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Kari Levitt
Minister of Supply and Services Canada

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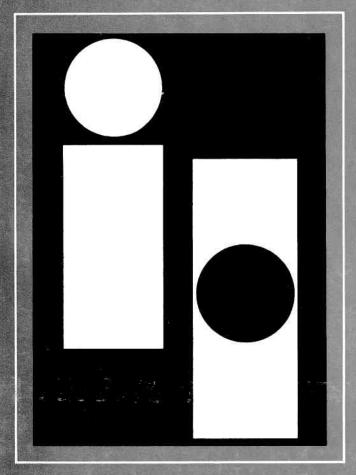
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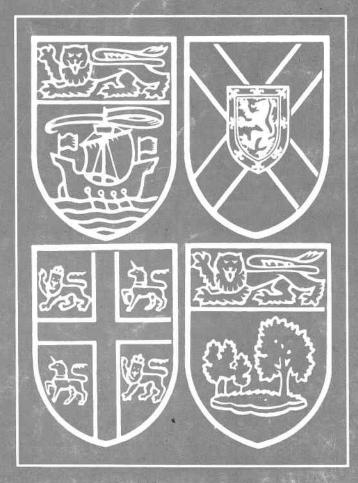
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input-output study of the atlantic provinces,1965

volume I social accounting matrix and models

kari levitt





STATISTICS CANADA

Input-Output Division

INPUT-OUTPUT STUDY OF THE ATLANTIC PROVINCES 1965

VOLUME 1: Social Accounting Matrix and Models

by

Kari Levitt

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FOREWORD

The Input-Output Tables and Models described in this Volume and in Volume 2. ("Input-Output Study of the Atlantic Provinces, 1965 – Structural Analysis and Data Sources"), make up a Special Monograph prepared by Professor Kari Levitt of McGill University.

Statistics Canada is pleased to publish this monograph and to assume responsibility for the statistical material presented in it. The analysis and conclusions are Professor Levitt's and do not necessarily represent the views of Statistics Canada.

PETER G. KIRKHAM, Chief Statistician of Canada.

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PREFACE

The distinctive character of Canadian Input-Output analysis, which is well-recognized throughout the world today, had its beginnings in the early sixties when, independently of each other, Professors Levitt and Matuszewski began to compile rectangular commodity by industry Input-Output accounts for the Atlantic Provinces and Quebec.

Professor Levitt presented a preliminary report on her work at the 1964 Canadian Political Science Association meetings which witnessed the first debate on the new accounting format. A number of discussants questioned the possibility of developing normal input-output models from these rectangular accounts. Other discussants conjectured that the rectangular format would provide more flexibility for analysis.

The debate was joined again in the 1965 Canadian Political Science Association meetings. Professor Matuszewski presented his solution to the analytical dilemma by showing that the rectangular system could provide the data base for models incorporating variable input-output coefficients, thus freeing input-output analysis from excessively restrictive proportionality assumptions. The Dominion Bureau of Statistics, which had also adopted the rectangular format by this time, presented a paper showing that most traditional input-output models and a number of variants could be derived easily from rectangular accounts.

Meanwhile the work on compiling the rectangular tables proceeded. In 1966 Professor Levitt completed tables for the Atlantic Provinces for 1960. A year later, the Dominion Bureau of Statistics undertook to compile tables for the Atlantic Provinces for 1965. The work continued to be directed by Professor Levitt.

This two-volume publication describes the statistical and analytical work embodied in the Atlantic Provinces Input-Output studies. A number of important contributions, both expository and analytical, which flowed from these studies deserve mention.

In Volume I Professor Levitt explores the algebra of standard rectangular input-output models in a methodical way. Apart from a relatively brief treatment in the Dominion Bureau of Statistics publication of the 1961 Canadian Input-Output Tables there is no readily available source on this subject. In view of the growing interest in rectangular systems Professor Levitt's exposition should meet a real need.

Professor Levitt's accounting innovations are not confined to the rectangular format. The Atlantic Provinces Input-Output Tables feature Income and Outlay accounts disaggregated by industry. These form the basis for models which trace the value added in production through factor incomes and transfers to those final expenditures whose magnitudes are highly correlated with levels of sectoral incomes. Thus Professor Levitt's models are "closed" not only over the household sector but over most of the non-discretionary incomes and expenditures of the government sector. These innovations are primarily conceptual and methodological in character: Professor Levitt starts out with the same inadequate data available to everybody else, adapts or truncates income and outlay conventions to match data constraints and derives significant new apparatus for extending the circuits of purchasing power in input-output models.*

^{*} In subsequent (as yet unpublished) work on a system of national accounts for Trinidad and Tobago Professor Levitt goes further, disaggregating industrially not only the Income and Outlay Accounts but parts of the Capital Finance and Balance of Payments Accounts.

Of the numerous contributions to Input-Output analysis to be found in these two volumes perhaps the most notable is the treatment of Input-Output multipliers. Professor Levitt develops a unique measure of interdependence, related to the major characteristic root of the Input-Output matrix of coefficients, which can be disaggregated to show the (negative) influence of foreign trade on the degree of interdependence as well as the contribution to interdependence of the various industries in an Input-Output Table. These measures of interdependence are not only a property of rectangular systems but can be calculated for interindustry systems as well.

T. Gigantes,
Director-General,
System of National Accounts
Structural Branch.

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SYMBOLS

The following standard symbols are used in Statistics Canada publications:

- . . figures not available.
- ... figures not appropriate or not applicable.
- nil or zero.
- -- amount too small to be expressed.
- p preliminary figures.
- r revised figures.
- x confidential to meet secrecy requirements of the Statistics Act.

CHAPTER 1

INTRODUCTION

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INTRODUCTION

In the course of a seminar sponsored by the Atlantic Provinces Economic Council on "Needs and Opportunities for Economic and Socio-economic Research in Canada's Atlantic Provinces" held in October 1958 at Dalhousie University, a group of 18 economists composed in large part of individuals originating or residing in the Atlantic Provinces, outlined a program of economic research directed towards finding a conceptual framework for the development of the Atlantic Region. Seventh in a list of eight suggested research topics read as follows: "then insofar as data will allow it, it seems to us that it would be useful to study the relations among industries, the intersectoral relations within the region". In the course of his presentation of the recommendation of the group of economists, W.C. Hood - at that time Professor of Economics at the University of Toronto observed that "the persons undertaking studies of the kind I've described will indeed encounter statistical difficulties . . it takes time to develop statistics". In the long perspective of hindsight this innocent and apparently trivial statement clearly embodies great wisdom and should perhaps have been taken as a warning to the writer to refrain from commencing a task which has taken twelve years to complete.

The two volumes of this study are offered as a statistical tool kit which will, we hope, be of assistance to citizens, scholars and governments seeking solutions to the social and economic problems of the Atlantic Region. In general we have followed the guidelines set out in "Inter-Industry Study of the Economy of the Atlantic Provinces" presented to the CPSA Conference on Statistics in 1964(21). A preliminary and condensed version of the present two volume study was read to the Canadian Economics Association in 1969 under the title "A Macro-Economic Analysis of the Structure of the Economy of the Atlantic Provinces, 1960" (22),

We are painfully aware of the fact that statistical research, however carefully conceived and executed, is no substitute for the formulation of rational economic and social policies. The principal difficulties here lie in the nature of the political decision making processes which must establish a consensus concerning the social objectives of public policies. A careful reading of the items contained in the select bibliography found at the conclusion of the second volume of this study leaves the inescapable impression that the expenditure of public funds without a coherent and relevant conceptual framework - or development strategy - is incapable of alleviating the relative underdevelopment of the Atlantic Region. This study has been, from its inception, rooted in that belief - a view shared by colleagues in the Atlantic Provinces whose moral and financial support gave us the resources to begin this work and the motivation to continue it to its conclusion.

The initial plan for the input-output study was developed in duscussions with Professor W.Y. Smith then at the University of New Brunswick and Mr. A.C. Parks, then research director of the Atlantic Provinces Economic Council. Professor John F. Graham of Dalhousie University was instrumental in securing a modest grant from the Atlantic Provinces Studies Series of the Social Science Research Council in 1961. Dr. S.A. Goldberg, of the Dominion Bureau of Statistics extended the co-operation of the Bureau which gave us access to data and facilities without which this study would not have been possible. Professor B.S. Keirstead of the University of Toronto gave the project his blessing in his capacity of supervisor of a PhD thesis which, in my innocence, I believed might eventually result from this study.

The recording of input and output data on the manufacturing sectors and work on the fishery commenced in the summer of 1962 with the assistance of Mr. John Iton, now at the Department of Economics of McGill University, Mr. Nugent Miller now at the Department of Economics of the University of the West Indies in Trinidad and Miss Geraldine Fulton whose death in 1968 prematurely terminated a promising career at the Department of Economics of Sir George William University. Financial support for summer research assistance was provided from a generous, if limited, grant by the Atlantic Provinces Economic Research Board and moral support came from its Secretary, Mr. A.C. Parks. No work could be done during the course of the academic year.

In the summer of 1963 we resumed work with the assistance of Mr. Miller and Mr. Clarence Bayne, now at the Department of Commerce of Sir George Williams University. In the winter of 1964 we obtained the help of Mrs. Noel Boissière, presently on the staff of Statistics Canada, who has worked continuously on this project as the principal research worker. Without Mrs. Boissière's limitless capacity for work, and good humour even in the leanest times, when it was never too clear where we would find the financing to continue, this study would have been totally impossible. Besides her continuing production of inspired estimates and supervision of the compilation of hundreds of tables and literally thousands of pages of text, Mrs. Boissière drafted the description of methods of construction of the tables in Chapter 3 of Volume I, the "Notes and Sources" contained in Volume II, and the select bibliography. The "Notes and Sources" represent a summary of the detailed records contained in eight volumes of working papers which were prepared between 1964 and 1966. (23,24,25,26,27,28,29,30). In 1964 Miss Wilma Augustine, also of McGill University joined the research team. Miss Augustine subsequently returned to Trinidad where she was in charge of the National Income work of the Central Statistical Office. In the summer of 1964

Miss Adlith Brown, now with the Department of Economics at the University of the West Indies in Jamaica, joined the team.

As the immensity of the task outran the financial resources of the Atlantic Provinces Economic Research Board, we were able to arrange financing from the newly established Atlantic Development Board in the form of a contract arranged through the Atlantic Provinces Economic Council. The peak of activity was reached in the summer of 1965 when we produced a rough "first draft" of the four input-output flow tables for 1960. In that summer, Mr. Miller, Miss Brown, and Miss Augustine were joined by Mr. Anthony Boissière presently with the Department of Regional Economic Expansion, Mr. Dan McDonald now also with the Department of Regional Economic Expansion, and Mr. Hugh O'Neale, at that time a graduate student at McGill University, whose tragic death in a car accident in the following year left all who knew him in a deep state of shock.

In the winter which followed, the work slowed down as again we were short of funds and short of help. Fortunately a grant from the Canada Council materialized. The difficult task of "balancing" and adjusting the flow tables was continued, and Mrs. Alison Morgan joined us at McGill University as a programmer with invaluable experience gained at Professor Leontief's Harvard Research Project. Cards were punched and we experienced our first encounter with modern data processing techniques. All tabulating and balancing up to that time had been done manually by the research team with only occasional clerical assistance, as funds permitted.

By the end of 1966 we had completed seven volumes of working papers containing detailed notes on sources and methods. These were delivered to the Atlantic Development Board, together with four flow tables, cleared for confidentiality by requesting and receiving permission from scores of firms involved. Mrs. Jacqueline Berube typed the manuscript of the working papers which comprised more than 2,000 pages and literally hundreds of tables.

Meanwhile Mrs. Boissière and Miss Brown had been invited to join the staff of the Input-Output Division of DBS and the project, for the first time since its commencement, was assured the financial and moral support necessary for its completion. The Atlantic Development Board contracted with DBS for an updating of the four 1960 tables to 1965 and also for consulting services concerning the use and application of the input-output models for development planning.

The work of updating the tables was done by Mrs. Boissière and Miss Brown in 1968 and 1969. The first formal presentation of the accounting system and models for 1960 was prepared by myself with the assistance of Mrs. Boissière and Miss Brown for the

Canadian Economics Association meetings at York University in June 1969. The text of the present volume was prepared by myself in the winters of 1971 and 1972 while on leave of absence from McGill University. Programming relating to the 1960 and 1965 tables has been done with great efficiency by Mr. Craig Gaston and Mrs. Marilyn Constantineau of the staff of Statistics Canada.

The construction of input-output accounts and the building of input-output models is clearly a specialized field of economic research and it is self-evident that the individuals working in this area, in Canada, have developed close professional relations of give and take. In the initial stages of our work, in 1962 and 1963, we were fortified in our decision to proceed with a rectangular (more commodities than industries) format by the support given to this model by Professor T. Matuszewski of the University of Montreal (now of Laval University) and his associates at the Quebec Bureau of Statistics. While our treatment of income generation and intersectoral transfers differs from Professor Matuszewski's more flexible approach, it was strongly influenced by the four quadrant schema of the Ouebec System of Accounts.1 Although our work had been physically located at Statistics Canada since its inception, it was not until 1967 that we seriously began to exchange ideas with the staff of the Input-Output Division of Statistics Canada. Prior to 1967 our research unit enjoyed the hospitality of the Industry Division and the Merchandising and Services Division and their respective Directors at that time, Mr. V.R. Berlinguette and Mr. F.J. Rashley. We wish to express our appreciation for the physical accommodation made available to us by Statistics Canada since the inception of the project in 1962.

Inasmuch as our four input-output tables for 1960 and our analytical models were completed before the 1961 input-output tables for Canada, our work might be said to have served, to some degree, as a pilot project for the Canadian input-output system. The relationship was undoubtedly of mutual benefit to all concerned. We received invaluable assistance from the Director of the Input-Output Division of Statistics Canada, Mr. Terry Gigantes, in solving problems encountered. At the same time, our project focussed attention on problem areas whose solution subsequently contributed to the Canadian Input-Output System. In the writing of this report we have appreciated the enthusiastic support given by Mr. Terry Gigantes. I am particularly indebted to Mr. Gigantes for his uninhibited

¹ T.I. Matuszewski and others. "Aide mémoire concernant le système de comptabilité nationale du Québec." October 1963, (31). See also more recent and complete expositions of the Quebec system in "Le système de comptabilité économique du Québec". Volume 1. July 1967 (36), "Un système rectangulaire d'échanges inter-industries à rendements non proportionnels". September 1965 (34), and "Some Remarks on an Econometric Model of a Provincial Economy", November 1965 (35).

readiness to check, correct and improve my algebraic manipulations and for his collaboration in exploring the character, significance and operational use of the input multipliers. We have equally appreciated assistance received from Mr. Paul Pitts of Statistics Canada in improving the presentation of material contained in Chapters 2 and 3 dealing with our system of provincial economic accounts and the characteristics of the system of input-output flow tables. We would also like to acknowledge the editorial corrections suggested by Mrs. Shaila Nijhowne in the final stages of the work. Indeed the intellectual environment of the Input-Output Division of Statistics Canada was both stimulating and comforting to us throughout the project. We wish to take this opportunity of thanking the entire staff of the Input-Output Division for their helpful and kind hospitality.

A very different, but equally important source of stimulation came in the form of demands from many quarters for access to our models and for assistance in operating them. From the initial completion of the 1960 tables, the Atlantic Development Board, and consultants to whom it had subcontracted various sectoral studies, as well as provincial governments and their agencies in the Atlantic Provinces, came to seek help. The time spent and frustrations experienced by myself and others in attempting to explain the system to potential users, convinced us of the necessity of producing a comprehensive methodological exposition such as is contained in this study. The "opportunity cost" of embarking on this exposition has been a high one. Some readers will undoubtedly be disappointed at the fact that the emphasis in this study is so strongly methodological. I am however convinced that the insights to be gained from input-output analysis are sufficiently significant to merit a demystification of the technique. It is my sincere hope that these two volumes will put at the disposal of individuals and research units working for governments, universities or on their own account, a powerful analytical tool. It will, one hopes, reduce reliance on professional consultants who have in the past been able to extract extravagant fees for input-output studies some of which have been of dubious quality.

This study is divided into two volumes. The first volume contains an exposition of the overall design of our system of provincial economic accounts; a description of the 10 input-output tables which have been constructed for Newfoundland, Prince Edward Island, Nova Scotia, New Brunswick and for the Atlantic Region as a whole for both 1960 and 1965; and a comprehensive presentation of open "rectangular" input-output models. Whereas the first volume focusses on methodology, the second volume focusses on results. It contains the principal findings of our input-output study, supported by primary and derived analytic tabulations for 1965 for each of the four Atlantic Provinces, as well as for the region as a whole. It also contains a comprehensive account of sources, methods

and definitions used in the compilation of the tables,² as well as a select and classified bibliography.

Clearly a great volume of statistical source material is embodied in this study. The numerous internal checks of the accounting system have, of necessity, forced us to evaluate and re-evaluate the quality of our estimates and, where necessary, the quality of original data. No explicit effort was made to bring our estimates into accordance with those obtained by others who have constructed national income and product accounts for any or all of the Atlantic Provinces.³

This study will, we hope, open new perspectives on economic research in the Atlantic Region. We conclude these introductory remarks by outlining an agenda of future research work which the constraints of time and resources have not permitted us to undertake ourselves. We do not seek to conceal our conviction that there are important areas of economic research which would gain in statistical quality and operational usefulness by accommodating to the accounting system developed in this study – with appropriate and necessary improvements as work proceeds. The list of suggested future work is confined to research which is "macroeconomic" and quantitative: it seeks to fill the obvious gaps in our system of provincial economic accounts. No implications are intended as to the priority of this type of research as compared with studies relating to institutional and historical aspects of Atlantic development, or detailed evaluations of the effectiveness of particular federal and provincial initiatives undertaken in recent vears.

1. Time Series Analysis of the Major Components of Income, Expenditures and Fiscal Flows

As is well known, Statistics Canada does not produce income and expenditure accounts on a provincial basis. In the absence of "official" provincial income and product accounts, a number of agencies and individual research workers in the Atlantic Provinces have produced such estimates. The earliest and most comprehensive of these was developed by A.C. Parks and D.B. Das Gupta of the Research Centre of APEC (41, 12). Their methodology was applied to New Brunswick by N.G. Mulder and R.L. Simpson (40). The series for the Atlantic Region as a whole were revised by APEC. (2) subsequent to the publication of revisions of Canada's National Income Accounts in 1969. Estimates of the national income and product for Nova Scotia have been made by S. Czamanski (9,10,11) and K. Scott Wood (43,44) under the auspices of the Nova Scotia Voluntary Planning Board, the Nova Scotia Department

³ For a comparison of our results with those obtained by others see Volume II.

² In addition to a summary of the seven volumes of working papers which we prepared between 1964 and 1966, the description of sources and methods in Volume II explains the methodology and data used to update the 1960 tables to 1965.

of Trade and Industry and the Institute of Public Affairs of Dalhousie University. Although each set of estimates is somewhat different from every other, all of them differ markedly from the estimates for 1960 and 1965 implicit in this study. While definitional differences between our study and estimates made by others do not permit direct comparisons of all components, we believe that definitional differences do not account for all major discrepancies. In general our estimates of income and expenditure are higher, and in the case of provincial exports and imports they are substantially higher than those made by others.

The publication of our accounts and the related material on sources and methods for 1960 and 1965, together with the 1972 revisions of Canada's national income and expenditure accounts invites a reexamination of the methodology of existing provincial income and product series in the Atlantic Provinces and the construction of authoritative and standardized accounts for each of the four Atlantic Provinces. Provincial economic accounts series should be decomposable into major categories of final expenditure, of types of incomes and fiscal and other transfers. They should be accompanied by consistent series of "value added" by major industry groups and corresponding time series of employment. Exports should be cross-classified by broad categories of type and destination. Year by year sectoral accounts for the operations of the federal government in each of the Atlantic Provinces, for provincial and municipal governments and educational and hospital sectors should be drawn up.

2. Capital Expenditures and Capital Coefficients

The treatment of capital expenditures in this study is clearly inadequate. Investment expenditures should be disaggregated by major sector undertaking them with separate "cost structures" representative of different types of capital construction activity. Public sector capital expenditures should be separated from the current outlays of provincial and municipal governments, educational institutions and hospitals. Moreover, a set of capital-output ratios typical of the industries in the system would clearly add to the operational usefulness of income and employment multipliers.

3. Sources of Imports

Although provincial imports are notoriously difficult to estimate with any degree of accuracy, we feel confident that our figures are reasonably reliable. One obvious deficiency lies in the fact that we know nothing about the source of imports - other than intra-regional movements within the Atlantic area. Specifically, we have not been able to distinguish provincial imports of Canadian origin from those of foreign origin. The second shortcoming of the system lies in its "constant market share" assumption with respect to provincial and external sources of supply. It is plainly not true that all users of commodities draw their supplies in the same proportion from provincial and external sources. Moreover major industrial users of imported commodities in general know their sources of supply. Further empirical work could greatly improve our knowledge of the sources of supply of intermediate inputs.

4. Agriculture and Fishery

As indicated in the text of this study, in spite of considerable efforts on our part, we remain dissatisfied with our treatment of economic activities which span a great diversity of institutional forms of organization. The principal problems here relate to agriculture and the fishery. These activities should be disaggregated by size of operations, so as to separate subsistence, low income activity from commercial production.

5. A Methodology of a Comprehensive Planning Model for the Atlantic Provinces

In spite of sporadic efforts by Mr. Gigantes and myself, and by individual members of the staff of the Planning Division of the former Atlantic Development Board to outline a systematic procedure for the development of an operational planning model, combining given input-output relations and econometric data based on time series, with discretionary policy choices, no coherent procedures have as yet been developed. Although the minimal data base for such a model is not as yet complete, the prime obstacle to progress in the past was not statistical. It lay in an excessive degree of indecision concerning policy objectives on the part of governmental agencies responsible for policy. The resolution of that problem clearly lies outside the terms of reference which have guided us throughout this study.

CHAPTER 2

DESIGN OF A SOCIAL ACCOUNTING FRAMEWORK
FOR A PROVINCIAL ECONOMY

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I. INTRODUCTION

The social accounts and input-output models which are developed in this study are designed to serve as a technical and statistical aid in the formulation of a strategy of economic development for the Atlantic Provinces. It should be unnecessary to warn the reader that social accounting and economic model building can never be substitutes for economic planning. Nor can the making of projections and plans be a substitute for the participation of the community in decision making. In essence, development planning consists of the systematic selection of measures designed to satisfy an ordered set of social and economic priorities. This is obviously a political process in which the multiple objectives of the communities affected by a development plan must be ranked and weighed in the light of the costs of alternative policy options. In the end no plan and no set of policies which do not mobilize the initiative and enthusiasm of the population can hope to succeed. This is so self-evident that it should not be necessary to state it, were it not for the fact that the technical sophistication of econometric devices, including input-output models, might mislead the unwary into believing that these techniques can substitute for the full participation by the people affected by economic plans in the making of policy decisions. Moreover, the professional bias of technocrats, whether operating in the governmental bureaucracy or in private consulting businesses which are sustained and financed by governments, may tempt them to place undue reliance on quantitative models which appear to yield "scientific" numbers.

Social accounting and model building can, however, serve as highly useful aids in estimating the effects of projected or planned expenditures on the provincial or regional economy. The quantification of the degree and nature of interdependence of economic activity within a province or region is unquestionably a useful aid to economic planning. Development planning requires a system of economic bookkeeping for a region which corresponds to the principal institutional units of decision-making. The accounts outlined here are offered in the hope that they might form the basis for the continuous and consistent compilation of provincial economic statistics in the future. Although designed with the requirements of the Atlantic Provinces in view, the system is generally applicable to any Canadian province, and perhaps also to regional economies in some other countries.

In the Atlantic Provinces the chief policy instruments available to raise income and employment are: government spending on the direct purchase of goods and services; (capital and/or current account) subsidization of selected industries; freight rate subsidies; and the transfers of purchasing power to persons and to local governments in the region. Because rational policies of federal government assistance to the Atlantic Provinces must take into account the pattern of economic interdependence within the region, the accounting system was designed to trace the impact of a given set of federal or local government expenditures on the provincial economy. We thought it might be useful, for example, to know more about the relationship between federal revenues deriving from the Atlantic Provinces and federal spending on transfer payments, subsidies and the purchase of goods and services in the region.

Furthermore, one would wish to be able to obtain estimates of total income and employment generated by federal expenditures. It was for reasons such as these that the accounting framework was designed to transform federal funds flowing into the Atlantic Region into expenditures by households, provincial governments, etc., and to do so with considerable flexibility. For such reasons also, it was decided to build into the accounts estimates of income arising from participation in production, and the patterns of expenditure from these incomes.

The requirements of a policy-oriented system of accounts for the Atlantic Provinces which could yield input-output models of relevance and operational feasibility led us to construct an accounting framework embodying the following main features:

1. Separate Accounts for Each Province

Because the province is the most important local unit of political decision-making, it was decided from the start to build up all estimates on a provincial basis. While this occasionally created problems of statistical estimation which would not have arisen on a regional basis, the errors introduced are considered to be a small price to pay for the advantages of obtaining inputoutput flow tables and fully integrated economic accounts separately for each of the four Atlantic Provinces.

¹ For example, the difficulty of allocating Maritime freight rate subsidies or steamship ferry deficits, or the revenues and costs of air and rail transportation, on a provincial basis.

2. Standardization of Sectors and Estimation of Interprovincial Commodity Flows among the Atlantic Provinces

From the point of view of the Atlantic Provinces as a region, it obviously makes a difference whether one Atlantic Province tends to import something from another Atlantic Province, or from a source external to the region. In the former case somebody in another Atlantic Province will benefit from the generated income and employment. In the latter case, the feedback will stimulate incomes and employment in the rest of Canada or in foreign countries. Inter-provincial trade within the Atlantic Provinces was thus estimated in the finest commodity detail possible. In any event this was necessary to obtain, separately for each province, an estimate of imports from sources external to the Atlantic Region. Final demand was disaggregated in order to show the commodity composition of competitive imports for each of the four provinces. Public sector expenditures were disaggregated by level of government and, in some cases, by function.

3. Input-output Accounts for Each Province

Four separate sets of input-output tables were constructed in order to permit the exploration of inter-dependence of economic activity within each province. In economies as open to external trade as those of the Atlantic Provinces, input-output analysis is particularly useful in estimating import leakages associated with different types of final expenditure. From the inputoutput tables it is possible to obtain estimates of the direct and indirect impact of one unit of final demand for each product in the system on gross output levels of all industries, on non-competitive imports, and on employment. Similar estimates can be made with respect to a typical "final demand" dollar - e.g., a typical dollar's worth of exports to foreign countries, or of personal expenditure, or of federal defence expenditures.

One can also estimate the additional increase in requirements due to the fact that part of the incomes earned by households (in the production of the direct and indirect requirements of one unit of final demand) are respent locally on consumer goods and services.

Finally, it is possible to add to this consumption multiplier yet another multiplier, arising from the fact that provincial and municipal revenues generated may be presumed to feed back to the local economy as expenditure on education, hospitalization, personal transfers, etc. The exact nature of these calculations is described below in Models I, II, and III.

4. Commodity-by-industry Inputs; Commodity-by-industry Outputs

The balancing of the supply of commodities — whether produced by domestic industries or imported — with the demands of intermediate and final users implies a set of commodity flow balances. Convenience in data compilation as well as analytical requirements in use of the models dictate the commodity dimension. The system therefore records the supply and uses of commodities.

The intermediate users of commodities are establishment-based industries, that is, industries defined as sets of establishments. The system therefore records commodity inputs into industries as well as the commodity outputs of industries.

An industry may produce several commodities and a commodity may be produced by several industries. The system is therefore set up in "rectangular" form, i.e., the input-output flow accounts consist of two rectangular matrices — one shows the production by industries of commodities and the other the inputs of commodities into industries. In this respect our system is similar to the 1961 Canadian input-output table and models.

Competitive and Non-competitive Imports Distinguished

Where there is no provincial output, the imports are classed as non-competitive. Where there is provincial output, the imports of commodities of a type and kind similar to locally produced commodities are classed as competitive. It can clearly be seen that the distinction between competitive and non-competitive imports is a discretionary one and that it is a function of the level of aggregation at which a commodity is defined. One may choose to classify all clothing as competitive imports on the grounds that certain specific items of clothing are locally produced. Alternatively, one may define commodities at a finer level of detail whereby all imported product lines which have no exact locally produced counterpart are treated as noncompetitive imports. The more narrowly commodities are defined, the fewer imports appear as competitive and the more appear as non-competitive.

In addition to the familiar problem of deciding whether any particular imported commodity should be treated as a competing or a non-competing import, we wished to maintain uniformity of definition with respect to the Atlantic Region as a whole. Consequently a commodity produced in at least one Atlantic Province

was considered as "local" in the sense that imports of that commodity into any of the four Atlantic Provinces were considered as competitive imports. This enabled us, at a later stage to build an inter-regional input-output model embodying inter-provincial trade with the Atlantic Provinces, commodities which were produced in the Atlantic Region, but not within the province were transferred from their original status as competitive (in regional terms) to the amended status as non-competitive (in provincial terms).

6. Integration of Input-output Accounts into a Social Accounting Framework for a Provincial Economy

Input-output accounts which cannot be related to the "national" accounting categories of an economy are useful with respect to the detail of "impacts" and "multipliers" relating to specific activities. The system becomes significantly more useful, however, when primary inputs of industries and governments are treated as receipts of households, government and the rest of the world. Transactions deriving from production within the provincial economy together with transfers between the major economic sectors of the system enable us to develop estimates of residual flows - such as the provincial balance of payments with the rest of the world - which cannot be obtained by any other technique of estimation. The integration of input-output accounts into the wider social accounting framework for the provincial economy enables us to close the model with respect to expenditures of households and local government sectors. It is an essential step towards the construction of quantitative planning models.

Uses of the Accounting System

The accounting system serves five distinct but inter-related purposes:

(a) To serve as a convenient device for collation of data in sufficient detail (disaggregation) to permit the user

to sum (aggregate) information according to his particular need.

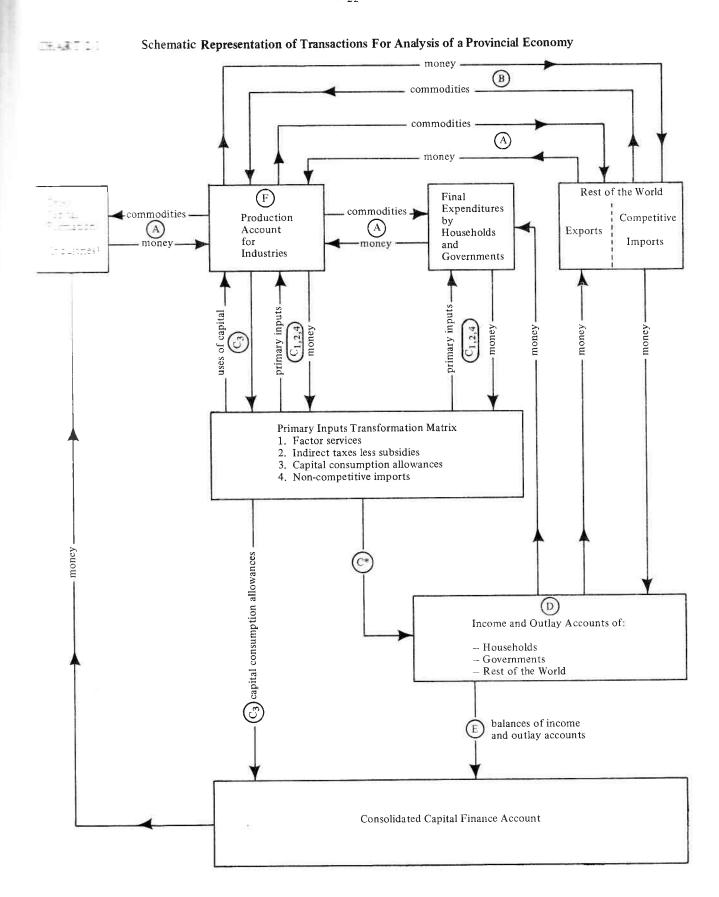
- (b) To reconcile independent estimates and point up gaps in statistical information. It can intuitively be appreciated that the accuracy of the estimates of macro-economic flows for a provincial economy is increased by the numerous internal accounting balances required by the framework.
- (c) To obtain at the macro-economic level a profile of the structure of the economy not directly available from existing macro-economic data. It is possible, for instance, to draw up a "balance of payments" account which indicates the importance of federal government operations in financing the large excess of imports over exports in each of the Atlantic Provinces. It is also possible to obtain estimates of key sub-macro-economic parameters such as the import, income or employment content of consumption expenditure, of construction activity, or of federal expenditure.
- (d) To obtain estimates of parameters required for analytical input-output models such as: the "technical coefficients" yielded by the input-output flow accounts; the "import coefficients" derived from the relationship between estimated competitive imports and local production; the distribution parameters which transpose factor incomes generated within the provincial economy into expenditures of households and provincial governments.
- (e) To provide a planning framework within which alternate sets of expenditure projections may be examined and compared. With the aid of such a model, one can evaluate the feasibility of alternate federal policies in terms of implied tax yields, subsidies, private capital inflows, incomes, employment, etc.

II. AN OVERVIEW OF THE SYSTEM OF ACCOUNTS

The accounting framework developed in this chapter consists of input-output flow tables, extended to show income distribution, tax transfers and other transfers among all sectors relating to the provincial economy, including the federal government and the "rest of the world". The latter, in the context of this accounting framework, refers to all economic agents

located outside the provincial boundary, except the federal government.

In the sectoring of the economy, a basic distinction is made between "industries", that is, sectors whose activity consists exclusively in the production of goods and services for sale, and other sectors. These other sectors may engage exclusively in the purchase of final



goods and services (Households), or they may engage both in production and consumption (e.g. Governments). The system includes a complete set of inputoutput flows² of goods and services. These input-output relations are fully integrated with the transactions between "industries" and standard macro-economic sectors such as Households, Provincial governments, Federal government, Rest of the world, etc.

The accounting system was designed by constructing a full set of input-output transactions, with commodity and industry dimension. The accounts were subsequently extended to embrace other economic transactions relating to the provincial economy. In the presentation which follows we first show the system in terms of the major transactions of the macro-economic "national accounting" sectors appropriate to a provincial economy. We then proceed to explain the manner in which these macro-economic flows are derived from and relate to the detailed input-output relations. The method of presentation follows, in a general way, that of the new System of National Accounts of the United Nations (51).

We begin the presentation of the system by defining six categories of transactions. These are indicated by the letters A to F in the Schematic Representation of Transactions depicted in Chart 2.1.

A. Purchase of final goods and services — Both those produced by industries and those imported to supplement local production. The latter are competitive imports of final goods. These final goods and services are sold to households, to governments, to the rest of the world and to industries on capital account. They equal the sum of final output of industries and competitive imports of final goods.

B. Purchase of competitive imports — In conformity with standard national accounting practice, all competitive imports, whether destined for intermediate or final use are routed through the production account for industries.

C. Outlay on primary inputs by industries, house-holds and governments — Primary inputs comprise all "costs" (inclusive of profit) except those incurred in

purchasing goods and services (net of indirect taxes) from industries or as competitive imports.³

There are four distinct categories of primary inputs:

- C1. Payment for the use of factor services made in the form of wages and salaries and supplementary labour income, net income of unincorporated business, interest, and corporate profit. All C1 estimates are before taxes.
- C2. Indirect taxes less subsidies paid to governments (subsidies are treated as negative indirect taxes and represent payments to industries for reasons of general social welfare).
- C3. Capital Consumption Allowances. The estimated (input) cost of current use of the stock of reproducible fixed capital assets of industries is offset by a (credit) entry to the consolidated capital finance account. Capital consumption allowances represent a part of gross savings available for financing gross capital formation. (Unlike primary inputs of types C1, C2 and C4, capital consumption allowances are book entries, there being no transactions involved.)
- C4. Non-competitive imports supplied by the rest of the world to using industries, households and governments. These inputs are valued net of duties and other commodity taxes such as taxes included in C2.

The income flows to the various sectors deriving from primary inputs of factor services (C1), indirect taxes less subsidies (C2), and non-competitive imports (C4) are represented by the flow C* in Chart 2.1. In C*, wages and salaries and net income of unincorporated business before tax are allocated to households; interest payments by industries and governments are split, at this stage, between amounts going to resident households and amounts due to the rest of the world. Corporate profits are split, at this state, into four components: taxes paid to the federal governments, taxes paid to the provincial government; after tax profit assumed to be paid to the rest of the world and after tax profit assumed to be paid to resident households. Undistributed or retained profits are assumed payable to the rest of the world or to resident households, according to the estimated locus of ownership and control of the establishments comprising each industry.

D. Direct tax and other transfers among households, governments and the rest of the world. These are entered in the income-outlay accounts of the appropriate sectors.

² In our accounts the input-output relations are described in terms of outputs of commodities by industries and inputs of commodities into industries. This system of input-output accounting is an improvement on conventional inter-industry accounting.

³ It should be noted that all commodity taxes associated with intermediate purchases are treated as primary inputs of type C2.

- E. The balance of the income-outlay accounts are carried forward to the consolidated Capital Finance Account. (The interpretation of these entries in terms of net lending or borrowing by the various sectors is outlined in the subsequent description of the detailed accounts.)
- **F. Input-output transactions among industries** These are transactions in intermediate goods and services among industries. Together with transactions A, B and C they constitute the complete set of input-output accounts.

The system of accounts is here presented at three levels of aggregation:

1. A System of Six Accounts (5 sectors)

- (i) Production Account for Industries (with implicit income-outlay account)
- (ii) Households (income-outlay account only)
- (iii) Provincial Public Sectors (income-outlay with implicit production account)
- (iv) Federal Government (income-outlay with implicit production account)
- (v) Rest of the World (income-outlay only)
- (vi) Consolidated Capital Finance Account

2. Summary Tables of Consolidated National Accounts

- (i) Gross Domestic Product and Expenditure
- (ii) Provincial Disposable Income

- (iii) Balance of Payments (in which transactions with the federal government are shown separately)
- (iv) Consolidated Capital Finance Account

3. A System of Nine Accounts (8 sectors)

- (i) Production Account for Industries (with implicit income-outlay account)
- (ii) Households (income-outlay only)
- (iii) Education (income-outlay with implicit production account)
- (iv) Hospitalization (income-outlay with implicit production account)
- (v) Municipal governments (income-outlay with implicit production account)
- (vi) Provincial governments (income-outlay with implicit production account)
- (vii) Federal government (income-outlay with implicit production account)
- (viii) Rest of the world (income-outlay only)
- (ix) Consolidated Capital Finance Account

Our exposition begins with the system of six accounts for five sectors. From this system we can derive Provincial Disposable Income and the Provincial Balance of Payments. In order to obtain the Gross Domestic Product and Expenditure Account, the system of six accounts must be disaggregated in order to separate transactions relating to domestic production from transfers between sectors. This yields the consolidated "national" accounts for a provincial economy.

Finally, the system is expanded to nine accounts for eight sectors. In this fuller system of nine accounts, provincial public sectors are disaggregated into four sub-sectors representing education, hospitalization, municipal government services, and provincial government services.

III. THE SYSTEM OF SIX ACCOUNTS

The system of six accounts of the consolidated national accounts is composed of five sectors and three types of accounts. The five sectors are (i) Industries, (ii) Households, (iii) Provincial public sectors, (iv) Federal government and (v) Rest of the world. The three types of accounts refer to (i) Production, (ii) Income and Outlay and (iii) Capital Finance. The system implicitly has separate production and income-outlay accounts for industries and government sectors. The income-outlay account of industries is included with the production accounts. The production accounts of government are included in their income-outlay accounts. Households are not producers and therefore have no production account. They do of course have an income-outlay account. The rest of the world has an income-outlay account only. The capital finance account is consolidated: it shows gross domestic capital formation and the net sources, from the various sectors, for finance of this capital expenditure.

Schematically, we may represent the system of accounts as follows:

The fundamental difference between a national and a provincial economy derives from the fact that the latter involves two levels of government - one internal to the province and the other external. Both levels of government represent the interests of provincial residents, albeit in different ways. Residents of a province contribute fiscally to the federal government and receive monetary transfers from the federal government, either directly or through the revenue account of the provincial government. Fiscal flows within a federal state have no meaningful counterpart in the international economy. The conventions of national accounting and balance of payments accounting were not really designed to cover the case of an economy whose "external" economic relations include the payment of direct and indirect taxes to a higher level of government and the receipts of statutory grants and other transfers from that government.

In the case of the Atlantic Provinces, funds transferred by Ottawa to the provincial economies far exceed fiscal payments made by provincial residents to Ottawa. The net transfer of funds into each of the Atlantic Provinces resulting from federal-provincial fiscal relations is very large: it greatly exceeds net capital inflows arising from provincial governmental borrowing and from external sources of private capital financing.

From the viewpoint of a provincial economic accounting system, transactions with the federal govern-

ment have a dual character. On the one hand, the domestic (provincial) operations of the federal government are a domestic production sector which purchases commodities and factor services in the domestic market; on the other hand, the federal government is an external transactor which spends funds in the province and receives funds from the province. Consequently, even the simplest set of provincial accounts must include two sets of external transactions - those with the federal government, and those with all other transactors located outside provincial borders. While expenditure on goods and services relating to the provincial operations of the federal government is domestic production activity, the "output" of this activity is "exported" in the sense that federal outlays and federal government production in a province are treated as being financed from sources external to the province. Federal expenditures on goods and services in a province, are in this regard, similar to export earnings of a province.

Clearly, the treatment of the federal government as an "external transactor" represents a distortion of the true relationship between the residents of a province and Ottawa. It does not include the full benefit dimensions of federal spending. It emphasizes the regional impact of federal expenditure rather than the value of federal services provided to provincial residents by virtue of their participation in a federal system.

The balance of net gain (or loss) accruing to the residents of any particular province in their fiscal relations with Ottawa can be drawn up on the basis of two distinct definitional concepts. One of these measures the relationship between the value of the services provided by the federal government to provincial residents and the fiscal contribution which these residents make to the federal government. This might be called the service benefit measure. It would have to take into account the value of the services which the federal government provides to each provincial resident by virtue of general administrative activities in Ottawa or elsewhere, regardless of the region or province in which these federal services are produced.

The alternate measure of the benefits and costs of the federal-provincial relationship pertains to the provincial impact of federal expenditures. In this study all references to federal-provincial balances relate to this economic, or impact definition of the benefits of federal spending to the provincial economy. Thus in our accounts the "benefit" to the provincial economy of federal expenditure on defence appears in the form of

CHART 2.2

Accounts for Five Sectors

			Type of account	
		Production	Income-outlay	Capital finance
	Sectors		F1	
1.	Industries			
2.	Households			
3.	Provincial public sectors			
				1
4.	Federal government			
5.	. Rest of the world			

wages, salaries, military pay and local disbursements related to federal installations such as Camp Gagetown in New Brunswick, or the naval establishments in Dartmouth-Halifax. This is to be distinguished from the alternative "service benefit" measure according to which the benefit of federal defence expenditure to the residents of a province would have to be calculated by obtaining a per capita figure for each Canadian and multiplying this by the provincial population.

To give another example, the "service benefit" measure would allocate the wages and salaries of the federal government in the Ottawa-Hull area as well to the provinces on a per capita basis. The assumption here is that the general administrative services produced by the federal government provide every Canadian with the benefit of such services. The impact benefit approach would treat these expenditures as incomes generated in Ontario and Quebec, in accordance with the province of residence of the persons engaged in producing these administrative services. National income accounting on a provincial level can deal only with the impact (or expenditure) aspect of federal spending, and it is with this impact aspect only that this study is concerned.

In summary, external transactions of a provincial economy consist of two separate and distinct sets of relationships — those with the federal government and those with all other transactors located outside provincial boundaries. Economic accounts for a provincial economy yield estimates of "Gross Domestic Product and Expenditure" and "Provincial Disposable Income", but there does not exist any unambiguous provincial counterpart to the concept of "Gross National Product and Expenditure". The accounting concepts of GNP and GNE are not applicable to provincial economies within a federal state which transmit and receive large unilateral transfers in the form of taxes and grants.

In any social accounting system there are good reasons for separating the private transactions of households from those of the government even at the crudest, most aggregated level. In a provincial economy these reasons are reinforced by the institutional fact that federal payments to residents are made in two distinct ways: (1) by direct payments to households or businesses, such as unemployment insurance, family allowances, pensions, payments of wages and salaries for labour services rendered, purchases of goods and services

from business, and subsidies paid to business; (2) by payments made indirectly via provincial governments. These latter may be contributions to general revenue (e.g., equalization payments, statutory grants), or transfers earmarked for specific purposes (e.g., shared-cost programs).

In our presentation of the social accounting framework we will use the accounts for Nova Scotia 1965 as an illustrative example. (The full set of accounts for all four provinces for 1965 and 1960 are cast in the same format and are found at the end of this chapter.) In Table 2.1 the System of Six Accounts for Nova Scotia for 1965 is presented in matrix form. Each entry is a credit to the row and a debit to the column. At the level of aggregation of Table 2.1 it is not possible to distinguish transactions arising from production from those which are transfers. Table 2.1 is a consolidation of the set of six accounts of Table 2.2. Each of the six sub-tabulations of Table 2.2 represents one of the six accounts of the Schema of Accounts of Chart 2.2

1. The Production Account of Industries (with implicit income-outlay accounts)

Industries are defined as: (i) all businesses producing commodities (goods and services) for commercial sale, whether incorporated or unincorporated, privately-owned or publically-owned; (ii) the activity of non-profit making enterprises (such as religious organizations and charities) providing community services — with the important exception of educational institutions and hospitals which are treated as provincial public sectors; and (iii) commodities produced by individuals for their own use, such as the services of owner-occupied dwellings, or produce produced and consumed on farms. The output of industries is approximately equal to the output of private goods and services, sold at the cost of production, inclusive of profit.

When the production activities of all the industries in the system are summed to arrive at a consolidated production account for all industries, intermediate purchases and sales cancel out. In aggregate, receipts from the sales of industrial output derive exclusively from final sales of consumer goods and services to households⁴ (\$820.7 million), sales of fixed capital goods and inventory accumulation (or liquidation) to industries (\$212.4 million); sales of goods and services to pro-

vincial public sectors — educational institutions; hospitals, municipal and provincial governments (\$124.3 million); sales of goods and services to the federal government (\$82.4 million); and exports to the rest of the world (\$392.6 million). These latter may be destined to foreign markets, to other Atlantic Provinces or to the rest of Canada. A relatively unimportant source of revenue for industries is provided by industrial subsidies received from the federal government (\$14.2 million) and from the provincial government (\$0.4 million). In our accounts these are entered as negative outlays.

In Table 2.2A, the production costs of industries consist of payments for all competitive imports which enter the provincial economy, regardless of whether they are used as intermediate inputs to industries or as final goods, (\$435.9 million), and the following "primary inputs": (i) income payments (before tax) to households in the form of wages and salaries; employees' contributions to pension and insurance plans and other supplementary labour income; unincorporated business income; and that portion of profit, rent and interest which was estimated to have been paid out to provincial residents or retained in businesses wholly owned or controlled by provincial residents (\$766.7 million); (ii) taxes paid to provincial public sectors, whether paid in the form of corporate income tax or in the form of indirect taxes, i.e., licenses, fees, excise and sales taxes, (\$85.0 million); (iii) taxes paid to the federal government in the form of corporate income tax or as indirect taxes⁵ levied on the intermediate purchase of goods and services by the producing sectors (\$36.2); (iv) profit, rent and interest estimated to have been remitted or retained in businesses not controlled by residents of the province (\$58.8 million). In the case of companies with non-resident6 head offices all profits are assumed to have been transferred out of the province. Interest payments are similarly allocated either to households or to the rest of the world; (v) capital consumption allowances, representing the depreciation of reproductible fixed capital assets of industries (\$117.6 million); and (vi) non-competitive imports used as intermediate inputs by industries (\$146.8 million).7

 $^{^{\}rm 4}$ Inclusive of sales to $\,$ non-resident tourists in the province.

⁵ Note that these do not include indirect taxes imposed after the final stage of processing on goods flowing to final consumers, or indirect taxes on services used by final consumers. In the accounting system, such taxes are charged to the final consumer, rather than the supplier. (The principal taxes involved are federal customs, sales and excise taxes, and provincial sales and amusement taxes.)

⁶ Non-resident in this context means non-resident to the

province.

7 Purchases of non-competitive imports by households or other final using sectors are treated as the expenditure of the buying sector, i.e., they are not routed through the production account of industries.

TABLE 2.1. System of Six Accounts, Nova Scotia, 1965 Summary of Transactions in Matrix Form

		Production:		Outlay	Capital			
	Rows: Credit Columns: Debits	Industries — Cost of final sales	House- holds	Provincial public sectors	Federal government	Rest of the world	finance: Debits	Totai
Item No.		1	2	3	4	5	6	7
					millions	of dollars		
1	Production: Industries – Receipts from final sales		820.7	124.3	82.4	392.6	212.4	1,632.4
2	Income (cols. 1-5): Households	766.7		126.5 18.1	156.0 93.1	22.3	=	1,182.7
3	Provincial public sectors	85.0 - 0.4	76.2	æ	101.3	-	36.5	298.6
4	Federal government	36.2 - 14.2	124.4	1.0	-	- 14.0	301.5	434.9
5	Rest of the world	435.9 58.8 146.8	90.0 + 15.0 - 21.3	28.7	2.1	~±		756.0
6	Capital finance: Credits	117.6	77.7	-	-	355.1	0-1	550.4
7	Total	1,632.4	1,182.7	298.6	434.9	756.0	550.4	**

Note: The information contained here represents a summary consolidation of Table 2.7C.

TABLE 2.2A. System of Six Accounts, Nova Scotia, 1965 **Production Account – Industries**

Item No.	Primary inputs and competitive imports	Millions of dollars	Item No.	Receipts from final sales	Millions of dollars
1 2	Income payments to households (21). Taxes paid to provincial public sectors	766.7	10	Sales of consumer goods and services to households ¹ (14)	820.7
3	Less: Subsidies received from provincial public sectors (34)	85.0 - 0.4	11	Sales of goods and services to provincial public sectors (27)	124.3
4	Taxes paid to federal government (43)	36.2	12	Sales of goods and services to federal government (38)	82.4
5	Less: Subsidies received from federal government (44)	- 14.2	13	Sales of capital goods to industries (including inventory change) (61)	212.4
6	Profits and interest remitted or remittable out of province (59)	58.8	13a	Exports to "rest of the world" (49)	392.6
7	Non-competitive imports (53)	146.8			
8	Competitive imports (53)	435.9	1		
9	Capital consumption allowances (63)	117.6			
	Total	1,632.4		Total	1,632.4

¹ Includes sales to tourists in the province.
2 Excludes sales to tourists in the province.

Note: Reference numbers in brackets denote cross references to other entries in the System of Six Accounts,

TABLE 2.2B. System of Six Accounts, Nova Scotia, 1965 Income and Outlay of Households

Item No.	Outlay	Millions of dollars	Item No.	Income	Millions of dollars
14	Purchases of consumer goods and services from industries 1 (10)	820.7	21	Factor services rendered to industries (1)	766.7
15	Less purchases by non-resident tourists (54)	- 21.3	22	Factor services rendered to provincial public sectors (28)	126.5
16	Resident tourist expenditures out of province (55)	15.0	23	Transfers received from provincial public sectors (29)	18.1
17 18	Non-competitive imports (56) Taxes paid to provincial public sectors	90.0	24	Factor services rendered to federal government (39)	156.0
19	(35)	76.2 124.4	25	Transfers received from federal government (40)	93.1
20	Personal saving (62)	77.7	26	Miscellaneous earnings and transfers from "rest of the world" (50)	22,3
	Total outlay and saving	1,182.7		Total income	1,182.7

¹ Includes sales to tourists.

TABLE 2.2C. System of Six Accounts, Nova Scotia, 1965 Income and Outlay of Provincial Public Sectors

Item No.	Outlay	Millions of dollars	Item No.	Income	Millions of dollars
27	Purchases of goods and services from industries (11)	124.3	33	Tax receipts from industries (2)	85.0
28	Income payments to households for services rendered (22)	126.5	34	Less: Subsidies to industries (3) Tax receipts from households (18)	- 0.4 76.2
29	Transfer payments to households (23)	18.1			
30	Transfers to federal government (46)	1.0	36	Transfers from federal government (41)	101.3
31	Interest payments to "rest of the world" (60)	17.7	37	Deficit (64)	36.5
32	Non-competitive imports (57)	11.0			
	Total outlay 1	298.6		Total income ² plus deficit	298.6

¹ Excluding subsidies paid.2 Net of subsidies paid.

TABLE 2.2D. System of Six Accounts, Nova Scotia, 1965 Income and Outlay of Federal Government (on transactions relating to Nova Scotia)

Item No,	Outlay	Millions of dollars	Item No.	Income	Millions of dollars
38 39	Purchases of goods and services from industries (12)	82.4	43	Tax receipts from industries (4) Less: Subsidies to industries (5)	36.2 - 14.2
40	services rendered (24) Transfer payments to households (25)	156.0 93.1	45 46	Tax receipts from households (19)	124.4
41	Transfers to provincial public sectors (36)	101.3 2.1	47	Less: Subsidy to rest of the world to assist provincial coal exports (51)	- 14.0
. 2	2.0		48	Excess of federal spending over federal receipts (66) Total income ² plus excess of	301.5
	Total outlay ¹	434.9		spending over receipts	434.9

¹ Excluding subsidies paid.2 Net of subsidies paid.

TABLE 2.2E. System of Six Accounts, Nova Scotia, 1965
Income and Outlay of "Rest of the World" (transactions with non-residents except for the federal government)

Item No.	Payments of "rest of the world" (receipts of Nova Scotia)	Millions of dollars	Item No.	Receipts of "rest of the world" (payments by Nova Scotia)	Millions of dollars
49	Purchases of goods and services from industries (13a)	392.6	53	Competitive and non-competitive imports of industries (7, 8)	582.7
50	Miscellaneous income and transfer pay-		54	Tourist purchases in Nova Scotia (15)	- 21.3
20	ments to households (26)	22.3	55	Households' tourist expenditures out of province (16)	15.0
51	Subsidy from federal government on coal exports to Central Canada (47)	- 14.0		Non-competitive imports of:	13.0
			56	Households (17)	90.0
52	Deficit of the province on current transactions with the "rest of the		57	Provincial public sectors (18)	11.0
	world" (65)	355.1	58	Federal government (42)	2.1
				Profits and interest remitted or remittable out of province:	
			59	By industries (6)	58.8
			60	Provincial public sectors (31)	17.7
	Total	756.0		Total	756.0

¹ Excludes purchases in the province by tourists.

TABLE 2.2F. System of Six Accounts, Nova Scotia, 1965 Consolidated Capital Finance Account

Item No.	Disposition	Millions of dollars	Item No.	Source	Millions of dollars
61	Purchases of capital goods by industries,		62	Personal saving (20)	77.7
	including inventory changes (13)	212.4	63	Capital consumption allowances of industries (9)	117.6
			64	Deficit (-) or surplus (+) of provincial public sectors (37)	- 36.5
			65	Deficit of the province on current transactions with "rest of the world" (52)	355.1
			66	Deduct: Excess of federal spending over federal receipts (48)	- 301.5
			67	Net capital inflow from "rest of the world" not covered by net federal government transfers (65, 66)	(53.6)
	Gross Domestic Capital formation	212.4		Finance of Gross Domestic Capital formation	212.4

2. Income-outlay Accounts of Households

The household account shows all income (before deduction of personal income tax) received by residents as remuneration earned from participation in industrial production, inclusive of social security contributions payable by employers, and of the retained profits of locally-controlled enterprises (\$766.7 million). Households also receive incomes earned from services rendered to the federal (\$156.0 million) and local governments (\$126.5 million) as well as personal transfer payments

made by local governments (\$18.1 million) and by the federal government (\$93.1 million). Household income deriving from government transfers is limited to cash payments such as pensions, unemployment insurance, family allowances, etc. (Federal contributions to hospitalization schemes, for example, are treated as revenues of the hospital sector, which is here shown as part of the consolidated provincial public sector.) Finally, households receive remittances, gifts and miscellaneous property income deriving from sources external to the province (\$22.3 million).

Household outlays consist of expenditure on consumer goods and services (\$820.7 million);8 purchase of non-competitive imports, inclusive of tourist expenditures made by provincial residents out of the province (\$105.0 million); payments of direct and indirect taxes to provincial public sectors (\$76.2 million) and to the federal government (\$124.4 million). The indirect taxes are sales, customs and excise taxes charged on consumer goods and services purchased by households.9 Personal savings (\$77.7 million) are the residual of the account.¹⁰ They include the undistributed portion of corporate profits of locally-controlled business.

3. Income-outlay Account of Provincial Public Sectors (with implicit production account)

The income and outlay account of provincial public sectors aggregates the revenues and expenditures of educational institutions, hospitals, all other municipal government functions and all other provincial government functions. It excludes provincially- or municipally-owned enterprises of a type and kind classified as industries.

The rationale for placing educational institutions and hospitals together with services provided by municipal and provincial governments is to be found in the fact that their financing is predominantly governmental and their output is a "social good" similar to the provision of sewerage, roads, police and fire services which constitute the older functions of local government. It should be noted that, as in the case of the aggregation of industries, transactions between these four sectors net out. In the consolidation the total outlay of the sector (\$298.6 million) thus represents payments to industries, households, the federal government and the rest of the world. Transactions such as provincial grants to educational institutions, disappear from view in the consolidation.¹¹

While a fuller description of the composition of the provincial public sectors can be found in Chapter 5, we may note two characteristics of their treatment in the system:

Firstly, the education and hospital sectors are formed on the basis of functional expenditures. Thus, the hospital sector includes the expenditures of all

hospitals, whether privately, publically, federally, provincially, or municipally-owned and operated. The education sector similarly includes all schools, colleges, vocational training institutes and universities. Provincially-operated schools and hospitals have thus been transferred to the appropriate functional sector and a matching "monetary" transfer entry has been made.

The second characteristic of the provincial public sector in these accounts is that capital-type expenditures are treated as current.¹² The "deficit" of provincial public sectors (\$36.5 million) thus refers to the combined overall deficit, i.e., the difference between total outlay, including expenditures on capital-type goods (\$298.6 million) and total income from all sources, including federal grants (\$101.3 million), taxes or levies paid by households, including private payments for education or hospitalization (\$62.4 million), and taxes net of subsidies received from industries (\$84.6 million).

The detailed outlays of the consolidated provincial public sectors consist of: purchases of goods and services from industries (\$124.3 million); purchases of noncompetitive imports (\$11.0 million); payment of wages, salaries and interest to resident households (\$126.5 million); transfer payments to persons (\$18.1 million); an adjustment concerning transactions with the federal government (\$1.0 million); and that portion of local government interest charges estimated to have been paid to persons or institutions non-resident to Nova Scotia (\$17.7 million).

4. Income and Outlay of Federal Government (on transactions relating to Nova Scotia) (with implicit production account)

The disbursements of the federal government in the province fall into the following categories: (i) purchase of goods and services from industries (\$82.4 million); (ii) payment of subsidies to industries (\$14.2 million); (iii) payment of wages, salaries and military pay to persons employed by the federal government within the province (\$156.0 million); (iv) remittances of transfer payments directly to households (\$93.1 million); 13 (v) remittances of transfers to provincial public sectors (\$101.3 million). In addition the federal government is shown as paying an export subsidy to the rest of the world (\$14.0 million).

13 Our figures of federal transfer payments remitted to households exclude estimates of federal interest payments received by provincial residents. Such an estimate should have

been made.

⁸ Includes sales to non-resident tourists in the province (\$21.3 million). These are debited to the rest of the world in row

⁹ As noted above sales taxes are charged to the sector which purchases the goods on which they are levied, not the sector which produces them. The outlay by households on a particular consumer good represents the cost of producing this good, including its onward distribution and transportation margins, but excludes taxes levied on it.

10 Our estimates were, however, cross checked with

¹⁰ Our estimates were, however, cross checked with independent data.

¹¹ Transactions between provincial public sectors are recorded in the System of Nine Accounts (see page 41).

¹² Data on aggregate capital expenditures and its commodity composition is readily available and was in fact used to construct the four sub-components of the provincial public sectors. We decided, however, to treat the expenditures of public sectors on capital-type goods as current expenditures in order to simplify the system.

In effect, this is a subsidy in aid of the Nova Scotia coal mining industry, paid to the Central Canadian purchasers of Nova Scotia coal to assist them in covering the cost of hauling this coal from Nova Scotia.

Federal revenues deriving from direct and indirect taxes raised in the Atlantic Provinces are much smaller than federal disbursements in the region. Tax receipts from industries (\$36.2 million) plus tax receipts from persons (\$124.4 million) together with an adjustment item relating to federal-provincial transactions (\$1.0 million) constitute federal revenues from Nova Scotia.

The balancing entry in the account is the "excess of federal spending over federal receipts" (\$301.5 million); this is a measure of the degree to which the rest of Canada subsidizes the economy of Nova Scotia through the federal fiscal system, it "finances" the larger part of Nova Scotia's deficit with the "rest of the world" (\$355.1 million), most of which derives from a deficit on trade in goods and services (see below).

5. Income-outlay Account of the Rest of the World

Unfortunately, it is impossible to separate the transactions of an Atlantic Province with foreign countries from its transactions with other Canadian provinces. Even the effort to construct an account between a province and the rest of the world stretches the data somewhat.

The only part of the account with the rest of the world which can be disaggregated with respect to geographic location is that pertaining to provincial commodity exports (see Tables 2.7 and 2.8H). Here we are able to distinguish exports to foreign countries (\$137.6 million), exports to other Atlantic Provinces (\$65.0 million) and exports to Central and Western Canada (\$190.0 million). We have no means of determining the geographic origin of commodity imports other than those which originate in Atlantic Provinces, i.e. we cannot distinguish between foreign imports and those of Canadian non-Atlantic origin.¹⁴ Short of a comprehensive survey of geographic origins of intermediate and final imports, it is impossible to arrive at estimates which meet the standard of statistical accuracy of the rest of this study. The estimated deficit on Nova Scotia's transactions with the rest of the world is \$355.1

It is obvious that this estimate is subject to an unknown and possibly wide margin of error, because it is

a residual. Nevertheless, it is our contention that a total accounting framework such as the one outlined in this study provides the only basis for systematic and progressive improvements in statistical estimation of such troublesome but significant items.

6. Consolidated Capital Finance Account

The consolidated capital finance account is set out so as to show the expenditure on gross domestic capital formation on the debit (disposition) side, and the (net) sources of funds for its financing on the credit side. Since expenditures in the province on capital-type goods made by provincial public sectors and the federal government are treated as current expenditures, they are excluded from gross domestic capital formation, which is therefore limited to the purchases of capital goods by industries (\$212.4 million); this relates to new residential housing, to industrial and commercial gross fixed capital formation and inventory change. Included, of course, are the investment expenditures of publicly-owned industrial enterprises, such as provincially-owned electric utilities.

The sources of finance for the purchase of capital goods by industries are: household saving (\$77.7 million); capital consumption allowances of industries (\$117.6 million); less the overall net deficit of provincial public sectors (\$36.5 million); plus the balancing entry "net capital inflow from the rest of the world not covered by net federal government transfers" (\$53.6 million), which represents a residual estimate of net private capital inflows to Nova Scotia.

Obviously, treatment of reinvested profits of "non-resident" ocompanies as income remitted out of the provincial economy raises the entry "net capital inflow" by showing these profits as flowing out on current account and re-entering on capital account. It raises, at the same time, the total deficit on transactions with the rest of the world (\$355.1 million). The alternate treatment – i.e., treating the reinvested profits of non-resident companies as provincially disposable income — would diminish this deficit and raise the proportion of it covered by the excess of federal disbursements over federal receipts in the province.

In the system of accounts the item "net capital inflow" is the ultimate residual balancing entry. For this reason it is the least reliable single estimate. Unfortunately there are virtually no data which permit even the roughest direct estimate of net capital flows. Data on gross transactions in financial investments on a regional (provincial) basis are even more difficult to obtain than data on interprovincial transactions in goods and services.

¹⁴ Others have attempted to "split" the residual of our account on the basis of data for Canada as a whole. While the exercise may be useful in yielding a rough indication of the feedback of federal expenditures to Central Canada, the reliability of such estimates is questionable without a comprehensive survey of the actual geographic origin of intermediate and final imports. See J.M. Hartwick, An interregional Input-Output Analysis of the Eastern Canadian Economics (20).

¹⁵ Non-resident to the province, i.e. companies with head offices elsewhere in Canada or abroad.

IV. SEPARATION OF TRANSFER INCOMES FROM INCOMES ORIGINATING IN DOMESTIC PRODUCTION

In Table 2.3 we have separated incomes and taxes deriving from the production of goods and services within the domestic economy from incomes received in the form of transfers. Table 2.3 thus constitutes and expansion of the system of six accounts of Table 2.2.

The first five rows represent the five sectors of the accounting system of Tables 2.1 and 2.2. The first seven rows and eight columns record transactions of Type A, B, C3 and C* of Chart 2.1, i.e., transactions arising from the production of goods and services in the domestic economy.

The intersection of the first row with the first seven columns represent transactions of Type A and B, i.e., sale of final outputs (A) and the purchase of competitive imports (B). The intersection of rows 2 and 5 and columns 1 to 7 represent transactions of Type C*, i.e., primary inputs C1, C2, and C4 arranged by sector of payment and receipt. In row 6 is found the category C3, which represents capital consumption allowances of the industries. Column 8 provides total receipts of each of the five sectors deriving from domestic production. Entries in rows 2 to 5 and columns 9 to 12 represent transactions of Type D, i.e., income transfers between households, provincial public sectors, federal government and the rest of the world. Balances of the income-outlay accounts of households, provincial public sectors, federal government and the rest of the world are found in row 6 (columns 9 to 12) and column 14 (rows 2 to 5). These balances are the transactions of Type E. Row 8 and columns 13 and 15 contain totals. In rows 10 to 20, primary inputs are reclassified by type C1, C2, C3 and C4.

Description of Table 2.3

Transactions of Category A — These transactions are entered in row 1 and repeated in row 9. Industries sell output to households (\$820.7 million), to provincial public sectors (\$124.3 million), to the federal government (\$82.4 million), to the rest of the world (\$392.6 million) and to industries on capital account (\$212.4 million).

Transactions of Category B — Industries purchase competitive imports from the rest of the world (\$435.9 million).

Transactions of Category C—We remind the reader that there are four types of primary inputs. These are factor services (C1), indirect taxes less subsidies (C2), capital consumption allowances (C3) and non-competitive imports (C4). In the C^* form, primary inputs are shown as the income of the various receiving sectors (rows 2 to 5) and outlays of the paying sectors (columns 1 to 5).

Households, for example, receive \$766.7 million from providing factor services to industries, \$126.5 million from production of provincial public sectors and \$156.0 million from domestic production of the federal government. Household incomes earned by providing factor services to industries (\$766.7 million) are composed of wages and salaries and supplementary labour income (\$539.5 million); unincorporated income (\$122.3 million); profits remitted or remittable to households (\$60.3 million); interest remitted (\$44.6 million).

Corporate profits before taxes (\$143.2 million) are shown to have been distributed as follows:

	Millions of dollars
Tax on profits (to federal government)	33.2
Tax on profits (to provincial government)	7.8
Profits remitted or remittable to rest of the world	41.9
Profits retained in the provinces and included in	
household income	60.3
Total	143.2

Rent and interest originating in industries has been distributed as follows:

																					Millions of dollars
To rest of the v	vor	ld				9	÷			÷		į.	:04	(4)			12		9	ę,	16.9
To households			ĮII.	į	2	1				-	٠		5			÷	٠	÷			44.6
Total																					

The interest paid by provincial public sectors has been distributed as follows:

																	Millions of dollars
To rest of the world						*	*	() e	*	(e			: *:	¥	170	,	17.7
To households .																	
Total	,	. ,	 21	,	÷				•	N.T.							29.8

Capital consumption allowances (C3) represent a current expense to industries (\$117.6 million) and are credited to the consolidated capital finance account as a source of funds in rows 6 and 17.

The sum of outlays of industries on non-competitive imports (\$146.8 million) and estimated profits and interest remitted out of the province by industries (\$58.8 million) is entered in row 5, column 1 as receipts of the rest of the world from industries (\$205.6 million).

In rows 10 to 20, primary inputs are re-arranged by type. Factor incomes are shown in rows 10 to 13, indirect taxes in row 15, subsidies in row 16, capital

TABLE 2.3. System of Six Accounts, Nova Scotia, 1965

Separation of Income arising from Production of Goods and Services in the Domestic Economy from Income received by Transfer

		Current	Final expenditure on goods and services less competitive imports										
		account inputs of industries	House- holds	Provin- cial public sectors	Federal govern- ment		the world	Capital finance	income arising from domestic production				
	,					Exports	imports						
Item No.		1	2	3	4	5	6	7	8				
	Production:	7		()	millions	of dollars	iii ii		Î ²				
1	Industries – Receipts from final sales less competitive imports Incomes arising from domestic production (cols. 1-8):	=	820.7	124.3	82.4	392.6	- 435.9	212.4	1,196.5				
2	Households Provincial public sectors	766.7 85.0	-	126.5	156.0	144	-	120	1,049.2				
4	Federal government	- 0.4 36.2	62.4	12	=	==	=	=	147.0				
7	1 coolat government	- 14.2	62.5	· ·	-	_	=	=	70.5				
5	Rest of the world	205.6	90.0	28.7	2.1	-	:	-	326.4				
6	Capital finance: Sources of funds	117.6		-	==	_	_		117.6				
7	Total expenditure	1,196.5	1,035.6	279.5	240.5	378.6	- 435.9	212.4					
			Re-arrangement of primary inputs										
	Production:		Α						,				
9	Industries – Receipts from final sales less competitive imports	-	820.7	124.3	82.4	392.6	- 435.9	212.4	1,196.5				
10	Wages, salaries, SLI	539.5	S-3	114.4	156.0			157	809,9				
11	Unincorporated income	122.3	(A)	-	524	-	~	52	122.3				
12	Corporate profit	143.2	-	29.8	-	355	150	-	143.2 91.3				
13 14	Rent and interest Net Domestic Product at factor cost	61.5 866.5	_	144,2	156.0	_	_	_	1,166.7				
15	Taxes (indirect)	80.2	124.9	-	-		74		205.1				
16	Less: Subsidies	- 14.6	-	-	÷==	- 14.0	-	-	- 28.6				
17	Capital consumption allowances	117.6	-	-	_	-	T A	-	117.6				
18	Gross domestic product at market prices	1,049.7	124.9	144.2	156.0	- 14.0	\—	-	1,460,8				
19 20	Non-competitive imports Total primary inputs	146.8 1,196.5	90.9 214.9	11.0 155.2	2.1 158.1	- 14,0	-	_	249.9 1,710.7				
21	Total expenditure	1,170.3	1,035.6	279.5	240.5	378.6	- 435.9	212.4	1,710.7				
	, dagaaa (22, 13, 13, 13, 13, 13, 13, 13, 13, 13, 13					61							
		Total — Income arising		Inco	ome and out	lay, and cap	pital finance ac	counts					
		from domestic production	House- holds	Provin- cial public sectors	Federal govern- ment	Rest of the world	Total income (8 + + 12)	Capital finance	Total income				
		8	9	10	11	12	13	14	15				
		10400			02.1	22.5	1.100.5		1 100 5				
2	Households	1,049.2 147.0	13.8	18.1	93.1 101.3	22.3	1,182.7 262.1	36.5	1,182.7 298.6				
4	Provincial public sectors Federal government	70.5	61.9	1.0	101.3	_	133.4	301.5	434.9				
5	Rest of the world	326.4	+ 15.0	1.0			155.4	331.3	1,37,1				
			- 21.3	-		=	320.1	-	320.1				
6	Capital finance sources of funds ,	117.6	77.7	-	·	355.1	550.4		550.4				
7	Total expenditure on goods and services		1,035.6	279.5	240.5	- 57.3		212,4					
8	Total outlay		1,182.7	298.6	434.9	320.1		550.4					

consumption allowances in row 17, and non-competitive imports in row 19. The column sums of primary inputs are of course identical in the two arrangements. 16

Transactions of Category D — Transfers among households, provincial public sectors, the federal government and the rest of the world are shown in the intersections of rows 2 to 5 and columns 9 to 12. These entries form a matrix of transfers between sectors.

Thus, for example, households receive \$18.1 million in personal transfer payments from provincial public sectors; \$93.1 million in personal transfer payments from the federal government, and \$22.3 million in miscellaneous property income and remittances from the rest of the world. When added to earned income of \$1,049.2 million (col. 8) we arrive at total household income of \$1,182.7 million entered in column 13. Household outlay, other than purchases of goods and services inclusive of indirect taxes, are entered in column 9 as transfers from households to the four other sectors of the system of accounts. Thus the household account pays \$13.8 million to provincial public sectors in direct taxes, \$61.9 million to the federal government in direct taxes, \$15.0 million to the rest of the world for tourism out of the province, and receives \$21.3 million from non-resident tourists, leaving a residual estimate of personal savings, inclusive of retained earnings of local corporations, of \$77.7 million. When the above items of outlay are added to the expenditure of \$1,035.6 million on goods and services, we arrived at total household outlay of \$1,182.7 million (row 8).

If we examine the account of the federal government (row 4) we observe that revenues arising from domestic production (\$70.5 million) are composed of indirect taxes paid by industries (\$36.2 million), subsidies paid to industries (\$-14.2 million), indirect taxes paid by households (\$62.5 million) and subsidies paid

for hauling coal from Nova Scotia to Central Canada (\$-14.0 million). To these items are added personal direct taxes of \$61.9 million and an adjustment credit from provincial public sectors of \$1.0 million. The total federal revenue, net of subsidies paid, is \$133.4 million (column 13).

Federal outlays, other than expenditure on the purchase of goods and services of \$240.5 million (row 7, column 11), are composed of transfer payments to households (\$93.1 million) and transfers to provincial public sectors (\$101.3 million). The total federal government outlay of \$434.9 million is \$301.5 million in excess of total net federal revenues deriving from Nova Scotia (\$133.4 million). The residual difference between the income and outlay of the federal government is entered in column 14 and represents the net fiscal transfer into Nova Scotia by the federal government.

Transactions of Category E-By now it is clear that "transactions" of Category E constitute the net sources of finance for domestic capital formation in the capital finance account; they are found in row 6 and column 14.

Credits to the consolidated capital finance account are recorded in row 6. These consists of capital consumption allowances (\$117.6 million), personal savings (\$77.7 million) and a residual item of \$355.1 million which represents the current account deficit on the balance of payments.

Debits to the account are entered in column 14; net borrowing by provincial public sectors (\$36.5 million); the excess of federal expenditures made in Nova Scotia over federal revenues originating from Nova Scotia (\$301.5 million); and, of course, gross capital formation of industries (\$212.4 million).

V. CONSOLIDATED ACCOUNTS FOR A PROVINCIAL ECONOMY

Gross Domestic Product and Expenditure

It is now possible to obtain the four summary tables of consolidated "national" accounts for a provincial economy. These, it will be recalled, are the Domestic Product and Expenditure Account, Provincial Disposable Income and its Disposition, Capital Finance and the Balance of Payments. The Gross Domestic Product and Expenditure Account is equivalent to the Consolidated Production Account of Industries and Government Sectors. Both the product and the expendi-

ture sides of the GDP account of Table 2.4A are taken from Table 2.3¹⁷

Gross Domestic Product at market prices for Nova Scotia in 1965 was \$1,460.8 million; Net Domestic Product at market prices was \$1,343.2 million; Net Domestic Product at factor cost was \$1,166.7 million. The latter was composed of wages and salaries (\$809.9 million), unincorporated income (\$122.3 million), corporate profits (\$143.2 million) and rent and interest

¹⁶ The reader is reminded that the exposition reverses the procedure of estimation. In fact primary inputs by type are obtained prior to their distribution by receiving accounts.

 $^{^{17}\,\}mathrm{Column}$ 8 (rows 10 to 18) of Table 2.3 record the product side of the GDP account. Row 21 (columns 2 to 7) minus the entry at the intersection of row 19, column 8 record the expenditure side of the GDP account.

(\$91.3 million). Expenditure on the Gross Domestic Product was composed of personal expenditure (\$1,035.6 million), expenditure on goods and services by provincial public sectors (\$279.5 million), expenditure on goods and services by federal government (\$240.5 million), gross domestic capital formation of industries (\$212.4 million), exports to foreign countries (\$137.6 million), exports to the rest of the Canada (\$241.0 million), less imports of \$685.8 million.

Tables 2.4B, C and D present the same information for Newfoundland, Prince Edward Island and New Brunswick respectively.

Provincial Disposable Income and its Disposition

While Gross Domestic Product pertains to the market value of goods and services produced within the geographic boundaries of the provincial economies, provincial disposable income pertains to the annual income available to residents of the province and to its disposition. (As has already been explained, there is no meaningful provincial counterpart to Gross National Product and Expenditure.)

Provincial Disposable Income and its disposition for Nova Scotia 1965 is presented in Table 2.5A.

The components of Provincial Disposable Income are: Net Domestic Product at factor cost (\$1,166.7 million), plus indirect taxes levied by provincial public sectors (\$205.1 million minus \$65.5 million) less subsidies paid by provincial public sectors (\$14.6 minus \$14.2 million) plus transfers from the federal government (\$194.4 million), plus transfers from the rest of the world (\$22.3 million) less funds remitted or remittable to the rest of the world by industries and provincial public sectors (\$77.5 million) less direct taxes paid to the federal government (\$95.1 million).

The disposition of Provincial Disposable Income is as follows: personal expenditure on goods and services, non-competitive imports, tourism out of the province and indirect taxes (\$1,029.3 million); plus the provincial public sector expenditure on its own output, on the output of industries and on non-competitive imports (\$279.5 million), and net provincial savings (\$77.7 million minus \$36.5 million).

This represents aggregate consumption and savings by provincial residents and provincial and local governments. Tables 2.5B, C and D present the same information for Newfoundland, Prince Edward Island and New Brunswick respectively.

The Balance of Payments

Transactions of residents with non-residents fall into two distinct categories: (i) transactions with the federal government, and (ii) transactions with the rest of the world. Table 2.6A shows receipts and payments of Nova Scotia residents in transactions with non-residents.

Total receipts of Nova Scotia residents deriving from transactions with the federal government were \$447.0 million, arising from: sales of goods and services by industries (\$82.4 million); wages, salaries and SLI earned by residents (\$156.0 million); subsidies to industries (\$14.2 million); transfer payments to households (\$93.1 million), and transfers to provincial public sectors (\$101.3 million). Total receipts from the rest of the world were \$436.2 million, arising from: exports, including tourism (\$413.9 million); transfers to households in the form of property income and remittances (\$22.3 million); and a (residual) net capital inflow of \$53.6 million. This latter figure represents an estimate of that portion of the deficit on current account not covered by net federal fiscal transfers into Nova Scotia.

Payments by residents consist of: direct and indirect taxes remitted to the federal government by industries and households (\$161.6 million); transfer by provincial and municipal governments to the federal government (\$1.0 million); payments to the rest of the world for commodity imports (\$683.7 million); tourist expenditures out of the province (\$15.0 million); and remitted or remittable profit and interest (\$76.5 million).

Table 2.6B presents the same information for Newfoundland, Prince Edward Island, and New Brunswick respectively.

The Consolidated Capital Finance Account was discussed earlier, and is the same as shown in Table 2.2F.

TABLE 2.4 A. Gross Domestic Product and Expenditure, 1 1965 Nova Scotia

	11011	i Deottia	Control Contro
Dr. Gross Domestic Product	Millions of dollars	Cr. Expenditure on the Gross Domestic Product	Millions of dollars
Add: Wages, salaries and SLI (1 + 92 + 106 + 120 + 142 + 167) Unincorporated income (2) Corporate profit (6) Rent and interest (3 + 93 + 107 + 121 + 143)	809.9 122.3 143.2 91.3	Personal consumption before adjustment ^{2,3} (61) Expenditure on goods and services by provincial public sectors (97 + 111 + 125 + 147)	1,035.6 279.5
Equals: Net Domestic Product at factor cost Plus: Indirect taxes (12 + 54) Less: Subsidies (17 + 18 + 223) Equals:	1,166.7 205.1 - 28.6	Expenditure on goods and services by federal government (169)	240.5 212.4 (378.6) 137.6 241.0
Net Domestic Product at market prices Plus: Capital consumption allowances (19) Equals:	1,343.2 117.6	Less: Imports ³ Competitive imports (201) Non-competitive imports (207)	- (685.8) - 435.9 - 249.9
Gross Domestic Product at market prices	1,460.8	Expenditure on the Gross Domestic Product at market prices	1,460.8

Consolidated Production Account of Industries and Government, Reference numbers refer to entries in the System of Nine Accounts, (See Tables 2.8 and 2.9.)
 Includes purchases by non-resident tourists,
 Excludes resident tourist expenditures out of province,
 Excludes purchases by non-resident tourists,
 Excludes \$14 million federal subsidy on coal shipments,

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TABLE 2.4 B. Gross Domestic Product and Expenditure, 1 1965 Newfoundland

Dr. Gross Domestic Product	Millions of dollars	Cr. Expenditure on the Gross Domestic Product	Millions of dollars
Add: Wages, salaries and SLI (1 + 92 + 106 + 120 + 142 + 167) Unincorporated income (2) Corporate profit (6) Rent and interest (3 + 93 + 107 + 121 + 143)	408.1 44.3 113.5 52.3	Personal consumption before adjustment ^{2,3} (61)	506.8 167.1
Equals: Net Domestic Product at factor cost Plus: Indirect taxes (12 + 54)	618.2 97.6 - 13.7	Expenditure on goods and services by federal government (169) Gross domestic capital formation (36, 226) Exports ⁴ To foreign countries (40, 190) To Canada (41 + + 45-223)	58.1 134.2 (311.0) 259.3 51.7
Net Domestic Product at market prices Plus: Capital consumption allowances (19) Equals:	703.1 65.7	Less: Imports ³ Competitive imports (201) Non-competitive imports (207)	(- 409.4) - 289.4 - 120.0
Gross Domestic Product at market prices	767.8	Expenditure on the Gross Domestic Product at markét prices	767.8

4 Excludes purchases by non-resident tourists.

See footnote 1, Table 2.4A.
 Includes purchases by non-resident tourists.
 Excludes resident tourist expenditures out of province.

TABLE 2.4 C. Gross Domestic Product and Expenditure, 1 1965 Prince Edward Island

Dr . Gross Domestic Product	Millions of dollars	Cr. Expenditure on the Gross Domestic Product	Millions of dollars
Add: Wages, salaries and SLI(1 + 92 + 106 + 120 + 142 + 167) Unincorporated income (2) Rent and interest (3 + 93 + 107 + 121 + 143) Equals:	72.8 33.1 11.2	Personal consumption before adjustment ^{2,3} (61)	129.3 41.0
Net Domestic Product at factor cost	130.9	Expenditure on goods and services by federal government (169)	24.6
Plus: Indirect taxes (12 + 54)	27.2	Gross domestic capital formation (36, 226)	28.6
Less: Subsidies (17 + 18 + 223) Equals:	- 3.6	Exports ⁴	(48.2) 10.2 38.0
Net Domestic Product at market prices Plus: Capital consumption allowances (19)	15 4. 5	Less: Imports ³	(- 100.5) - 67.1 - 33.4
Equals:			
Gross Domestic Product at market prices	171.2	Expenditure on the Gross Domestic Product at market prices	171.2

TABLE 2.4 D. Gross Domestic Product and Expenditure, 1 1965 **New Brunswick**

Dr. Gross Domestic Product	Millions of dollars	Cr. Expenditure on the Gross Domestic Product	Millions of dollars
Add: Wages, salaries and SLI (1 + 92 + 106 + 120 + 142 + 167)	615.9 89.6 109.7 80.6	Personal consumption before adjustment2,3 (61)	767.1 231.4
Equals: Net Domestic Product at factor cost Plus Indirect taxes (12 + 54) Less:	895.8 163.9	Expenditure on goods and services by federal government (169) Gross domestic capital formation (36, 226) Exports ^{4,5} To foreign countries (40, 190)	100.0 232.5 (382.3) 207.9
Subsidies (17 + 28 + 223) Equals: Net Domestic Product at market prices	- 6.7 1,053.0	To Canada (41 + 45-223)	174.4 (- 547.7)
Plus Capital consumption allowances (19) Equals:	112.6	Competitive imports (201)	- 332.4 - 215.3
Gross Domestic Product at market prices	1,165.6	Expenditure on the Gross Domestic Product at market prices	1,165.6

See footnote 1, Table 2.4A.
 Includes purchases by non-resident tourists.
 Excludes resident tourist expenditures out of province.
 Excludes purchases by non-resident tourists.

See footnote 1, Table 2.4A.
 Includes purchases by non-resident tourists.
 Excludes resident tourist expenditures out of province.
 Excludes purchases by non-resident tourists.
 Excludes \$1.5 million Federal Subsidy on coal shipments.

TABLE 2.5 A. Provincial Disposable Income, 1965 Nova Scotia

Disposition	Millions of dollars	Source	Millions of dollars
Personal expenditure on consumer goods and services:	799.4	Wages and salaries, etc. Unincorporated income	809.9 122.3 143.2
Industries 1 Non-competitive imports 2 Indirect taxes	105.0 124.9	Corporate profit Rent and interest originating in: Industries	61.5
Total	1,029.3	Provincial public sectors Sub-total:	29.8
	-,,-	Net Domestic Product at factor cost Add: Total indirect taxes	(1,166.7)
Local governments expenditure on goods and services:		Less: Indirect taxes to federal government	- 65.5
On own output	144.2 124,3	Deduct: Total subsidies	- 14.6
Non-competitive imports	11.0	Subsidies from federal government Add:	- 14.2
Total	279.5	Transfers from federal government Property income, wages and salaries and	194.4
		transfers from rest of world Deduct:	22.3
Saving: Personal saving	77.7 - 36.5	Interest from industries to rest of world Profits from industries to rest of world Interest from local governments to rest of	- 16.9 - 41.9
		world	- 17.7
Total	41.2	world Direct taxes to federal government	- 1.0 - 95.1
Total	1,350.0	Provincial disposable income	1,350.0

TABLE 2.5 B. Provincial Disposable Income, 1965 Newfoundland

Disposition	Millions of dollars	Source	Millions of dollars
Personal expenditure on consumer goods and services: Industries 1	382.8	Wages, salaries and SLI Unincorporated income Profits and investment income originating in:	408.1 44.3
Non-competitive imports ²	57.9 68.3	Corporate industries	150.6 15.2
Total	509.9	Net Domestic Product at factor cost Add:	(618.2)
		Total indirect taxes	97.6
Local governments expenditure on goods and services:		Indirect taxes to federal government Deduct:	- 32.8
On own output	72.0 88.4	Total subsidies	- 13.7
Non-competitive imports	6.7	Subsidies from federal government Add:	13.6
Total	167.1	Transfers from federal government Property income, wages and salaries and	149.9
		transfers from rest of world Deduct:	6.4
Saving:		Interest from industries to rest of world	- 20.0
Personal saving Local governments	38.0 - 14.3	Profits from industries to rest of world Interest from local governments to rest of	- 49.9
	22.7	world	- 11.9
Total a ranson or or national to receive	23.7	world Direct taxes to federal government	- 2.2 - 55.4
Total	699.8	Provincial disposable income	699.8

 ¹ Excluding non-resident tourist expenditure in the province.
 2 Including resident expenditure on tourism outside the province.

¹ Excluding non-resident tourist expenditure in the province.
2 Including resident expenditure on tourism outside the province.

TABLE 2.5 C. Provincial Disposable Income, 1965 Prince Edward Island

Disposition	Millions of dollars	Source	Millions of dollars
Personal expenditure on consumer goods and		Wages, salaries and SLI	72.8
services: Industries ¹	91.9	Unincorporated income Profits and investment income originating in:	33.1
Non-competitive imports ²	12.5	Corporate industries	20.5
Indirect taxes	18.9	Local governments	4.5
Total	123.3	Net Domestic Product at factor cost Add:	(130.9)
		Total indirect taxes	27.2
Local governments expenditure on goods and services:		Indirect taxes to federal government Deduct:	- 9.5
On own output	17.6 20.9	Total subsidies	- 3.6
Non-competitive imports	2.5	Subsidies from federal government Add:	3.4
Total	41.0	Transfers from federal government Property income, wages and salaries trans-	34.7
		fers from rest of world	3.0
Saving:		Interest from industries to rest of world	- 3.7
Personal saving Local governments	8.7 - 5.2	Profits from industries to rest of world Interest from local governments to rest of	- 1.8
		world	- 3.5
Total	3.5	world	- 0.2
		Direct taxes to federal government	- 9.1
Total	167.8	Provincial disposable income	167.8

TABLE 2.5 D. Provincial Disposable Income, 1965 New Brunswick

Disposition	Millions of dollars	Source	Millions of dollars
Personal expenditure on consumer goods and		Wages, salaries and SLI	615.9
services: Industries 1	593.6	Unincorporated income	89.6
Industries 1 Non-competitive imports 2	77.7		167.1
Indirect toyog	96,8	Corporate industries	23.2
Indirect taxes	90.0	Local government	23.2
Total	768.1	Net Domestic Product at factor cost	(895.8)
		Add:	(/
		Total indirect taxes	163.9
		Less:	
Local governments expenditure on goods and		Indirect taxes to federal government	- 50.1
services:		Deduct:	
On own output	117.6	Total subsidies	- 5.2
Industries	105.6	Add:	
Non-competitive imports	8.2	Subsidies from federal government	4.8
TD f	001 1	Add:	150.5
Total	231.4	Transfers from federal government	170.5
		Property income, wages and salaries and transfers from rest of world	13.5
		Deduct:	15.5
Saving:		Interest from industries to rest of world	- 28.9
Personal saving	58.4	Profits from industries to rest of world	- 38.5
Local governments	- 20.2	Interest from local governments to rest of	00.0
		world	- 14.2
Total	38.2	Transfers from local governments to rest of	
Total	38.2	world	- 0.8
		Direct taxes to federal government	- 73.1
Total	1,037.7	Provincial disposable income	1,037.7
The state of the s	, - , - ,		=,==,

 ¹ Excluding non-resident tourist expenditure in the province.
 2 Including resident expenditure on tourism outside the province.

 $^{^{\}rm I}$ Excluding non-resident tourist expenditure in the province, $^{\rm 2}$ Including resident expenditure on tourism outside the province,

TABLE 2.6 A. Balance of Payments Account, 1965 Nova Scotia

Receipts of residents	Millions of dollars	Payments by residents	Millions of dollars
From federal government	(447.0)	To federal government	(161.6)
Sales of goods and services by industries (166)	82.4	Direct and indirect taxes:	
Wages, salaries and SLI (167)	156.0	Paid by industries (179 + 181) Paid by households (182)	36.2 124.4
Subsidies to industries (180)	14.2	Transfer from provincial government (185)	0.8
Transfers to households (171)	93.1	Transfer from municipal government (186)	0.2
Transfers to provincial public sectors (172 ++ 175)	101.3	To rest of the world	(775,2)
From rest of the world	(436,2)	Competitive imports (by industries) (201)	435.9
Exports including tourism (189 + 196)	413.9	Non-competitive imports (excluding federal government) (207-214)	247.8
Transfers to households (remittances, gifts, miscellaneous property income) (198)	22.3	Tourist expenditures by households out of province (215)	15.0
Net capital inflow from rest of the world not covered by federal government transfers (236)	(53.6)	Remittable and remitted profit and interest (217)	76.5
Total receipts of residents	936.8	Total payments by residents	936.8

TABLE 2.6 B. Balance of Payments Account, 1965 Atlantic Provinces

	Newfound- land	Prince Edward Island	Nova Scotia	New Brunswick
Receipts of residents		millions o	of dollars	
From federal government Sales of goods and services by industries (166) Wages, salaries and SLI (167) Subsidies to industries (180) Transfers to households (171) Transfers to provincial public sectors (172 + + 175)	(221.1) 28.7 28.9 13.6 54.1 95.8	(61.7) 8.8 14.8 3.4 15.7 19.0	(447.0) 82.4 156.0 14.2 93.1 101.3	(274.5) 25.9 73.3 4.8 72.6 97.9
From rest of the world Exports including tourism (189 + 196) Transfers to households (remittances, gifts, miscellaneous property income) (198)	(320.2) 313.8 6.4	(59.2) 56.2 3.0	(436.2) 413.9 22.3	(416.3) 402.8 13.5
From federal government Sales of goods and services by industries (166) Wages, salaries and SLI (167) Subsidies to industries (180) Transfers to households (171) Transfers to provincial public sectors (172 + . + 175) From rest of the world Exports including tourism (189 + 196) Transfers to households (remittances, gifts, miscellaneous property income) (198) Net capital inflow from rest of the world not covered by federa government transfers (236) Total receipts of residents Payments by residents To federal government Direct and indirect taxes: Paid by industries (179 + 181) Paid by households (182) Transfer from provincial government (185) Transfer from municipal governments (186) To rest of the world Competitive imports (by industries) (201) Non-competitive imports (excluding federal government) (207) less 214) Tourist expenditures by households out of province (215) Remittable and remitted profit and interest (217)	(44.8)	(8.4)	(53.6)	(81.7)
Total receipts of residents	586.1	129.3	936.8	772.5
Payments by residents				
To federal government Direct and indirect taxes:	(90.4)	(18.8)	(161.6)	(124.0)
Paid by industries (179 + 181) Paid by households (182) Transfer from provincial government (185) Transfer from municipal governments (186)	29.4 58.8 2.0 0.2	4.2 14.4 0.2	36.2 124.4 0.8 0.2	31.7 91.5 0.7 0.1
To rest of the world	(495.7) 289.4	(110.5) 67.1	(775.2) 435.9	(648.5) 332.4
	119.5 5.0 81.8	32.4 2.0 9.0	247.8 15.0 76.5	214.5 20.0 81.6
Total payments by residents	586.1	129.3	936.8	772.5

VI. THE SYSTEM OF NINE ACCOUNTS

In the tables which follow, the five sectors of the simplified system are expanded to eight sectors by disaggregating the provincial public sectors into four sub-sectors representing the functional categories of expenditures on education, hospitalization, municipal government services, and provincial government services.

The expansion principally affects the transfer matrix D and the full system of nine accounts for each of the four Atlantic Provinces and for the Atlantic Region is shown in matrix form in Table 2.7. Detailed accounts for Nova Scotia for 1965 are presented in Table 2.8 and similar detail for each of the other Atlantic Provinces is found in Table 2.9.

TABLE 2.7 A. System of Nine Accounts, Summary of Transactions, 1965 Newfoundland

_			Newto	ounciand							
				Fir	nal expenditu	re on good	s and servi	ces, less comp	etitive impor	ts	
				Capital fo		Fed govern	leral nment			al public tors	
		Current account inputs of industries	Personal expenditure (including purchases by non-resident tourists)	Gross fixed capital formation	Inventory change	Defence	Civil	Provincial	Municipal	Education	Hospitali- zation
		1	2	3	4	5	6	7	8	9	10
No.						millions o	f dollars				
1 Sa	ales by industries		385.6	128.6	5.6	2.6	26.1	53.0	10.5	11.4	13.5
	rimary inputs:	300.4					21.7	16.6	2.0	21.0	1.5.0
	Wages, salaries, and SLl Unincorporated income	322.4 44.3		_	_	7.2	21.7	16.5	2.8	21.8	15.
	Corporate profit	113.5						_		_	
	Rent and interest	37.1		_	_	000	764	11.2	1.1	2.8	0.
6	Net Domestic Product at factor cost (2+ +5)	(517.3)	=	-	-	(7.2)	(21.7)	(27.7)	(3.9)	(24.6)	(15.
- 1	Indirect taxes:										
7	Municipal	6.6	1.4	- 1	-	1.57	25	= -	- 1	-	-
9	Provincial Federal	19.9	33.6 30.0		_	A2	75	E	- /	_	_
0	Education and hospital charges	=	3.3	-	-	-	15	=	=	_	-
111	Less: Subsidies:										
1	Provincial	-0.1		-	-	10-	1000	-	_	-	-
2 3	Federal Capital consumption allowances	-13.6 65.7	_	_	- 1		7.0	=	=	_	-
- 1			(60.0)				45	#			00.2
5	Gross Domestic Product at market prices (6++13) . Non-competitive imports	(598.6) 59.9	(68.3) 52,9	-	-	0.2	(21.7) 0.3	(27.7) 1.5	(3.9) 0.6	(24.6) 1:5	(15.
16	Total primary inputs (14+15)	(658.5)	(121.2)	-	_	(7,4)	(22.0)	(29.2)	(4.5)	(26.1)	(18.
	otal final expenditure on goods and services, less competitive mports		506.8	128.6	5.6	10.0	48.1	82.2	15.0	37.5	32.4
In	come plus deficit (column 30) of:										
1.	Households (2+2+33+35)	412.7	1-1	- 1	-	7.2	21.7	19.2	2,8	21.8	15
9	Education (10)	=	1.5	- 1	-	~	5 E	Sec. 1		-	25=
	Hospitalization (10)		1.8	-		=		201	553	120	72
	Municipal government (7)	6.6	1.4	-		75			==	===	
	Provincial government (8+11+32) Federal government (9+12+31)	27.9 15.8	33.6 30.0	_	=		-	(a)	_	_	-
	Rest of the world (15+34+36)	129.8	52.9	_		0.2	0.3	9.4	1,7	4.3	3
25	Total outlay					1, - 3, -, 1, -	e Brantoid	entwodere.	interior		
26 Ca	apital finance: CCA plus saving	65.7	-	ie.	i e	=	: =	+	-	-	(2-
27	Total primary (18+ +24+26)	658.5	121.2	=	-	7.4	22.0	29.2	4.5	26.1	18
28	Total (1+27)		506.8	128.6	5.6	10.0	8.1	82.2	15.0	37.5	32
29				(134	+.2)	(58	5.1)		(16	7.1)	
30 E:	stimated allocation of profit, rent and interest:										
	Profits:										
31	Federal tax	26.6	=	-	124	-	- 1	=	=	=	100
2	Provincial tax	8.1		100	25		2	5.0		1970	
33 34	Remaining in province Transferred out	28.9 49.9	1	2	=	-	-	50	=	=	
	Rent and interest:										
	Remaining and province	17.1		-	88	-	=	3,3	121	32	-
35 36	Transferred out	20.0		_	-		_	7.9	1.1	2.8	0.

TABLE 2.7 A. System of Nine Accounts, Summary of Transactions, 1965 Newfoundland

Foreign countries Nova Atlantic Provinces) Nova Bruns- Edward wick Island Scotia Indices Rest of Canada (excluding Atlantic Income) (21++20) Cation in the countries of	apital nance: Gross omes- tic apital orma-	finan				of	row 26)	saving (tlav plus	Ou	-11			imports	npetitive	, less con	l services	oods and	ture on g	expendi	Final	
Coreign cluding rines Coreign rine	nance: Gross omes- tic apital Total	finan				0.	0., 20,															
Rest of Canada (Canada Countries Prince Canada (Canada Countries Prince Canada (Canada Countries Prince Countries Pri	omes- tic apital Total	GIO							, ,											Exports		
millions of dollars 259.3	tion plus eficits	tic capit form tion plu	income	f the	ern-	gover	cial govern-	cipal govern-	tali-			primary inputs	Sub-total (2+ +19)	other	Prince Edward	New Bruns-		Edward	Bruns-		Canada (ex- cluding At- lantic Prov-	coun-
259.3	30 31	30	29	28	7	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11
85.7 408.1 44.3 113.5 52.3 (100.9) 618.2											ollars	millions of d										
44.3 113.5 52.3 												-	658.5	-252.4	-5.1	-11.1	-20.8	233	0.1	9.3	42.3	259.3
44.3 113.5 52.3 												409.1	05.7									
15.2 52.3 (100.9) 618.2																				-		
(100.9) 618.2 1.4 8.0 33.6 53.5 30.0 32.8 33.3 3.3 31.6															D 18				8		-	-
33.6 53.5 30.0 32.8 															P 3					-		T .
33.6 53.5 30.0 32.8 																						
30.0 32.8 	+												100			_		=			355	50
3.3 3.3 																						
= - - - - - - - - -												200	7(0	- 51	-	-	15	2/	-	-	-	7
															U 11							-
												1										-
(169.2) 767.8															_	-	-	-	-	_	-	-
60.1 120.0												120,0	60.1		-	_	=	=0	-	-	-	\pm
(229.3) 887.8												887.8	(229.3)	=	- 1	-	π	- 20	-	-	-	77
259.3 42.3 9.3 0.120.8 -11.1 -5.1 -252.4 887.8 506.8 37.5 32.4 15.0 82.2 58.1 21.6	134.2 887.8	13		21.6	3.1	58.	82.2	15.0	32.4	37.5	506.8		887.8	-252.4	-5.1	-11.1	-20.8	10000	0.1	9.3	42.3	259.3
501.7 19.8 54.1 6.4 (582.0)	- 582,0		(582 M	6.4		5.4	10.8					501.7										
	2.0 37.5									-			1	111		-					_	-
16.3 12.4 - (30.7) (12.5)	1.7 32.4				420	. 40				- 1										-		<u>=</u>
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	3.4 15.9 7.2 152.9	1	-																1			_
45.8 28.8 0.2 2.0 (76.8)	131.2 208.0	13	(76.8)	-		1,000	2.0	0.2	-	-	28.8	45.8	1	Mil Y					-			=
- - - - - - - - - (204.0)	204-0		(204-0)	1225		-	2	57	=	122	2.2	201.8	-	-	=	-	-	-	=	-	-	-
(544.0) (37.5) (32.4) (15.9) (70.7) (149.9) (28.0)													1	e grande M	ranga L	 I	 I	a recens	1	i	2003 - 220 1	- 100
65.7 38.0 176.0	279.7			176.0		-		=1/	**	100	38.0	-					=					=
887.8												887.8					20.0					
259.3 42.3 9.3 0.1 -20.8 -11.1 -5.1 -252.4 887.8 21.6													887.8	-252.4	-5.1	-11.1	-20.8	1	0.1	9.3	42.3	259.3
																		21.0		-		
582.0 37.5 32.4 15.9 152.9 208.0 204.0	279-7	27		204.0	8.0	208.	152.9	15.9	32.4	37.5	582.0											
		1				1															1	

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0.1

TABLE 2.7 B. System of Nine Accounts, Summary of Transactions, 1965 Prince Edward Island

			Prince E	dward Island							
				Fir	ıal expenditu	re on good	s and servi	ces, less comp	etitive impor	ts	
				Capital fo		Fed govern				ial public tors	
		Current account inputs of industries	Personal expenditure (including purchases by non-resident tourists)	Gross fixed capital formation	Inventory change	Defence	Civil	Provincial	Municipal	Education	Hospitali- zation
No.		1	2	3	4	5	6	7	8	9	10
	Palas ku isalaw isa		1			millions o					
	Sales by industries		99.9	30.9	-2.3	4.0	4.8	15.1	1.6	2.3	1.9
2	Primary inputs:	44.0									
3	Wages, salaries, and SLI Unincorporated income	44.9 33.1			-	8.5	6.3	3.7	0.8	5.5	3.1
4	Corporate profit	13.8	-	57/		=	-	3 0	-	_	_
5	Rent and interest	6.7			34		=	3.0	0.5	0.7	0.1
6	Net Domestic Product at factor cost (2+ +5)	(98.5)	_	=	82	(8.5)	(6.3)	(6.7)	1.3	(6.4)	(3.2
	Indirect taxes										
7	Municipal	3.8	0.5	_	142	1 2	- 1	527		22	2
8	Provincial .	3.8	8.8	_			_ 1		_		-
9	Federal	0.7	8.8	-	-	-	_		100	-	-
10	Education and hospital charges	-	0.8	- /	12	=	-	-	=	=	=
11	Less: Subsidies:	0.2									
12	Provincjal Federal	-0.2 -3.4		=		=	- 1	3		127	Ξ
13	Capital consumption allowances	-5,4 16.7	(5) (4)	_	35	= =		=======================================		i i	-
										1	_
14 15	Gross Domestic Product at market prices (6 + + 13) . Non-competitive imports	(119.9) 19,4	(18.9) 10.5	_	12	(8.5) 0.8	(6.3) 0.2	(6.7) 0,5	(1.3) 0.4	(6.4) 0.6	(3,2 1,0
16	Total primary inputs (14+15)	(139.3)	(29.4)	_	194	(9.3)	(6.5)	7.2	1.7	7.0	4.2
17	Total final expenditure on goods and services, less competitive imports		129.3	30.9	-2.3	13.3	11.3	22.3	3.3	9.3	6-1
	Income plus deficit (column 30) of:										e III.
18	Households (2+3+33+35)	88.6	-	120	15-	8.5	6.3	4.7	0.8	5.5	3.1
19	Education (10)	-	0.4	-	- 2	-	27	. =	_	1/2	- 55
20	Hospitalization (10)	2.0	0.4	-	=	===	71	=		-	=
21 22	Municipal government (7) Provincial government (8+11+32)	3.8 4.5	0.5 8.8	_	2	20 20	5 53 53				_
23	Federal government (9+12+31)	0.8	8.8		_			3	_	=	- 5
24	Rest of the world (15+34+36)	24.9	10.5			0.8	0.2	2.5	0.9	1.5	1.:
25	Total outlay				k Anca escava		ti en erese		r o consoner	e Occupante de la casa d	
26	Capital finance: CCA plus saving	16,-7	_	_		-	-	-	_	=	-
27	Total primary (18+ +24+26)	139.3	29.4	_	2	9.3	6.5	7.2	1.7	7.0	4.2
28	Total (1+27)		129.3	30.9	-2.3	13.3	11.3	22.3	3.3	9.3	6.1
29				(28	.6)	(24	l.6)		6	 4.9)	
30	Estimated allocation of profit, rent and interest:										
31	Profits:	3.5									
31 32	Federal tax Provincial tax	0.9	_	155	=		===	=	175	= =	2
33	Remaining in province	7.6	_	72	=	120	=	-	72	= =	5
34	Transferred out	1.8		UE:	=	===	=	=	100	=	=
	Rent and interest:										
35	Remaining in province	3.0	-	-	=	-	=	1.0		= 1	===
36	Transferred out	3.7	_	000	-	-		2.0	0:5	0.9	0.:

TABLE 2.7 B. System of Nine Accounts, Summary of Transactions, 1965 Prince Edward Island

										Prince Edw	vard Islan	ıd									
	Final	expendi	ture on	goods an	d services				s			Oı	ıtlay plus	s saving (row 26)	of			0.11.1		T
	Rest of	Exports					Compe imports			Total primary			itiay pius	s saving (10 w 20)			Total	Capital finance: Gross domes- tic		
oreign coun- tries	Canada (ex- cluding At- lantic prov- inces)	Nova Scotia	New- Bruns- wick	New- found- land	Nova Scotia	New Bruns- wick	New found- land	All other sources	Sub-total (2+ +19)	inputs (1++20)	House- holds	Edu- cation	Hospi- tali- zation	Muni- cipal govern- ment	Provin- cial govern- ment	Federal govern- ment	Rest of the world	income (2+ , , +28)	aonita1	Total	
11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	N
Honor					·	7	<i>i</i> :		v	millions of	dollars				NY C			,			
10.2	14.7	12.5	5.7	5.1	-4.8	-7.8	****	-54.5	139.3	-											
120	S	762	=	=	-	=	=		27.9	72.8	j										
- 55 - 25		04	(E)		-	=			== 1	33.1 13.8											
20	54	700	=	22	-	15	325	-	4.5	11-2	0										
200	3	75	-	-	-	1177	S\$	=	(32.4)	(130.9)											
=	40	ne			_	2	=	_	0.5	4.3	į.										
=	5V	U.E.	=	=	-	=	=	-	8.8	12.6											
3	-	112	=	=	_		-	_	8.8 0.8	9.5 0.8											1
										0.2											
- F3	90	000		-	_	=======================================	- 	_	= =	-0.2 -3.4											1
-	==:	:=	154	120	-	=	-	-	=	16,7											1
	91 50		-	_	_	2	-	-	(51.3) 14.0	171.2 33.4											1
-	=	94		-	-	=	144	-	(65,3)	204.6											1
10.2	14.7	12.5	5.7	5.1	-4.8	-7.8	202	-54.5	204.6		129.3	9.3	6.1	3.3	22.3	24.6	-18.9		28.6	204.6	1
	_	_				3				117.5			- 17	0.1	2.5	15.7	3.0	(138.8)	_	138.8],
-	=	-	-	=	=0	111	_	-	-	0.4	-		-	3.0	4.9	0.6	-	(8.9)	0.4	9.3	1
3	90	-	-	=	90 20	=	_	_	_	0.4 4.3		(#2)	_	WE	2.9 1.0	2.6 0.2	2	(5.9) (5.5)	0.2 0.9	6.1 6.4	
73	8	-	1575.	-	50	, les	_	-		13.3	1.2	755	-	130	- 1	15.6	185	(30.1)	3.7		2
	90	_	700	96 323	9)	16	_	-	-	9.6 42.4	5.6 -6.0	-	_	1000	0.2	725	- Se	(15.4) (36.4)	43.9	59.3 36.4	
		Į.	1		1		i.			12/1/										30.1	Ш
	_		_	_	-	_	() 	l _	_	16.7	(130.1)		(6.1)	(6.4)	(33.8)	(59.3)	(-15.9) 52.3			77.7	2
528	5	100	_	-	50		-	-		204.6	1						3213			7 7.27	2
10-2	14.7	12.5			-4.8			1													2
			b \	(-18.9)	1)). 	li .	le													2
											138,8	9.3	6.1	6.4	33,8	59,3	36.4		77.7		3
																					3
																					3
																					3
																					30

TABLE 2.7 C. System of Nine Accounts, Summary of Transactions, 1965 Nova Scotja

				I in	al Expenditu	re on good	s and servi	ces, less comp	ctitive import	S	
				Capital for indus		Fed govern	eral iment			al public	
		Current account inputs of industries	Personal consumption (including purchases by non-resident tourists)	Gross fixed capital formation	Inventory change	Defence	Civil	Provincial	Municipal	Education	Hospitali- zation
No.		1	2	3	4	5	6	7	8	9	10
						millions c	of dollars				
1 S	ales by industries		820.7	207.7	4.7	45.2	37.2	54.7	17.0	28.6	24.0
	rimary inputs:										
9777	Wages, salaries, and SLI	539.5	-		2.	87.7	68.3	20.0	10.1	53,9	30.4
- 22	Unincorporated income	122.3	==:	= 1	=	155	-	-	= =	77.0	-
	Corporate profit	143.2 61.5	-			-	-	10.2	2.0		2.0
6	Rent and interest	(866.5)	-	-	2	(87.7)	(68.3)	18.2 (38.2)	3.0 (13.1)	6,6 (60.5)	(32.4
	Indirect taxes:									, -7	,/
:7	Municipal	49.9	3.3		-	_	_ 1	2	E 1		
8	Provincial	27,3	50,4	_	-	_	_	_	-		
9	Federal	3.0	62.5	- 1	-	- 1	_	-	=	==:	
10	Education and hospital charges	=	8.7	-	12.0	-	-	= 1	=	= = = = = = = = = = = = = = = = = = = =	
	Less: Subsidies:										
11	Provincial	-0.4		- 1	-	- !	_ 0	-	-	-	-
12	Federal	-14.2	-	-	-	-		-	-	-	-
13	Capital consumption allowances	117.6	=	- 1	-	- 1	-	=	-	5	-
14	Gross domestic product at market prices (6+ 22+13)	(1,049.7)	(124.9)	- 1		(87.7)	(68.3)	(38.2)	(13.1)	(60.5)	(32,4
15	Non-competitive imports	146.8	90.0	-	-	1.5	06	1.4	1,0	3.1	5.5
16	Total primary inputs (14+15)	(1,196.5)	(214.9)	-	-	(89.2)	(68.9)	(39.6)	(14.1)	(63.6)	(37.9
	otal final expenditure on goods and services, less competitive imports		1.035.6	207.7	4.7	134.4	106.1	94.3	31.1	92.2	61.9
lr.	ncome plus deficit (column 30) of:										
	Households (2+3+33+35)	766.7	-	_	-	87.7	68.3	27.2	11,5	56.9	30,9
19	Education (10)	Ξ.	3,7	_	141	-	18	<u> </u>	2 1		
20	Hospitalization (10)	π.	5.0	-	-	(= 1		-	-	-	-
	Municipal government (7)	49.9	3.3	- 1	-	(inc.	152	4	=	-	-
	Provincial government (18+11+32)	34.7	50.4		-	-	-	-	₫.	===	
	Federal government (9+12+31)	22.0	62.5	- 1	-	15.	1275	= '	-	340	100
24	Rest of the world (15+34+36)	205.6	90.0	- 1	-	1.5	0.6	12.4	2.6	6.7	7.0
25	Total outlay		ere en recente El		1 1 1 1 1 1 1	ancorra e I			*****	4 4 4 4 4 4 4 4 A	ra radick
	apital finance: CCA plus saving	117.6	=	-	17.5	-52	2.5		= 1	77.	
27	Total primary (18+.,+24+26)	1,196.5	214.9	-	-	89.2	68.9	39.6	14.1	63.6	37.9
28	Total (1+27)		1,035.6	207.7	4.7	134.4	106.1	94.3	31.1	92.2	61.9
29			<u> </u>	(212	2.4)	(24	0.5)		(27	9.5)	
30 E	stimated allocation of profit, rent and interest										
	Profits:										
31	Federal tax	33.2	-	-	-	1.0	-	-	-	-	
32	Provincial tax	7.8	-	-	-		2=	-	=)	==	
33	Remaining in province	60.3	-	2.1		- 2	925	2	2	-	=
34	Transferred out	41.9	===	= 1	=	111	Œ.	= 1	-	-	1
	Rent and interest:										
35	Remaining in province	44.6		57	=	1.5	3.00	7,2	1.6	3.0	0,5
36	Transferred out .	16.9	-		-		-	11.0	1.6	3.6	1.5

TABLE 2.7 C. System of Nine Accounts, Summary of Transactions, 1965 Nova Scotia

Foreign (excluding Bruns-tries Provinces) Rest of Canada (excluding Bruns-tries Bruns-tries Provinces) Rest of Canada (excluding Bruns-tries Bruns-tries Bruns-tries Provinces) Rest of Canada (excluding Bruns-tries Bruns-tries Bruns-tries Provinces) Rest of Canada (excluding Bruns-tries Bruns-tries Bruns-tries Bruns-tries Provinces) Rest of Canada (excluding Bruns-tries B	Capital finance: Gross domestic capital formation plus deficits 30 31
Rest of Canada (excluding and Foundation of the Island Foundation Foundation Foundation Foundation Foundation Foundation Foundation Foundation Federal government Foundation Foundation Foundation Federal Government Foundation Foundation Foundation Federal Federal Foundation Federal Federal Foundation Federal F	finance: Gross domes- tic capital forma- tion plus deficits
millions of dollars 137.6 190.0 30.1 12.8 22.1 -32.3 -12.5 -7.5 -383.6 1,196.5 - 122.3 143.2 29.8 91.3	30 31
137.6 190.0 30.1 12.8 22.1 -32.3 -12.5 -7.5 -383.6 1,196.5 270.4 809.9 122.3 143.2 29.8 91.3	1
270.4 809.9 122.3 143.2 29.8 91.3	
122.3 29.8 91.3	
122.3 143.2 29.8 91.3	
29,8 91,3	
(300.2) 1,166.7	
3,3 53,2	
= 50,4 77,7	
62,5 65,5 8,7 8,7	
14.0 14.0 - 28.2 117.6	
- (41.1) 1,460.8	
103 _x 1 249,9	
- (-14.0) (514.2) 1,710.7	
137.6 176.0 30.1 12.8 22.1 -32.3 -12.5 -7.5 -383.6 1,710.7 1,035.6 92.2 61.9 31.1 94.3 240.5 -57.3	212.4 1,710.7
1,049.2 = 4.0 14.1 93.1 22.3 (1,182.7)	- 1,182.7
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	9.1 92.2 1.2 61.9
6.8 4.4 - (64.4)	11.7 76.1
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	14.5 183.1 301.5 434.9
326.4 -6.3 (320.1)	320,1
(1105.0) (92.2) (61.9) (76.1) (183.1) (434.9) (-35.0)	=
355,1	550.4
14.0 1,710.7	
137.6 176.0 30.1 12.8 22.1 -32.3 -12.5 -7.5 -383.6 1,710.7	
(-57.3)	
1,182.7 92.2 61,9 76,1 183.1 434,9 320.1	550.4

TABLE 2.7 D. System of Nine Accounts, Summary of Transactions, 1965 New Brunswick

				Fi	nal expenditur	re on good	s and servi	ces, less comp	etitive import	ts	
				Capital fo	rmation – stries	Fed govern				al public tors	
		Current account inputs of industries	Personal expenditure (including purchases by non-resident tourists)	Gross fixed capital formation	Inventory change	Defence	Civil	Provincial	Municipal	Education	Hospitali- zation
No		1	2	3	4	5	6	7	8	9	10
						millions o	f dollars				
1	Sular by industries		(12.6					1			
	Sales by industries		612.6	242.5	-10.0	11.0	14.9	57.3	13.3	23.1	11.9
	Primary inputs:										
2	Wages, salaries, and SLI	448.2	= 1	=	=0	38.1	35.2	20,9	8,8	38,0	26,7
4	Unincorporated income Corporate profit	89,6 109,7	=		-		(=)	100	77.	=:	-
5	Rent and interest	57,4	50		50			14.3	2.9	- 1	-
6	Net Domestic Product at factor cost (2+ +5)	(704.9)						1	50	4.6	1.4
J	Pomostic (2000) at factor cost (214, 13)	(704,9)	=			(38.1)	(35.2)	(35,2)	(11.7)	(42.6)	(28.1
	Indirect taxes										
7	Municipal	37.4	4.1	=	90	-	_	=	_	- 1	
8	Provincial	26.3	40.3	=		1=1	-	= =	-	- 1	
9 10	Federal Continued to the State of the State	3.4	46.7	-	25.0	:=:	-	=	-	- 1	-
10	Education and hospital charges	100	5.7	=	80	-	-	>==	- 1	-	=2
11	Less: Subsidies:	0.4									
12	Provincial Federal	-0.4 -4.8	57	2 2	==:	-	-	=	lis.	-	2
13	Federal Capital consumption allowances	112,6	_	-	2 9	- Th	-	=	-	-	-50
14	Gross Domestic Product at market prices (6+ +13)	(879.4)					2222		-	-	-
15	Non-competitive imports	148.6	(96.8) 57,7	S (S)	= 0	(38.1)	(35.2)	(35.2) 0.7	(11.7) 1.1	(42.6)	(28.1 4.4
16	Total primary inputs (14+15)	(1,028.0)	(154.5)		_	(38.5)	(35.6)	(35.9)	(12.8)	(44.6)	(32.5
17	Total final expenditure on goods and services, less competitive imports		767.1	242.5	-10.0	49.5	50.5	93.2	26.1	67.7	
				2.20		19.5	30.3	75.2	20.1	07.7	44.4
	Income plus deficit (column 30) of:										
18 19	Households (2+3+33+35)	602.3	=	-	-	38.1	35.2	26.6	9,9	39,6	27.3
20	Education (10)	=	3.2	12-		-	-	-	670	= 1	=0
21	Hospitalization (10)	37.4	2.5 4.1	, E		= 1	===	===	7.22	-	
22	Provincial government (8+11+32)	32.8	40.3	22			==			<u> </u>	-
23	Federal government (9+12+31)	26.9	46.7	200		_	-				-
24	Rest of the world (15+34+36)	216.0	57,7	150	=	0.4	0.4	9.3	2.9	5.0	5.2
25	Total outlay			1). A.	, t	100	
26	700- K5000				tatat katalana		1	1.000.000.00	toronomics in	1	
27	Capital finance: CCA plus saving Total primary (18++24+26)	112.6	154.5	_	-	38.5	35.6	35.9	12.8	44.6	32.5
28	Total (1+27)	,,	767.1	242.5	10.0	49.5	50.5	93.2	26.1	67.7	44.4
29	AN ARCHITECTURE AND ARC					1		75.2	Į.	- 1	77.9
30				(232	3)	(100	.0)		(231	(.4)	
20	Estimated allocation of profit, rent and interest										
	Profits:										
31	Federal tax	28.3	22	-		52			-	38	_
32	Provincial tax	6.9	-	=	: = 1	-81	=		-	198	-
33	Remaining in province	36.0	(()			34	= 1	=	1520	~=	2
34	Transferred out	38,5	12	===	-	E6	€	===	==	-	_
	1				1			. 1			
	Rent and interest:					1					
35	Rent and interest: Remaining in province	28,5	16			58	· ·	5.7	1.1	1.6	0.6

TABLE 2.7 D. System of Nine Accounts, Summary of Transactions, 1965 New Brunswick

	Final	expendi	ture on g	oods and	-	, less con		-				Ou	ıtlay plus	s saving (row 26)	of			Comitat	
		Exports				Less: Cor				Total								67	Capital finance: Gross domes-	
oreign coun- tries	Rest of Canada (ex- cluding At- lantic prov- inces)	Nova Scotia	Prince Edward Island	New found- land	Nova Scotia	Prince Edward Island	New found- land	All other sources	Sub-total (2++19)	primary inputs	House- holds	Edu- cation	Hospi- tali- zation	Muni- cipal govern- ment	Provin- cial govern- ment	Federal govern- ment	Rest of the world	Total income (2+,,+28)	tic capital forma- tion plus deficits	Total
11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
									į.	millions of	iollars		ř	iii.	1	1		í i	ľ	
194.9	137.4	32.3	7.8	11.4	-22.5	-5.7	-0.1	-304,1	1,028.0	-										
=	-	-	=	-	=	=	-	-	167,7	615.9										
-	-	= 1	=	199	_	-	_	_	-	89.6 109.7										
=	-	= 1	-	12	-		-	-	23.2	80.6										
	-	-	=		-		-	-	(190.9)	(895.8)										
-	-	=	-	1 4	=	-		_	4,1	41,5										
1.5	=	-	-	=	-	-	-	-	40.3 46.7	66,6 50,1										
-	-		-		-	-	-	_	5.7	5,7								1		
-	-1.5	-	-	_	-	-	-	-	-1.5	-0.4 -4.8										
-	***	- 1	-	_	-		-	-	=	112.6										
4	(-1.5) -	-	-	-	-	-	-	_	(286.2) 66.7	1165.6 215.3										
-	(-1.5)	_	_	_	-	-	-	-	(352.9)	1380.9										
194.9	135.9	32.3	7.8	11.4	-22.5	-5.7	-0.1	-304.1	1,380.9		767-1	67.7	44.4	26.1	93.2	100.0	49.9		232.5	1,380.9
				_	_					779.0	==:			4.2	11.4	72.6	13.5	(880,7)	2	880.7
:=		-	=	_	-	-	-	_	_	3,2	_	-	-	33.2	20.7	3,2	15.5	(60,3)	7.4	67.7
â :	-	-	=	-	-	_	-	-	-	2.5 41.5	-		-	0.7	22.0 13.4	18.1 4.1		(43.3) (59.0)		44.4 64.3
.=	-	-	-	-	-	-	-	-	-	73.1	9,4		=	-	-	72.5	= 1	(155.0)	6.4	161.4
12	=1.5	2	-	_	_	-	-	-	_	72,1 296,9	44.8 1.0	-	=	0.1	0.7	-	-	(117.2) 297.9	1	270,5 297,9
						4-4-4-4	E + + + + + + + + + + + + + + + + + + +				(822.3)	(67.7)	(44.4)	(64.3)	(161.4)	(270.5)	(63.4)			
-	_	-	-	-	-	-	70	-	175	112.6	58.4	775	=	7.	-	-	234.5			405.5
-	- 1.5	_	-	==	100	12	-	2	-	1,380.9										
194.9	135.9	32.3	7.8	11.4	-22.5	-5.7	-0.1	-304.1	1,380.9											
_				(49.9)				_				1								
											880.7	67.7	44.4	64.3	161.4	270:5	297.9		405.5	

TABLE 2.7 E. System of Nine Accounts, Summary of Transactions, 1965 Atlantic Region

					, 0.0		mpetitive	ds and service imports	,		
				Capital for indus		Fede govern			Provincia sect		
		Current account inputs of industries	Personal consumption	Gross fixed capital formation	Inventory change	Defence	Civil	Provincial	Municipal	Education	Hospitali- zation
lo.		1	2	3	4	5	6	7	8	9	10
10.				0		millions o	f dollars				
1	Sales by industries		1,928.9	609.7	-2.0	63.5	83.3	180.2	42.5	65.6	51.4
	Primary inputs:					141.6	121.5	(1.0	22.4	110.2	75.0
2	Wages, salaries, and SLI	1,355,0 289.5	51	_	20	141.6	131.5	61.0	22,4	119.2	75.
3	Unincorporated income Corporate profit	380.2	= =====================================	_	20 20						
5	Rent and interest	162.7		_	20	220	120	46.8	7.4	14.9	3,
6	Net Domestic Product at factor cost (2+., 5)	(2,187.4)	59	-	÷	(141.6)	(131.5)	(107.8)	(29.8)	(134,1)	(79.
	Indirect taxes:										
7	Municipal	97.7	9.3	-	-	-	-	344	# 1	9	- 4
8	Provincial	77.3	133.0	-	-	-	-	- 55	- 5		
9	Federal g	9_9	148.0	- 1	-	- 1	-	350	=	=	
0	Education and hospital charges	12	18.5	-	-	- 1	-		#	-	-
	Less: Subsidies:									200	
1	Provincial	-1,1	=	_	_	_	- :	V5	<u> </u>	30	
2	Federal	-36,0 312,6	- E	_	_	_	- 15		2	27	
3	Capital consumption allowances			_							
۱4 اج	Gross Domestic Product at market prices (6+ , +13) . Non-competitive imports	(2,647.8) 336.9	(308.8)	_	-	(141.6)	(131.5)	(107.8) 3.9	(29.8) 3.0	(134.1) 6,9	(79 14
16	Total primary inputs (14+15)	2,984.7	509.9	-	-	143.6	132.8	(111.7)	32.8	141.0	(93.
17	Total final expenditure on goods and services, less competitive imports		2,438.8	609.7	-2.0	207.1	216.1	291.9	75.3	206.6	145.
	Income plus deficit (column 24) of:										
18	Households (2+3+33+35)	1,870.5	=	- 20	-	141.6	131.5	78,2	24.9	123,8	77
19	Education (10)				_	325	3 to 1			-	15
			8,8	-00							
	Hospitalization (10)	977	9.7	91	-	08 72	= =	=	90	-	
21	Municipal government (7)	97.7	9.7 9.3	-00	-	72 72	72		=0		
21 22	Municipal government (7) . Provincial government (8+11+32)		9.7	91	-27	75	72	- 1	=0		
21 22 23	Municipal government (7)	97.7 99.9	9.7 9.3 133.0		-1	%2 UE	72 35	=	=0		16
21 22 23 24	Municipal government (7) . Provincial government (8+11+32) Federal government (9+12+31) Rest of the world (15+34+36)	97,7 99,9 65,5 538,5	9.7 9.3 133.0 148.0 201.1	7	-1	75 35 8	1.3	= =	20 51 52 53	17.2	
21 22 23 24 25	Municipal government (7) . Provincial government (8+11+32) Federal government (9+12+31) Rest of the world (15+34+36)	97,7 99,9 65,5 538,5	9.7 9.3 133.0 148.0 201.1	7	-1	2,0	1.3	- - - 33,5	7.9	17.2	i.
21 22 23 24 25 26	Municipal government (7) Provincial government (8+11+32) Federal government (9+12+31) Rest of the world (15+34+36) Total outlay Capital finance: CCA plus saving	97.7 99.9 65.5 538.5	9.7 9.3 133.0 148.0 201.1	7	-1	2,0	1.3	- - - 33,5	7.9	17.2	
20 21 22 23 24 25 26 27	Municipal government (7) Provincial government (8+11+32) Federal government (9+12+31) Rest of the world (15+34+36) Total outlay Capital finance: CCA plus saving Total primary (18+ +24+26)	97.7 99.9 65.5 538.5	9.7 9.3 133.0 148.0 201.1	2	-	2.0	1.3	33.5	7.9	17,2	93
21 22 23 24 25 26 27	Municipal government (7) Provincial government (8+11+32) Federal government (9+12+31) Rest of the world (15+34+36) Total outlay Capital finance: CCA plus saving Total primary (18++24+26) Total (1+27)	97.7 99.9 65.5 538.5	9,7 9,3 133,0 148,0 201.1	- 609.7	-	2,0 - 143.6 207.1	1.3	33,5	7.9	17,2	93
21 22 23 24 25 26 27 28	Municipal government (7) Provincial government (8+11+32) Federal government (9+12+31) Rest of the world (15+34+36) Total outlay Capital finance: CCA plus saving Total primary (18++24+26) Total (1+27)	97.7 99.9 65.5 538.5	9,7 9,3 133,0 148,0 201.1	- 609.7	-2.0	2,0 - 143.6 207.1	1.3	33,5	7.9	17,2 141.0 206.6	93
21 22 23 24 25 26 27 28	Municipal government (7) Provincial government (8+11+32) Federal government (9+12+31) Rest of the world (15+34+36) Total outlay Capital finance: CCA plus saving Total primary (18+ +24+26) Total (1+27) Estimated allocation of profit, rent and interest:	97.7 99.9 65.5 538.5	9,7 9,3 133,0 148,0 201.1	- 609.7	-2.0	2,0 - 143.6 207.1	1.3	33,5	7.9	17,2 141.0 206.6	93
21 22 23 24 25 26 27 28	Municipal government (7) Provincial government (8+11+32) Federal government (9+12+31) Rest of the world (15+34+36) Total outlay Capital finance: CCA plus saving Total primary (18+ +24+26) Total (1+27) Estimated allocation of profit, rent and interest: Profits:	97.7 99.9 65.5 538.5	9.7 9.3 133.0 148.0 201.1 509.9 2,438.8	- 609.7	-2.0	2,0 - 143.6 207.1	1.3	33,5	7.9	17,2 141.0 206.6	93
21 22 23 24 25 26 27 28 29	Municipal government (7) Provincial government (8+11+32) Federal government (9+12+31) Rest of the world (15+34+36) Total outlay Capital finance: CCA plus saving Total primary (18+ +24+26) Total (1+27) Estimated allocation of profit, rent and interest: Profits: Federal tax	97.7 99.9 65.5 538.5 312.6 2,984.7	9,7 9,3 133,0 148,0 201.1 509.9 2,438.8	- 609.7	-2.0	2,0 - 143.6 207.1	1.3 132.8 216.1 3.2)	33.5 - 111.7 291.9	7.9 - 32.8 75.3 (71	17,2 141.0 206.6	93
212 222 223 224 225 226 227 228 229 330	Municipal government (7) Provincial government (8+11+32) Federal government (9+12+31) Rest of the world (15+34+36) Total outlay Capital finance: CCA plus saving Total primary (18++24+26) Total (1+27) Estimated allocation of profit, rent and interest: Profits: Federal tax Provincial tax	97.7 99.9 65.5 538.5 312.6 2,984.7	9,7 9,3 133,0 148,0 201.1 509.9 2,438.8	609.7	-2.0	2,0 - 143.6 207.1	1.3 132.8 216.1 3.2)	33,5 111.7 291.9	7.9 - 32.8 75.3 (71	17,2 141.0 206.6 8.8)	9.
21 22 23 24 25 26 27 28 29 30 31 32 33	Municipal government (7) Provincial government (8+11+32) Federal government (9+12+31) Rest of the world (15+34+36) Total outlay Capital finance: CCA plus saving Total primary (18++24+26) Total (1+27) Estimated allocation of profit, rent and interest: Profits: Federal tax Provincial tax Remaining in province	97.7 99,9 65,5 538.5 312.6 2,984.7	9,7 9,3 133,0 148,0 201.1 509.9 2,438.8	609.7	-2,0	2,0 - 143.6 207.1	1.3 132.8 216.1 3.2)	33,5 111.7 291.9	7.9 - 32.8 75.3 (71	17,2 141.0 206.6 8.8)	9.
21 22 23 24 25 26 27	Municipal government (7) Provincial government (8+11+32) Federal government (9+12+31) Rest of the world (15+34+36) Total outlay Capital finance: CCA plus saving Total primary (18++24+26) Total (1+27) Estimated allocation of profit, rent and interest: Profits: Federal tax Provincial tax Remaining in province Transferred out Rent and interest:	97.7 99.9 65.5 538.5 312.6 2,984.7 91.6 23.7 132.8	9.7 9.3 133.0 148.0 201.1 509.9 2,438.8	609.7	77.7)	2,0 - 143.6 207.1	1.3 132.8 216.1 3.2)	33,5 111.7 291.9	7.9 - 32.8 75.3 (71	17,2	93

TABLE 2.7 E. System of Nine Accounts, Summary of Transactions, 1965 Atlantic Region

-		Less: Competitive		1	4		Outlay plus	saving (re	ow 26) of				1.	
Exp Foreign puntries	Rest of Canada (excluding Atlantic Provinces)	All other sources	Sub-total (2++13)	Total primary inputs (1+,,+14)	House hold	Education	Hospitali- zation	Muni- cipal govern- ment	Provincial government	Federal govern- ment	Rest of the world	Total income (15++22)	Capital finance: Gross domestic capital formation plus deficits	Total
11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Ť		Î.	E.	E		millions o	f dollars	7	90	W	W	200	2)	
602.1	384.3	-1,024.8	2,984.7	-										
=	.70	_	551.6	1,906.6										
=	20	=	-	289.5						Y.				
=	24) 24)	n Iv	72,8	380,2 235,5										
=	25	=	(624.4)	2,811.8										
_	4	_	9.3	107.0										
-	- 1	- 1	133.0	210.3										
-	= =	- 1	148.0	157.9	ľ									
_	-	-	18,5	18.5										
-	15.5	- "	-	-141										
_	-15,5	-	-15,5	-51.5 312.6										
_	-15.5	_	(917.7)	(3,565.5)										
-	sa l	_	232.2	569,1										
-	-15.5	-	(1,149.9)	4,134.6										
602.1	368.8	-1,024.8	4,134.6		2,438.8	206.6	145.0	75.3	291.9	423.2	-53.9		607.7	4,134.6
													33771	1,13110
	-		20	2,447.5	324	- [- 1	8.3	47.8	235,5	45.2	(2,784.3)	-	2,784.3
-		-	2	8.8 9.7		-		74.3 3.9	91.1 71.2	13.6 55.8	33	(187.8)	18.8	206:6
-	(94)	=	2	107.0	=	-	- 1	3.9	25.2	9.2	=3 =3	(140.6) (141.4)	4.4 21.1	145.0 162.5
-	15.5	175	5 5	232.9	30.6	- 1	-	0,4	-	235.4	57	(499,3)	31.8	531.1
-	-15.5	(#) (3)	= 1	198.0 818.1	141.1 -9.1	-	-	0.3	3,9	===	= 1	(343.3)	629.4	972.7
				31021	(2,601.4)	(306.6)	(1.45.0)		7:		-	809.0	- 1	809.0
=	=	=	=	312.6	182.9	(206.6)	(145.0)	(162.5)	(531.1)	(972.7)	(-8.7) 817.7			-
=	-15.5	2	=	4,134.6						537	017.7	=		1,313.2
602.1	368.8	-1,024.8	4,134.6											
	(-53.9)													
					2,784.3	206.6	145.0	162.5	531.1	972.7	809.0		1,313.2	
				1	- 1				11		11			

TABLE 2.8A. System of Nine Accounts, Nova Scotia, 1965 Production Account – Industries

Item No.	Dr. Primary inputs	Millions of dollars	Item No.	Cr. Receipts from final sales less total competitive imports	Millions of dollars
1	Wages, salaries and SLI – To house-holds (71)	539.5		Receipts from sales of goods and services to:	
2	Unincorporated income – To house-		29	Households (52)	820.7
	holds (77)	122.3	30	Of which purchased by non-resident tourists (53, 196)	(21.3)
3	Rent and interest	(61.5)	31	Education (schools, colleges, universi-	(21.5)
4	To households (79)	44.6	31	ties) (91)	28.6
5	To rest of the world (218)	16.9	32	Hospitalization (105)	24.0
6	Corporate profits	(143.2)	33	Municipal governments (excluding purchases related to hospitals or education) (119)	17.0
7	To federal government (181)	33.2	34	Provincial government (excluding pur- chases related to hospitals or educa-	
8	To provincial government (158)	7.8		tion) (141)	54.7
	Profit after tax:	1	35	Federal government (excluding pur- chases related to federal hospitals,	
9	To households (84)	60.3		shared cost programmes, etc.) (166)	82.4
10	To rest of the world (218)	41.9	36	Industries (226)	(212.4)
			37	Gross fixed capital formation (224)	207.7
11	Factor income $(1+2+3+6)$	866.5	38	Inventory cahnge (225)	4.7
	2,200, 2,00,00 (2 2 3 3)		39	Rest of the world exports (40 + + 45) (189)	(392.6)
12	Indirect taxes	(80.2)		То:	
13	To municipal government (134)	49.9	40	Foreign countries (190)	137.6
14	To provincial government (156)	27.3	41	Nova Scotia (191)	,
15	To federal government (179)	3.0	42	New Brunswick (192)	30.1
16	Less: Subsidies	(- 14.6)	43	Prince Edward Island (193)	12.8
17	From provincial government (157)	- 0.4	44	Newfoundland (194)	22.1
18	From federal government (180)	- 14.2	45	Rest of Canada (195)	190.0
19	Capital consumption allowances (228)	117.6	46	Less competitive imports (47 + + 51) (201)	(- 435.9)
				From:	
20	Gross Domestic Product at mar-		47	Nova Scotia (202)	=:
	ket prices originating (11 + 12 + 16 + 19)	1,049.7	48	New Brunswick (203)	- 32.3
			49	Prince Edward Island (204)	- 12.5
21	Non-competitive imports (208)	146.8	50	Newfoundland (205)	- 7.5
	Ten compositive imports (200)	2.00	51	Rest of Canada and foreign countries (206)	- 383.6
22	Total primary inputs (20 + 21)	1,196.5		Total final sales less total competitive imports (29 + 31 + 26 + 39 + 46)	1,196.5

TABLE 2.8B. System of Nine Accounts, Nova Scotia, 1965 Income and Outlay Account — Households

Item No.	Dr. Outlay	Millions of dollars	Item No.	Cr. Income	Millions of dollars
52	Consumer goods and services from industries (29)	820.7	70	Wages, salaries and SLI, and military pay	809.9
53	Of which purchased by non-resident tourists (30, 196)	21.3	71	From: Industries (1)	539.5
54	Indirect taxes ,	(124.9)	72	Education (92)	53.9
	To:		73	Hospitalization (106)	30.4
55	Education (private payments for schools, etc.) (98)	3.7	74	Municipal governments (120)	10.1 20.0
56	Hospitalization (private payments for services) (112)	5.0	76	Federal government (167)	156.0
57	Municipal Governments (135)	3.3	77	Unincorporated income – from industries	122.3
58 59	Provincial Government (160)	50.4 62.5	78	Rent and interest	(56.7)
60	Non-competitive imports (209)	90.0	79	From: Industries (4)	44.6
61	Total personal consumption before adjustment (52 + 54 + 60)	1,035.6	80	Education (94)	3.0 0.5
62	Less purchase by non-resident tourists (53)	- 21.3	82	Municipal governments (122)	1.4
63	Add resident tourist expenditure out of province (215)	15.0	83	Provincial government (144)	7.2
64	Total personal consumption (61 + 62 +	1.020.2	84	Corporate profits after tax – from industries (9)	60.3
	63)	1,029.3	85	Income earned in domestic production (70 + 77 + 78 + 84)	1,049.2
	Income tax:		86	Transfers received	(133.5)
	To:			From:	(=====)
65	Provincial government (161)	13.8	87	Municipal governments (127)	4.0
66	Federal government (184)	61.9	88	Provincial government (149)	14.1
67	Total outlay (64 + 65 + 66)	1,105.0	89	Federal government (171)	93.1
68	Personal saving (including retained earnings of locally controlled business) (227)	77.7	90	Rest of the world (remittances, gifts and miscellaneous property incomes) (198)	22.3
69	Total outlay and saving (67 + 68)	1,182.7	91	Total income (85 + 86)	1,182.7

TABLE 2.8C. System of Nine Accounts, Nova Scotia, 1965 Income and Outlay Account — Education

tem √o,=	Dr. Outlay	Millions of dollars	ltem No.	Cr. Income	Millions of dollars
91	Goods and services purchased from industries (31)	28.6	98 99 100	Indirect taxes from households (fees, etc.) (55) Transfers received from: Municipal governments (128) School boards	3.7 (37.4) 34.5
92	Wages, salaries and SL1 - Households (72)	(6,6)	101	Debt payment Provincial government (150) School boards	2.9 (36.9) 27.3
14	To: Households (80) Rest of the world (219)	3.0 3.6	102	Vocational schools and Universities Other Federal government (172)	8.9 0.7 (5.1)
6	Non-competitive imports (210)	3.1		Vocational grants University grants Grants to school boards	2.5 1.5 1.1
7			103	Total income (98 + 100 + 101 + 102) Deficit (+) or surplus (-) (230)	83.1 + 9.1
7	Total outlay (equal to expenditure on goods and services)	92.2		Total income and net borrowing (103 + 104)	92.2

TABLE 2.8D. System of Nine Accounts, Nova Scotia, 1965 Income and Outlay Account — Hospitalization

tem No.	Dr. Outlay	Millions of dollars	Item No.	Cr. Income	Millions of dollars
			110	T. V	5.0
0.5	Goods and services purchased from industries (32)	24.0	112	Indirect taxes from households (fees, etc.) (56)	5.0
	(32)	21.0	113	Transfers received from:	
		20.4	114	Municipal governments (129)	3.2
06	Wages, salarics and SLI – To households (73)	30.4	115	Provincial government (151) Provincial share of hospital services Cost of provincially-operated hospitals	(30.0) 15.1 13.9
07	Interest	(2.0)		Construction grants Other	1.0
08 09	Households (81) Rest of the world (220)	0.5 1.5	116	Federal government (173) Federal share of hospital services Construction grants Cost of (federal) veterans' hospitals	(22.5) 18.1 0.8 3.6
10	Non-competitive imports (211)	5,5	117	Total income (112 + 114 + 115 + 116)	60.7
			118	Deficit (+) or surplus (-)	+1.2
11	Total outlay (equals total expenditure on goods and services)	61.9		Total income and net borrowing (117 + 118)	61.9

TABLE 2.8E. System of Nine Accounts, Nova Scotia, 1965 Income and Outlay Account – Municipal Governments

ltem No.	Dr. Outlay Millions of dollars No. Cr. Income		Cr. Income	Millions of dollars	
119	Goods and services purchased from industries (33)	17.0	133	Indirect taxes Industries (including all residential property	(53,2)
120	Wages, salaries and SLI - To households (74)	10.1	1.0	taxes) (13)	49.9
121	Interest	(3.0)	135	Households (licences, fees, etc.) (57)	3.3
122 123	Households (82)	1.4 1.6	136	Transfers received	(11.2)
124	Non-competitive imports (212)	1.0	137	Provincial government (152)	6.8
125	Total expenditure on goods and services (119 + 120 + 121 + 124)	31.1	138	Federal government (174)	4.4
126 127	Transfers paid (127 + + 131	(45.0) 4.0	139	Total income (133 + 136)	64.4
128 129 130 131	Education (100) Hospitalization (114) Provincial government (162)	37.4 3.2 0.4	140	Deficit (+) or surplus (-)	11.7
131	Federal government (186)	76.1		Total income and net borrowing (139 + 140)	76.1

TABLE 2.8F. System of Nine Accounts, Nova Scotia, 1965
Income and Outlay Account — Provincial Government

ltem No.	Dr. Outlay	Dr. Outlay Millions of dollars Item No. Cr. Income		Cr. Income	Millions of dollars
41	Goods and services purchased from			Receipts from:	
	industries (34)	54.7	155	Industries	(34.7)
42	Wages, salaries and SLI – To households (75)	20.0	156 157 158	Indirect taxes (14) Less: Subsidies (17) Corporate income tax (8)	27.3 - 0.4 7.8
43	Interest	(18.2)	159	Households	(64.2)
44 45	Households (83)	7.2 11.0	160 161	Indirect taxes (58)	50.4 13.8
46	Non-competitive imports (213)	1.4	162	Municipal governments (130)	0.4
47	Total expenditure on goods and services (141 + 142 + 143 + 146)	94.3	163	Federal government (175) Tax equalization Succession duties Atlantic provinces subsidy	(69.3) 36.6 0.2 10.5
48	Transfers paid (149 + 150 + 151 + 152 + 153)	(88.8)		Statutory subsidies Tax rental adjustment Public utility income tax rebate	2.1 0.4 0.7
49 50	Households (88) Education (101)	14.1 36.9		Shared cost programmes	18.8
51 52 53	Hospitalization (115)	30.0 6.8 1.0	164	Total income (155 + 159 + 162 + 163)	168.6
<i>J J</i>	r datai government (100)	1.0	165	Deficit (+) or surplus (-) (233)	14.5
54	Total outlay (147 + 148)	183.1		Total income and net borrowing (164 + 165)	183.1

TABLE 2.8G. System of Nine Accounts, Nova Scotia, 1965
Income and Outlay Account — Federal Government

Item No.	Dr. Outlay	Millions of dollars	Item No.	Cr. Income	Millions of dollars
166	Goods and services purchased from			Receipts from:	
	industries (35)	82.4	178	Industries	(22.0)
67	Wages, salaries and SLI – To households (76)	156.0	179 180 181	Indirect taxes (15) Less: Subsidies (18) Corporate income tax (7)	3.0 - 14.2 33.2
68	Non-competitive imports (214)	2.1	182 183	Households	(124.4) 62.5
69	Total expenditure on goods and	2	184	Personal income tax (66)	61.9
	services (166 + 167 + 168)	240.5	185	Provincial government (153)	1.0
70 71	Transfers paid to: (171 + + 176) Households (89)	(208.4) 93.1	186	Municipal government (131)	_
72 73 74	Education (102)	5.1 22.5 4.4	187	Total income (178 + 182 + 185 + 186)	147.4
75 76	Provincial government (163) Rest of the world (subsidy on coal	69.3	188	Excess of federal government spending over federal government receipts (235)	301.5
	exports to Central Canada) (223)	14.0	1	<u> </u>	
i 77	Total outlay (169 + 170)	448.9		Total income plus net federal government fiscal transfer to the province (187 + 188)	448.9

TABLE 2.8H. System of Nine Accounts, Nova Scotia, 1965 Income and Outlay Account — Rest of the World

Note: All transactions non-resident to the province, except for Federal Government.

Item No.	Dr. Payments of non-resident transactors (receipts of the province)	Millions of dollars	Item No.	Cr. Receipts of non-resident transactors (payments by the province)	Millions of dollars
	Payments to industries:			Receipts from sale of:	
189	Exports of goods and services (39)	(392.6)	201	Competitive imports to industries (202 + + 206) (46)	(435.9)
190 191 192 193 194 195	To: Foreign countries (40) Nova Scotia (41) New Brunswick (42) Prince Edward Island (43) Newfoundland (44) Rest of Canada (45) Payments to households:	137.6 30.1 12.8 22.1 190.0	202 203 204 205 206 207	Origin Nova Scotia (47) New Brunswick (48) Prince Edward Island (49) Newfoundland (50) All other (51) Non-competitive imports (208 + + 214)	32.3 12.5 7.5 383.6 (249.9)
196	Purchases by non-resident tourists			To:	(243.5)
.,0	routed through household account (30, 53)	21.3	208 209	Industries (21)	146.8 90.0
197 198	Total exports (189 + 196) Transfers to households (remittances,	413.9	210 211 212 213 214	Education (96) Hospitalization (110) Municipal governments (124) Provincial government (146) Federal government (168)	3.1 5.5 1.0 1.4 2.1
	gifts and miscellaneous property income) (90)	22.3	215	Tourist expenditures by households out of province (63)	15.0
			216	Total imports (201 + 207 + 215)	700.8
199	Deficit of the province on current transactions with rest of the world (234)	355.1	217	Remittable and remitted profit and interest	(76.5)
			218 219 220 221 222	Received from: Industries (5 + 10) Education (95) Hospitalization (109) Municipal governments (123) Provincial government (145)	58.8 3.6 1.5 1.6 11.0
			223	Subsidy from federal government on coal exports to Central Canada (176)	14.0
200	Total (197 + 198 + 199)	791.3		Total (216 + 217 + 223)	791.3

TABLE 2.8I. System of Nine Accounts, Nova Scotia, 1965 Consolidated Capital Finance Account

Item No.	Dr. Disposition	Dr. Disposition Millions of dollars No. Cr. Source		Millions of dollars	
224	Industries: Gross fixed capital formation (37)	207.2	227	Personal saving (including retained earnings of locally-controlled business) (68)	77.7
	•		228	Capital consumption allowances – In-	77.7
225	Inventory change (38)	4.7		dustries (19)	117.6
			229	Deficit (-) or surplus (+) of provincial public sectors (230 + + 233)	(- 36.5)
			230	Education (104)	- 9.1
			231	Hospitalization (118)	- 1.2
			232	Municipal governments (140)	- 11.7
			233	Provincial government (165)	- 14.5
			234	Deficit of the province on current transactions with rest of the world (199)	355.1
	2.		235	Deduct: Excess of federal government spending over federal government receipts (188)	- 301.5
			236	Net capital inflow from "rest of the world" not covered by federal government transfers (234-235)	(53.6)
226	Gross domestic capital formation (224 + 225) (36)	212.4		Finance of gross domestic capital formation (227 + + 235)	212.4

TABLE 2.9A. System of Nine Accounts, 1965 Production Account – Industries

Item No.		New- foundland	Prince Edward Island	Nova Scotia	New Brunswick
			millions of o Dr. Primary		
1	Wages, salaries and SLI To households (71)	322,4	44.9	539,5	448.2
2	Unincorporated income – To households (77) Rent and interest	44.3 (37.1)	33.1	122.3	89.6
	To:	` ′	(6.7)	(61.5)	(57.4)
4 5	Households (79)	17.1 20.0	3.0 3.7	44.6 16.9	28.5 28.9
6	Corporate profits Corporate income tax: To:	(113,5)	(13.8)	(143.2)	(109.7)
7 8	Federal government (181) Provincial government (158) Profit after tax: To:	26,6 8,1	3.5 0.9	33.2 7.8	28.3 6.9
9 10	Households (84)	28.9	7.6	60.3	36.0
11	Rest of the world (218)	49.9 517.3	1.8 98.5	41.9 866.5	38.5 704.9
12		l'			
	To:	(29,3)	(8.3)	(80.2)	(67,1)
3 4 5	Municipal governments (134) Provincial governments (156) Federal governments (179)	6.6 19.9 2.8	3.8 3.8 0.7	49.9 27.3 3.0	37.4 26.3 3.4
.6	Less: Subsidies From:	(- 13.7)	(- 3.6)	(- 14.6)	(- 5.2)
.7	Provincial government (147)	- 0.1	- 0.2	- 0.4	- 0.4
9	Federal government (180) Capital consumption allowances (228)	- 13.6 65.7	- 3,4 16,7	- 14.2 117.6	- 4.8 112.6
20	Gross Domestic Product at market prices originating (11 + 12 + 16 +	03,7	10.7	117.0	112,6
1 1	19)	598.6	119.9	1,049.7	879.4
!1 !2	Non-competitive imports (208) Total primary inputs (20 + 21)	59,9 658.5	19.4 1 39.3	146.8 1,196.5	148.6
	Toma primary impais (20 · 21)	038.3	Primary inputs aggre		1,028,0
			or account of de		121
23 24 25	To: Households (1 + 2 + 4 + 9) Municipal governments (13) Provincial government (8 + 14 + 17)	412.7 6.6 27.9	88.6 3.8 4.5	766.7 49.9 34.7	602.3 37.4 32.8
!6 !7	Federal government (7 + 15 + 18) Rest of the world (5 + 10 + 21)	15.8 129.8	0.8 24.9	22.0 205.6	26.9 216.0
28	Capital finance account (19)	65.7	16.7	117.6	112.6
	Total primary inputs	658.5	139.3	1,196.5	1,028.0
			Cr. Receipts from less total competi	final sales tive imports	
20	Receipts from sales of goods and services to:				
29 30	Households (52) Of which purchased by non-resident tourists (53, 196)	385.6 (2.8)	99.9 (8.0)	820.7 (21.3)	612.6 (19.0)
2	Education (schools, colleges, universities) (91) Hospitalization (105)	11.4 13.5	2.3	28.6 24.0	23.1 11.9
3	Municipal governments (excluding purchases related to hospitals or education) (141)	10.5	1.6	17.0	13.3
4	Provincial government (excluding purchases related to hospitals or education) (141)	53.0	15.1	54.7	
5	Federal government (excluding purchases related to federal hospitals, shared cost programmes, etc.) (166)	28.7			57,3
	Industries (226) Gross fixed capital formation (224)	(134.2)	(28.6)	82.4 (212.4)	25.9 (232.5
		128.6 5.6	$-\frac{30.9}{2.3}$	207.7 4.7	- 242.5 - 10.0
37	Inventory change (225)				
37 38		(311.0)	(48.2)	(392.6)	(383.8)
7 8 9	Inventory change (225) Rest of the world: Exports (189) To: Foreign countries (190)	(311.0)	10,2	(392.6) 137.6	194.9
7 8 9 0 1 2	Inventory change (225) Rest of the world: Exports (189) To: Foreign countries (190) Nova Scotia (191) New Brunswick (192)	(311.0)		137.6 30.1	194.9 32.3
7 8 9 0 1 2 3	Inventory change (225) Rest of the world: Exports (189) To: Foreign countries (190) Nova Scotia (191) New Brunswick (192) Prince Edward Island (193) Newfoundland (194)	(311.0) 259.3 9.3 0.1	10.2 12.5	137.6	194.9
7 8 9 0 1 2 3 4 5	Inventory change (225) Rest of the world: Exports (189) To: Foreign countries (190) Nova Scotia (191) New Brunswick (192) Prince Edward Island (193) Newfoundland (194) Rest of Canada (195)	(311.0) 259.3 9.3 0.1 42.3	10.2 12.5 5.7 5.1 14.7	137.6 30.1 12.8 22.1 190.0	194.9 32.3 - 7.8
7 8 9 0 1 2 3 4 5	Inventory change (225) Rest of the world: Exports (189) To: Foreign countries (190) Nova Scotia (191) New Brunswick (192) Prince Edward Island (193) Newfoundland (194) Rest of Canada (195) Less competitive imports (201)	(311.0) 259.3 9.3 0.1	10.2 12.5 5.7 5.1	137.6 30.1 12.8 22.1	194.9 32.3 7.8 11.4 137.4
17 18 19 10 12 12 13 14 15 16	Inventory change (225) Rest of the world: Exports (189) To: Foreign countries (190) Nova Scotia (191) New Brunswick (192) Prince Edward Island (193) Newfoundland (194) Rest of Canada (195) Less competitive imports (201) From: Nova Scotia (202)	(311.0) 259.3 9.3 0.1 42.3 (- 289.4) - 20.8	10.2 12.5 5.7 5.1 14.7 (- 67.1)	137.6 30.1 12.8 22.1 190.0 (- 435.9)	194.9 32.3 7.8 11.4 137.4
17 18 19 10 12 12 13 14 15 16 17 18 18 19	Inventory change (225) Rest of the world: Exports (189) To: Foreign countries (190) Nova Scotia (191) New Brunswick (192) Prince Edward Island (193) Newfoundland (194) Rest of Canada (195) Less competitive imports (201) From: Nova Scotia (202) New Brunswick (203) Prince Edward Island (204)	(311.0) 259.3 9.3 0.1 42.3 (- 289.4) - 20.8 - 11.1	10.2 12.5 5.7 5.1 14.7 (-67.1) - 4.8 - 7.8	137.6 30.1 12.8 22.1 190.0 (- 435.9)	194.9 32.3 7.8 11.4 137.4 (- 332.4)
7 8 9 0 1 2 3 4 4 5 6 7 8 9 0	Inventory change (225) Rest of the world: Exports (189) To: Foreign countries (190) Nova Scotia (191) New Brunswick (192) Prince Edward Island (193) Newfoundland (194) Rest of Canada (195) Less competitive imports (201) From: Nova Scotia (202) New Brunswick (203) Prince Edward Island (204) Newfoundland (205)	(311.0) 259.3 9.3 0.1 42.3 (- 289.4) - 20.8 - 11.1 - 5.1	10.2 12.5 5.7 5.1 14.7 (-67.1) - 4.8 - 7.8	137.6 30.1 12.8 22.1 190.0 (- 435.9) - 32.3 - 12.5 - 7.5	194.9 32.3 7.8 11.4 137.4 (- 332.4) - 22.5 - 5.7 - 0.1
36 37 38 39 40 41 42 43 44 45 16	Inventory change (225) Rest of the world: Exports (189) To: Foreign countries (190) Nova Scotia (191) New Brunswick (192) Prince Edward Island (193) Newfoundland (194) Rest of Canada (195) Less competitive imports (201) From: Nova Scotia (202) New Brunswick (203) Prince Edward Island (204)	(311.0) 259.3 9.3 0.1 42.3 (- 289.4) - 20.8 - 11.1	10.2 12.5 5.7 5.1 14.7 (-67.1) - 4.8 - 7.8	137.6 30.1 12.8 22.1 190.0 (- 435.9) - 32.3 - 12.5	32.3 7.8 11.4 137.4 (- 332.4) - 22.5 - 5.7

TABLE 2.9B. System of Nine Accounts, 1965 Income and Outlay Account – Households

Of which purchased by non-resident toursits (30, 196) (2,8) (8,0) (21,3)	Item No.		New- foundland	Prince Edward Island	Nova Scotia	New Brunswick
Consumer goods and services from industries (29) 385.6 99.9 820.7						All S
Of which purchased by non-resident toursits (30, 196) (2.8) (8.0) (21.3) (124.9)				DI. C	utlay	
Of which purchased by non-resident toursits (30, 196) (2.8) (8.0) (21.3) (124.9)	52	Consumer goods and services from industries (29)	385.6	99.9	820,7	612.6
Indirect taxes	100					(19.0)
Education (private payments for schools, etc.) (98)	54	Indirect taxes	` '			(96.8)
Hospitalization (private payments for services) (112)	55		1.5	0.4	3.7	3.2
Provincial government (160) 33.6 8.8 50.4	56	Hospitalization (private payments for services) (112)	1.8	0.4	5.0	2.5
Federal government (183) 30.0 8.8 62.5 Non-competitive imports (209) 52.9 10.5 90.0 Total personal consumption before adjustment (52 + 54 + 60) (506.8) (129.3) (1,035.6) (128 spurchased by non-resident tourists (53) -2.8 -8.0 -21.3 -4.0 Add resident tourist expenditure out of province (215) 5.0 2.0 115.0 Total personal consumption (61 + 62 + 63) 509.0 123.3 1,029.3 Income tax: To: To: Provincial government (161) 6.2 1.2 13.8 5.6 61.9 Federal government (184) 28.8 5.6 61.9 Total outlay (64 + 65 + 66) 544.0 130.1 1,105.0 Personal saving (including retained earnings of locally controlled business) (227) 38.0 8.7 77.7 Total outlay and saving (67 + 68) 582.0 138.8 1,182.7 Wages, salaries and SLI, and military pay (408.1) (72.8) (809.9) (60.2) (1.2 1.2 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3		Municipal governments (135)				4.1
Non-competitive imports (209) 52.9 10.5 90.0 Total personal consumption before adjustment (52 + 54 + 60) (506.8) (129.3) (1,035.6) (1.035.6)						40.3 46.7
Total personal consumption before adjustment (\$52 + 54 + 60)	. 1	10 2021 ANSTHUTE	1			57.7
Less purchased by non-resident tourists (53) -2.8 -8.0 -21.3 -2.8 -3.0 -21.3 -3.0 -2.8 -3.0 -2.1.3 -3.0	177		l i			
Add resident tourist expenditure out of province (215) 5.0 2.0 15.0	- 1	10 Mar VI-VANTOR	` ′	` '		(767.1)
Total personal consumption (61 + 62 + 63) Soy. 123.3 1,029.3 Income tax: To: Total outlay (64 + 65 + 66) S44.0 130.1 1,105.0	193	Ve 40.3 (40.3))(40.3 (40.3 (40.3 (40.3 (40.3 (40.3 (40.3 (40.3 (40.3 (40.3 (40				- 19.0
Income tax: To:			1			20.0
To:	64	Total personal consumption $(61 + 62 + 63)$	509.0	123.3	1,029.3	768.1
Provincial government (161) 28.8 5.6 61.9		Income tax:				
Federal government (184) 28.8 5.6 61.9						
Total outlay (64 + 65 + 66)						9.4
Personal saving (including retained earnings of locally controlled business) (227) 38.0 8.7 77.7	- 11	as the constitution and the section and the section and the section of the sectio	1			44.8
C277 Total outlay and saving (67 + 68) S82.0 138.8 1,182.7		the side substitutional value ball participation but definitionals.	544.0	130.1	1,105.0	822.3
Cr. Income Cr. Income Cr. Income	68		38.0	8.7	77.7	58,4
Wages, salaries and SLI, and military pay (408.1) (72.8) (809.9) (72.8) (809.9) (72.8) (809.9) (72.8) (809.9) (809	69	Total outlay and saving (67 + 68)	582.0	138.8	1,182.7	880.7
From: Industries (1)				Cr. In	come	
From: Industries (1) Education (92)						
Industries (1) 322.4 44.9 539.5 72 Education (92) 21.8 5.5 53.9 13.8 5.5 53.9 14.8 15.7 3.1 30.4 15.7 3.1 30.4 16.5 3.7 20.0 16.5 3.7 3.0 16.5 3.7 3.0 16.5 3.7 3.0 16.5 3.0 3.0 16.5 3.0 3.0 16.5 3.0 3.0	70		(408.1)	(72.8)	(809.9)	(615.9)
Education (92)	71		222.4	44.0	520.5	440.2
Hospitalization (106) 15.7 3.1 30.4 Municipal governments (120) 16.5 3.7 20.0 Federal government (167) 28.9 14.8 156.0 Unincorporated income - From industries 44.3 33.1 122.3 Rent and interest (20.4) (4.0) (56.7) From:		Education (92)				448.2 38.0
Provincial government (142)		Hospitalization (106)	15.7			26.7
76 Federal government (167) 28.9 14.8 156.0 77 Unincorporated income – From industries 44.3 33.1 122.3 78 Rent and interest (20.4) (4.0) (56.7) 79 Industries (4) 17.1 3.0 44.6 80 Education (94) - - 3.0 81 Hospitals (108) - - 0.5 82 Municipal governments - - 1.4 83 Provincial government (144) 3.3 1.0 7.2 84 Corporate profits after tax – From industries (9) 28.9 7.6 60.3 85 Income earned in domestic production (70 + 77 + 78 + 84) (501.7) (117.5) (1,049.2) (7 86 Transfers received (80.3) (21.3) (133.5) (7 87 Municipal governments (127) 0.1 4.0 89 Federal government (171) 54.1 15.7 93.1 89 Federal government (171		Municipal governments (120)				8.8
Unincorporated income - From industries 44.3 33.1 122.3						20.9 73.3
From:	77					89.6
Industries (4) 17.1 3.0 44.6 Education (94) - 3.0 Hospitals (108) - 0.5 Municipal governments - 1.4 Provincial government (144) 3.3 1.0 7.2 Rest of the world (remittances, gifts and miscellaneous property in-	78	Rent and interest	(20.4)	(4.0)	(56.7)	(37.5
Education (94) - 3.0 81 Hospitals (108) - 0.5 82 Municipal government (144) 3.3 1.0 7.2 84 Corporate profits after tax - From industries (9) 28.9 7.6 60.3 85 Income earned in domestic production (70 + 77 + 78 + 84) (501.7) (117.5) (1,049.2) (7.0 + 7.0 +	70					
Hospitals (108)			17.1	3.0		28.5
Municipal governments		Hospitals (108)		=		1.6 0.6
84 Corporate profits after tax – From industries (9)		Municipal governments	-		1.4	1.1
85 Income earned in domestic production (70 + 77 + 78 + 84)	83	Provincial government (144)	3,3	1.0	7.2	5.7
86 Transfers received		1 100 T	28.9	7.6	60.3	36.0
From: Municipal governments (127)	85	Income earned in domestic production (70 + 77 + 78 + 84)	(501.7)	(117.5)	(1,049.2)	(779.0)
87 Municipal governments (127) 0.1 4.0 88 Provincial government (149) 19.8 2.5 14.1 89 Federal government (171) 54.1 15.7 93.1 90 Rest of the world (remittances, gifts and miscellaneous property in-	86		(80.3)	(21.3)	(133.5)	(101.7)
88 Provincial government (149)	87	Municipal governments (127)		0.1	4.0	4.2
90 Rest of the world (remittances, gifts and miscellaneous property in-	88	Provincial government (149)		2.5	14.1	11.4
comes) (198)		Federal government (171)	54.1	15.7	93.1	72.6
	70	comes) (198)	6.4	3.0	22.3	13.5
Total income (85 + 86)						880.7

TABLE 2.9 C. System of Nine Accounts, 1965 Income and Outlay Account – Education

Item No.		New- foundland	Prince Edward Island	Nova Scotia	New Brunswick	
			millions Dr. O	ı of dollars utlay		
91	Goods and services purchased from industries (31)	11.4	2.3	28.6	23.1	
92	Wages, salaries and SLI – To households (72)	21.8	5.5	53.9	38.0	
93	Interest	(2.8)	(0.9)	(6.6)	(4.6)	
	То:					
94	Households (80)	-	-	3.0	1.6	
95	Rest of the world (219)	2.8	0.9	3.6	3.0	
96	Non-competitive imports (210)	1.5	0.6	3.1	2.0	
97	Total outlay (equals total expenditure on goods and services)	37.5	9.3	92.2	67.7	
			Cr. Ir	ncome		
98	Indirect taxes from households (fees, etc.) (55)	1.5	0.4	3.7	3.2	
99	Transfers received from:					
100	Municipal governments (128)	(0.7)	(3.0)	(37.4)	(33.2)	
	School boards	0.7	2.6	34.5	31.3	
	Debt payment	-	0.4	2.9	1.9	
101	Provincial government (150)	(28.6)	(4.9)	(36.9)	(20.7)	
	School boards	24.0	4.4	27.3	12.6	
	Vocational schools and universities	4.1	0.4	8.9	7.9	
	Other	0.5	0.1	0.7	0.2	
102	Federal government (172)	(4.7)	(0.6)	(5.1)	(3.2)	
	Vocational grants	3.7	0.3	2.5	1.8	
	University grants	1.0	0.3	1.5	1.2	
	Grants to school boards	• • •	***	1.1	0.2	
103	Total income (98 + 100 + 101 + 102)	35.5	8.9	83.1	60.3	
104	Deficit (+) or surplus (-) (230)	+ 2.0	+ 0.4	+ 9.1	+ 7.4	
	Total income and net borrowing (103 + 104)	37.5	9.3	92.2	67.7	

TABLE 2.9 D. System of Nine Accounts, 1965 Income and Outlay Account — Hospitalization

Item No.		New- foundland	Prince Edward Island	Nova Scotia	New Brunswick	
			millions o			
105	Goods and services purchased from industries (32)	13.5	1.9	24.0	11.9	
106	Wages, salaries and SLI — To households (73)	15.7	3.1	30.4	26.7	
107	Interest	(0.1)	(0.1)	(2.0)	(1.4)	
	To:					
108	Households (81)	=	-	0.5	0.6	
109	Rest of the world (220)	0.1	0.1	1.5	0.8	
110	Non-competitive imports (211)	3.1	1.0	5.5	4.4	
111	Total outlay (equals total expenditure on goods and services)	32.4	6.1	61.9	44.4	
			Cr. In	come		
112	Indirect taxes from households (fees, etc.) (56)	1.8	0.4	5.0	2.5	
113	Transfers received from:					
114	Municipal governments (129)	-		3.2	0.7	
115	Provincial government (151)	(16.3)	(2.9)	(30.0)	(22.0)	
	Provincial share of hospital services	9.0	1.6	15.1	13.8	
	Cost of provincially-operated hospitals	5.3	1.2	13.9	6.3	
	Construction grants	2.0	0.1	1.0	0.2	
	Other	-	-		1.7	
116	Federal government (173)	(12.6)	(2.6)	(22.5)	(18.1)	
	Federal share of hospital services	11.6	2.4	18.1	14.9	
	Construction grants	1.0	0.2	0.8	0.2	
	Cost of (federal) veterans' hospitals	<u></u>	- !	3.6	3.0	
117	Total income (112 + 114 + 115 + 116)	30.7	5.9	60.7	43.3	
118	Deficit (+) or surplus (-) (231)	+1.7	+0.2	+1.2	+1.1	
	Total income and net borrowing (117 + 118)	32.4	6.1	61.9	44.4	

TABLE 2.9E. System of Nine Accounts, 1965 Income and Outlay Account — Municipal Government

Item No.		New- foundland	Prince Edward Island	Nova Scotia	New Brunswick
			millions of Dr. Ou		
119	Goods and services purchased from industries (33)	10.5	1.6	17.0	13.3
120	Wages, salaries and SLI — To households (74)	2.0	0.8	10.1	8.8
121	Interest	(1.1)	(0.5)	(3.0)	(2.9)
	To:				
122	Households (82)	.=	-	1.4	1.1
123	Rest of the world (221)	1.1	0.5	1.6	1.8
124	Non-competitive imports (212)	0.6	0.4	1.0	1.1
125	Total expenditure on goods and services (119 + 120 + 121 + 124)	15.0	(3.3)	(31.1)	26.1
126	Transfers paid to	(0.9)	(3.1)	(45.0)	(38.2)
127	Households (87)		0.1	4.0	4.2
128	Education (100)	0.7	3.0	37.4	33.2
129	Hospitalization (114)	130	***	3.2	0.7
130	Provincial government (162)		***	0.4	===
131	Federal government (186)	0.2	222	-	0.1
132	Total outlay (125 + 126)	15.9	6.4	1.4 1.6 1.0 (31.1) (45.0) 4.0 37.4 3.2 0.4	64.3
			Cr. Inc	come	
133	Indirect taxes	(8.0)	(4.3)	(53.2)	(41.5)
134	Industries (including all residential property taxes) (13)	6.6	3.8	49.9	37.4
135	Households (licenses, fees, etc.) (57)	1.4,	0.5	3.3	4.1
136	Transfers received	(4.5)	(1.2)	(11.2)	(17.5)
137	Provincial government (152)	4.0	1.0	6.8	13.4
138	Federal government (174)	0.5	0.2	4.4	4.1
139	Total income (133 + 136)	12.5	5.5	64.4	59.0
140	Deficit (+) or surplus (-) (232)	+ 3.4	+ 0.9	+11.7	+ 5.3
	Total income and net borrowing (139 + 140)	15.9	6.4	76.1	64.3

TABLE 2.9 F. System of Nine Accounts, 1965
Income and Outlay Account – Provincial Government

Item No.		New- foundland	Prince Edward Island	Nova Scotia	New Brunswick
				of dollars Outlay	1
141	Goods and services purchased from industries (34)	53.0	15.1	54.7	57.3
142	Wages, salaries and SLI – To households (75)	16.5	3.7	20.0	20.9
	SV AND MICHIGARY AND THE MICHIGA				
143	Interest	(11.2)	(3.0)	(18.2)	14.3)
144	Households (83)	3.3	1.0	7.2	5.7
145	Rest of the world (222)	7.9	2.0	11.0	8.6
146	Non-competitive imports (213)	1.5	0.5	1.4	0.7
147	Total expenditure on goods and services (141 + 142 + 143 + 146)	82.2	22.3	94.3	93.2
148	Transfers paid (149 + 153)	(70.7)	(11.5)	(88.8)	(68.2)
149	Households (88)	19.8	2.5	14.1	11.4
150	Education (101)	28.6	4.9	36.9	20.7
151	Hospitalization (115)	16.3	2.9	30.0	22.0
152	Municipal governments (137)	4.0	1.0	6.8	13.4
153	Federal government (185)	2.0	0.2	1.0	0.7
154	Total outlay (147 + 148)	152.9	33.8	183.1	161.4
			Cr. In	come	
	Receipts from:				
155	Industries	(27.9)	(4.5)	(34.7)	(32.7)
156	Indirect taxes (14)	19.9	3.8	27.3	26.3
157	Less: Subsidies (17)	-0.1	-0.2	-0.4	-0.4
158	Corporate income tax (8)	8.1	0.9	7.8	6.8
159	Households	(39.8)	(10.0)	(64.2)	(49.8)
160	Indirect taxes (58)	33.6	8.8	50.4	40.3
161	Personal income tax (65)	6.2	1.2	13.8	9.5
162	Municipal governments (130)	***	34.40	0.4	=
163	Federal government (175)	(78.0)	(15.6)	(69.3)	(72.5)
	Tax equalization	22.0	6.0	36.6	29.8
	Succession duties	1.1	0.2	0.2	2.5
		10.5	3.5	10.5	10.5
	Atlantic Provinces subsidy	1			1.8
	Statutory subsidies	9.7	0.7	2.1	
	Statutory subsidies	0.2	***	0.4	0.3
	Statutory subsidies Tax rental adjustment Public utility income tax rebate	0.2 0.3	0.1	0.4 0.7	* **
	Statutory subsidies	0.2	***	0.4	
164	Statutory subsidies Tax rental adjustment Public utility income tax rebate	0.2 0.3	0.1	0.4 0.7	* **
164 165	Statutory subsidies Tax rental adjustment Public utility income tax rebate Shared cost programmes	0.2 0.3 34.2	0.1 5.1	0.4 0.7 18.8	27.6

TABLE 2.9G. System of Nine Accounts, 1965 Income and Outlay Account — Federal Government

Item No.		New- foundland	Prince Edward Island	Nova Scotia	New Brunswick
			millions of	dollars	100000000000000000000000000000000000000
		- To g	Dr. Out	lay	
166	Goods and services purchased from industries (35)	28.7	8.8	82.4	25.9
167	Wages, salaries and SLI — To households (76)	28.9	14.8	156.0	73.3
168	Non-competitive imports (214)	0.5	1.0	2.1	0.8
169	Total expenditure on goods and services (166 + 167 + 168)	58.1	24.6	240.5	100.0
170 171	Transfers paid to	(149.9) 54.1	(34.7) 15.7	(208.4) 93.1	(172.0) 72.6
172	Education (102)	4.7	0.6	5.1	3.2
173	Hospitalization (116)	12.6	2.6	22.5	18.1
174	Municipal governments (138)	0.5	0.2	4.4	4.1
175 176	Provincial governments (163)	78.0	15.6	69.3 14.0	72.5
177	Total outlay (169 + 170)	208.0	59.3	448.9	272.0
			Cr. Inco	ome	
	Receipts from:				
178	Industries	(15.8)	(0.8)	(22.0)	(26.9)
179	Indirect taxes (15)	2.8	0.7	3.0	3.4
180	Less: Subsidies (18)	- 13.6	- 3.4	- 14.2	- 4.8
181	Corporate income tax (7)	26.6	3.5	33.2	28.3
182	Households	(58.8)	(14.4)	(124.4)	(91.5)
183	Indirect taxes (59)	30.0	8.8	62.5	46.7
184	Personal income tax (66)	28.8	5.6	61.9	44.8
185	Provincial government (153)	2.0	0.2	1.0	0.7
186	Municipal governments (131)	0.2	-	:	0.1
187	Total income (178 + 182 + 185 + 186)	76.8	15.4	147.4	119.2
188	Excess of federal government spending over federal government receipts (235)	131.2	43.9	301.5	152.8
	Total income plus net federal government fiscal transfer to the province (187 + 188)	208.0	59.3	448.9	272.0

TABLE 2.9H. System of Nine Accounts, 1965 Income and Outlay Account — Rest of the World

All transactions non-resident to the province, except for federal government

Item No.		New- foundland	Prince Edward Island	Nova Scotia	New Brunswick			
		Dr. Pay	millions of orments of non-re (receipts of the	sident transac	tors			
Pay	ments to industries:							
	xports of goods and services (39)	(311.0)	(48.2)	(392.6)	(383,8)			
190	Foreign countries (40)	259.3	10.2	137.6	194.9			
191 192	Nova Scotia (41) New Brunswick (42)	9.3 0.1	12.5 5.7	30.1	32.3			
193 194	Prince Edward Island (43)	333	5.1	12.8 22.1	7.8 11.4			
195	Rest of Canada (45)	42.3	14.7	190.0	137.4			
Pay	ments to households:							
196 P	urchases by non-resident tourists routed through household							
	account (30, 53)	2.8	8.0	21.3	19.0			
97	Total exports (189 + 196)	313.8	56.2	413.9	402.8			
	nsfers to households (remittances, gifts and miscellaneous propery income) (90)	6.4	3.0	22.3	13.5			
	icit of the province on current transactions with rest of the vorld	176.0	52.3	355.1	234.5			
200	Total (197 + 198 + 199)	496.2	111.5	791.3	650.8			
		Cr. Receipts of non-resident transactors (payments by the province)						
Red	ceipts from sale of:							
01 C	Competitive imports to industries (46)	(289.4)	(67.1)	(435.9)	(332.4			
02	Nova Scotia (47)	20.8	4.8	221	22.5			
03 04	New Brunswick (48) Prince Edward Island (49)	11.1	7.8	32.3 12.5	5.7			
05 06	Newfoundland (50)	252.4	54.5	7.5 383.6	0.1 304.1			
. 1	Ion-competitive imports	(120.0)	(33.4)	(249.9)	(215.3			
08	To: Industries (21)	59.9	19,4	146.8	148.6			
09	Households (60)	52.9	10.5	90.0	57.7			
10 11	Education (96) Hospitalization (110)	1.5 3.1	0.6 1.0	3.1 5.5	2.0			
12	Municipal governments (124)	0.6	0.4	1.0	1.1			
13 14	Provincial government (146)	1.5 0.5	0.5 1.0	1.4 2.1	0.7			
15 Tou	urist expenditures by households out of province (63)	5.0	2.0	15.0	20.0			
16	Total imports (201 + 207 + 215)	414.4	102.5	700.8	567.7			
14	mittable and remitted profit and interest	(81.8)	(9.0)	(76.5)	(81.6			
18	Industries (5 + 10)	69.9	5.5	58.8	67.4			
19 20	Education (95)	2.8 0.1	0.9	3.6 1.5	3.0			
21	Municipal governments (123)	1.1	0.5	1.6	1.8			
22	Provincial government (145)	7.9	2.0	11.0	8.6			
	osidy from federal government on coal exports to Central Canada	_	84_2	14.0	1.5			
1		404.6						
H	Total (216 + 217 + 223)	496.2	111.5	791.3	650.8			

TABLE 2.91. System of Nine Accounts, 1965 Consolidated Capital Finance Account

Item No.		New- foundland	Prince Edward Island	Nova Scotia	New Brunswick
			f dollars		
			Dr. Disp	osition	
	Industries:				
224	Gross fixed capital formation (37)	128.6	30.9	207.7	242.5
225	Inventory change (38)	5.6	- 2.3	4.7	- 10.0
226	Gross domestic capital formation (224 + 225)	134.2	28.6	212.4	232.5
			Cr. So	urce	
227	Personal saving (including retained earnings of locally controlled business) (68)	38.0	8.7	77.7	58.4
228	Capital consumption allowances – Industries (19)	65.7	16.7	117.6	112.6
229	Deficit (-) or surplus (+) of provincial public sectors (230 + + 233)	(~ 14.3)	(- 5.2	(- 36.5)	(- 20.2)
230	Education (104)	- 2.0	- 0.4	- 9.1	- 7.4
231	Hospitalization (118)	- 1.7	- 0.2	- 1.2	- 1.1
232	Municipal governments (140)	- 3.4	- 0.9	- 11.7	- 5.3
233	Provincial government (165)	- 7.2	- 3.7	- 14.5	- 6.4
234	Deficit of the province on current transactions with rest of the world (199)	176.0	52,3	355.1	234.5
235	Deduct: Excess of federal government spending over federal government receipts (188)	- 131.2	- 43.9	- 301.5	- 152.8
236	Net capital inflow from rest of the world not covered by federal government transfers (234-235)	(44.8)	(8.4)	(53.6)	(81.7)
	Finance of gross domestic capital formation (227 + + 235)	134.2	28.6	212.4	232.5

VII. PROVINCIAL ECONOMIC ACCOUNTS FOR 1960

Tables 2.10 to 2.14 show similar sets of provincial economic accounts for 1960. These estimates are here presented in the same format as those for 1965. The data are essentially the same as those contained in A Macro-Economic Analysis of the Structure of the Economy of the Atlantic Provinces, 1960.(22) Input-output tables for 1960 corresponding to the provincial eco-

nomic accounts are presented in the tabular appendix to this volume. The formal properties of the 1960 input-output tables have been changed from those described in A Macro-Economic Analysis of the Structure of the Economy of the Atlantic Provinces, 1960 to the fixed market share model described in Chapter 4 of this volume.

TABLE 2,10 A. System of Nine Accounts, Summary of Transactions, 1960 Newfoundland

			Final expenditure on goods and services, less competitive imports										
				Capital fo		Fed govern				al public tors			
		Current account inputs of industries	Personal expenditure (including purchases by non-resident tourists)	Gross fixed capital formation	Inventory change	Defence	Civil	Provincial	Municipal	Education	Hospitali- zation		
<u> </u>		1	2	3	4	5	6	7	8	9	10		
No						millions o	f dollars						
î	Sales by industries		209.9	108.1	7.9	4.5	19.9	29.4	3.7	5.2	6.5		
	Primary inputs:												
2		235.8	-	-	-	5.0	17.7	10.2	1.6	12.9	7.5		
3	4100 8001000 40000 00	42.1 77.0	-	_	-	=	-	_	-	_	_		
5	distribution of Papers (Care decided and	25.1	-		-	= 1	15	3.3	0.8	1.7	0.1		
6		(380.0)				(5.0)	(17.7)	(13.5)	(2.4)	(14.6)	(7.6)		
U	Constitution at lactor cost (21	(300.0)				(5.0)	(17.7)	(13.3)	(2.4)	(14.0)	(7.0)		
	Indirect Taxes:												
7		4,3	0.7	-		- 1		-	====	-	-		
8		8.0 0.6	21,0 9.1	_		_	-	-		_	_		
10	1 540 MARIE MARIE	-	2.3		-		-	2	. S.	_	_		
	Less: Subsidies:												
11		-0.5	144	_	_	- 1	- 1	2	=	_	_		
12		-9.0	-	_	-	- 1		\$1		- 1	72		
13	Capital consumption allowances	51.3	-	-	-	-	=	=	===	- 1	in the		
14	Gross Domestic Product at market price (6+ * +13) *	(434.7)	(33.1)	- 1	-	(5.0)	(17.7)	(13.5)	(2.4)	(14.6)	(7.6)		
15	Non-competitive imports	60.6	58.9	-	- 1	0.2	0.5	1.3	0.2	0.6	1.9		
16	Total primary inputs (14+15)	495.3	92.0	-	-	5.2	18.2	14.8	2.6	15.2	9.5		
17	Total final expenditure on goods and services, less competitive imports		382.9	108.1	7.9	9.7	38.1	44.2	6.3	20.4	16.0		
	Income plus deficit (column 24) of:												
18	- CO-000M-90	310.1	155	-	-	5.0	17.7	11,2	1,6	12.9	7.5		
ī9	Education (10)		1.0	-	-	-	-	-	-	-			
20	By the AC CONSCIONARION AND	27	1.3	-	-	-	-	-	-		-		
21	A CONTRACTOR OF THE PROPERTY O	4.3 7.5	0.7 21.0	_	_	2	=	-	-		.0		
23	- · · · · · · · · · · · · · · · · · · ·	5.1	9.1		_			_	_	_	_		
24		117.0	58.9	-	-	0.2	0.5	3.6	1.0	2.3	2.0		
25	Total outlay		di Nata tanangan sa		ti 	ti Vantaat		! 					
26	Capital finance: CCA plus saving	51.3	-	-	7.=	-	-	=	:=:	-	=		
27	Total primary (18+ +24+26)	495.3	92.0	-	-	5.2	18.2	14.8	2.6	15.2	9.5		
28	Total (1+27)		382.9	108.1	7.9	9.7	38.1	44.2	6.3	20.4	16.0		
29				(11)	6.0)	(47	'.8)		(86	5.9)			
30	Estimated allocation of profit, rent and interest:												
	Profits:												
3 1		13.5		_		25	=	=	=	-	_		
3.2		===		_		=	-	-	977.0	.575	Ξ		
33		19.9	(÷	-	08				=	-	===		
34	Transferred out	43.6	72	-	: 12	50	-	=	-	7=	_		
J													
35	Interest: Remaining in province	12.3	12	_				1.0	_	-			

TABLE 2.10 A. System of Nine Accounts, Summary of Transactions, 1960 Newfoundland

				n goods a	_		mpetitive					0	utlay plu	s saving	(row 26)	of			Capital	
	Rest of Canada (ex- cluding At- lantic Prov- inces	Nova Scotia	New Bruns- wick	Prince Edward Island	Nova Scotia		Prince Edward Island	All	Sub-total (2++19)	Total primary inputs (1+ , . +20)	House- holds	Educa- tion	Hospi- tali- zation	Muni- cipal- govern- ment	Provin- cial govern- ment	Federal govern- ment	Rest of the world	Total Income (2++28)	finance: Gross domes- tic capital forma- tion plus deficits	Total
1	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
				C.	N 6			v.		millions of	dollars					10	9			// //.
52.6	15.0	17.9	0.9	0.4	-11.7	-9.1	-4.6	-142.2	495.3	-										
-	-	-		-	-	=	-	\=	54.9	290.7										
_	-	-	_	=	-	20	_	_	3	42.1 77.0										
-	-	=	=	-	-	-	=	=	5.9	31.0										
-	-	-	-	-	-	-	-	75	(60.8)	(440.8)										
-	-	-	-	-	-	-	-	_	0.7	5.0										
-	_	_	_	-	_	-	_	_	21.0 9.1	29.0 9.7										
-	-	-	275		-	=	-	-	2.3	2,3										
-	-	-	-	_	-	-	-	-	=	-0.5 -9.0										
-	-)	-	12	-	- 1	- 1	-	_	-	51.3										
-	_	-	-	-	-	<u>-</u>	_	_	(93.9) 63.6	528.6 124.2										
-	-	-	Œ.	_	-	- 1	_	_	157.5	652.8										
2.6	15.0	17.9	0.9	0.4	-11.7	-9.1	-4.6	-142.2	652.8		382.9	20.4	16.0	6.3	44.2	47.8	19.2		116.0	652.8
-	-	_	_	-	-	-	_	_	_	366.0	#	_	res	_	14.5	46.9	7.0	(434,3)		434.
-	-	=	_	- 1	- 1	-	-	-	-	1.0	27	-	=	0.2	16.4	1.3	8	(18.9)	1.5	20.
-	-	-	_	_	-	_	_	-	_	1,3 5.0	=	- 1	, A	_	9,2 1.5	5.1 0,2	(E)	(15.6) (6.7)	0.4 0.1	16.6 6.1
-	9	-	_	- 1	-	_	_	-	li –	28.5 14.2	20.1	- 1	=	0.1	20	51.3		(79.9)	6.7	86.
-	-			- 1				-	-	185.5	20.1 1.8	_	=	0.2	0.8	= 1	12	(35.3) 187.3	117.3	152,i
					ess es I	11.51.5						(20.4)	(16.0)	(6.8)	(86.6)	(152.6)	(26.2)			
	-		-	=	_	,== ,	-	-	7-	51.3	29.6	-	=	77.1	7.	15	161.1			242.0
2.6	15.0	17.9		0.4		-9.1	-4.6	-142.2	652.8	652.8										
ļ	ŀ			(19.2)	,															
											434.4	20.4	16.0	6.8	86.6	152.6	187.3		242.0	

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TABLE 2.10 B. System of Nine Accounts, Summary of Transactions, 1960
Prince Edward Island

				Fir	nal expenditui	re on good	s and servi	ces, less comp	etitive import	s	
				Capital fo		Fed govern	eral ument			al public tors	
		Current account inputs of industries	Personal expenditure (including purchases by non-resident tourists)	Gross fixed capital formation	Inventory change	Defence	Civil	Provincial	Municipal	Education	Hospital zation
No.	9	1	2	3	4	5	6	7	8	9	10
			V	V 0		millions o	f dollars		0		
1 Sa	ales by industries		71.8	24.4	1.7	4.8	6.1	8.7	0.9	1,8	1
	rimary inputs:										
	Wages, salaries, and SL1	35.4		-	-	4.0	5.0	2.8	0,5	3.0	1
111	Unincorporated income	27.6 8.7		250	150	_	116	201		- 1	
111	Corporate profit	5.5			-		08 72	1.4	0.5	0.2	(
6	Net Domestic Product at factor cost (2+ +5)	(77.2)	120			(4.0)	(5.0)	(4.2)	(1.0)	(3.2)	(2
	the state of the s	()				()	(3.0)	(4.2)	(1.0)	(3.2)	(2
111	Indirect taxes:										
7	Municipal	2,2	0.4	127	2	22	75	=	550	-	-
8	Provincial	2,4	6.3	250			58.0	=			
9	Federal	0.2	5.5		= = 1	-	100			-	
10	Education and hospital charges	=	0,6	-		-	12	2	24	-	
	Less: Subsidies:					0					
1	Provincial	450	=	30	:=:	:E (26	= '			
2	Federal	-3.0	-	= 2	=		252	-	==:	-	
	Capital consumption allowances	13.9	-		-	~~	75	E .	-30	-	
5	Gross Domestic Product at market price (6+., +13) Non-competitive imports	(9 2.9) 20.3	(12.8) 16,6	=	(8)	(4.0) 0.2	(5.0) 0.1	(4.2) 0.4	(1.0) 0.1	(3.2) 0.5	()
16	Total primary inputs (14+15)	113.2	29.4	50 50		4.2	5.1	4.6	1.1	3.7	2
17 T	otal final expenditure on goods and services, less competitive imports		101.2	24,4	1.7	9.0	11.2	13.3	2.0	55	4
	come plus deficit (column 30) of:										
	Households (2+3+33+35)	71.5	-	- 1	-	4.0	5_0	3.3	0.5	3.0	
	Education (10) Hospitalization (10)	= =	0,3	-		7.	-	=	=1.1	-	
	Municipal government (7)	2.2	0.3		-	12	724	=	= 3		
	Provincial government (8+11+32)	2.4	6.3	_	_	722	~		_		
	Federal government (9+12+31)	-1.1	5.5	_	_		5=	-	-		
24	Rest of the world (15+34+36)	24.3	16.6	-	-	0.2	0_1	1.3	0.6	0.7	
25	Total outlay accorded materials suggested a restriction of							* * * * * * * *			9 (000)000
26 Ca	npital finance: CCA plus saving	13.9		-		ve.	175	= 1	35%	-	
27	Total primary (18++24+26)	113.2	29.4	_	120	4.2	5.1	4.6	1.1	3.7	:
28	Total (1+27)		101.2	24.4	1.7	9.0	11.2	13.3	2.0	5.5	
29				(26	.1)	(20	.2)	351	(24	.9)	
SO Es	stimated allocation of profit, rent and interest										
	Profits:										
31	I ederal tax	1.7	-	_	-	1744		-	æ₹	-	
3.2	Provincial tax	=		=	=		=	=	=27	120	
3.3	Remaining in province	5.3	250	50		. =	.=	=	= 1	-	
34	Transferred out	17	-	97		0=	19-	***	=	-	
	Rent and interest:										
35	Remaining in province	3.2	=	= 1	=	55	5=	0.5	= 1	-	
36	Transferred out	2;3	=	(e)	-	(∈	120	0.9	0,5	02	

TABLE 2.10 B. System of Nine Accounts, Summary of Transactions, 1960 Prince Edwar Saland

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		Capital			υΓ	ow 26) (saving (tlay plus	Ou			Exports Less: Competitive imports									
tal	Tot	finance Gross domes- tic capital forma- tion plus deficits	Total income (2+. +28)	Rest of the world	l ederal govern- ment		cipal	Hospi- tali- zation	Fduca- tion	House- holds	Total primary inputs (1++20)	Sub-total (2+ +19)		New- found-	New	Nova Scotia	New- found- land	New Bruns- wick	Nova Scotia	Rest of Canada (ex- cluding	oreign coun- tries
1	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11
	í	r		1	¥ 14	9			7	lollars	millions of d		P 1)		1					1 1	
											127	113.2	-32.6	-0.4	-8,1	-5.5	4.7	3.6	7.4	15.8	6.7
											52,5	18.1	-	-	-	- 1		· =	-	-	-
											27.6 8.7	_	=	-	=	-			=	-	_
											7.9	2,4	-	:==	=	2	-	.=	9	=	7.0
											(96.7)	(19.5)	-	12.50	=	5 81				7	-
											2.6	0.4	-		=	- 2.	-	-53	-	- 1	-
											8.7 5.7	6,3 5,5	-	-	77		=======================================		=	-	
											0,6	0.6	-	-		-	-	=	- 1	-	ú.
											3.0		-	-	-	=		-	= 1	-	
											13.9	=	-	-	-	2.0		54	-		
											125.2 38.8	(32.3) 18.5	_	-	-	-	=	25 (E)	=	- 1	=
											164.0	50.8	-	7.2	-	-		12	12	_	_
64.0	16	26.1		-8.4	20.2	13.3	2.0	4. j	5.5	101.2		164.0	-32.6	-0.4	-8.1	-5.5	4.7	3.6	7.4	15.8	6.7
06.7	10	_	(106.7)	2.5	13.8	13				5	89.1			_			_	_	_	_	
5.5		-	(5,5)		0.3	2.9	2.0	=	-	=	0.3	- 1	-	-	-	- 1	-	-	-	- 1	-
4.1 4.0			(3.5)		1.2 0.1	2.0 0.4	_		_	_	0.3 2.6	_	_	_	_	_	_	-	-	_	_
20 ₊ 0 46 ₋ 6			(19.7) (7.1)		11.0	0.1	_	=	-	2.6	8.7 4.4	-	_	-	-	- 1	-	-	- 1	- 1	
40-1		Li	(40.1)	- ×	=	2.1	_		-	-4.6	44.7	_	-	-	-	-	-	-	-	-	-
				(-5.9)	(46,6)	(20.0)	(2.0)	(4.1)	(5.5)	(99.2)											
67.4	6			46-0	=	-	-		-	7.5	13.9	=	=	in.	-	-	=	-	-	-	-
											164.0	=	=	355	-	-	=	-	-	_	77.0
												164.0	-32.6	-0.4	-8.1	-5.5		3.6	7.4	15.8	6.7
		67.4		40.1	46,6	20.0	4,0	4.1	5,5	106.7							(-8.4)				
		07.4		+U±1	70,0	2010	4,0	4.1	343	100.7											

TABLE 2.10 C. System of Nine Accounts, Summary of Transactions, 1960 Nova Scotia

				Fin	etitive import	S					
				Capital for indus		Fed				al public tors	
		Current account inputs of industries	Personal expenditure (including purchases by non-resident tourists)	Gross fixed capital formation	Inventory change	Defence	Civil	Provincial	Municipal	Education	Hospitali- zation
io.		1	2	3	4	5	6	7	8	9	10
	MATERIAL CONTRACTOR CO					millions o	f dollars				
1 Sale	es by industries , ,		619.2	177.2	5.7	33.2	21.6	42.4	8.6	20.3	14.5
	nary inputs:										
- 12	/ages, salaries, and SLI Inincorporated income	431.3 104.2	-	-	-	54.0	56.7	14.7	8.0	31.2	19,
- 1	orporate profit	100.3	-			e _	-		_	= = = = = = = = = = = = = = = = = = = =	-
- 11	Lent and interest	47.0	===	-	-2	-	=	11.6	4.0	3.0	0,
6	Net domestic product at factor cost (2++5)	(682.8)	-	-	-	(54.0)	(56.7)	(26.3)	(12.0)	(34.2)	(20.
lr	ndirect taxes:										
A.1	Municipal	33.7	5.9	-	-	-	-	-	-		-
	Provincial	20.9	33.1	_	-		_	_	- 1	=	-
111	Federal Education and hospital charges	-	57.7 5.1	_	_	_	_	_	_	-	
L	ess: Subsidies:										
	Provincial	-0.4		-	-	- 1	-	-			-
	Federal,,,,	-15.1			-	-	-	-	- /	===	-
	apital consumption allowances	92.7	-	-	-		-	-	•		-
14 15 N	Gross Domestic product at market prices (6+ +13) and con-competitive imports	(815.8) 137.6	(101.8) 78.6	_	_	(54.0)	(56.7) 0.6	(26.3)	(12.0) 0.7	(34.2)	(20. 4.
16	Total primary inputs (14+15)	(953.4)	180.4	_	_	54.9	57.3	27.0	12.7	35.9	24.
	ral final expenditure on goods and services, less competitive inports		799.6	177.2	5.7	88.1	78.9	69.4	21.3	56.2	38.
Inc	ome plus deficit (column 30) of:										
111	louscholds (2+3+33+35)	596.4	-	_	-	54.0	56.7	20.7	10.0	32.8	19.
	ducation (10)	=	3.0	-	-	-	-		É	=	
	lospitalization (10)	-	2.1		-	- 7	=	15	=	===	-
	funicipal government (7) rovincial government (8+11+32)	33.7 20.5	5.9 33.1		_	-	=	2	= 5	23	
	ederal government (9+12+31)	3.8	57.7	_	_		_	-	-		
.	test of the world (15+34+36)	206.3	78.6	-	-	0.9	0.6	6.3	2.7	3.1	4.
25	Total outlay				*.*.*.*.*.*.						
26 Cap	oital finance: CCA plus saving	92.7	-	-	-	-	=		2	-	-
27	Total primary (18+ +24+26)	953.4	180.4	-	2	54.9	57.3	27.0	12.7	35.9	24.
28	Total (1+27)		799.6	177.2	5.7	88.1	78.9	69.4	21.3	56.2	38.
29				(18	2.9)	(16	7.0)		(18	5.6)	U
30 Est	imated allocation of profit, rent and interest						=				
P	rofits:										
31	Federal tax	17.7	-		==	(m.	(5)	=	= 1	-	-
	Provincial tax	=	,	-	:=:	_	13+1	=	=	-	100
33 34	Remaining in province Transferred out	32.1 50.5	-	-	-	-	7		5	-	-
R	ent and interest:		i.								
35	Remaining in province	28.8	-	- 30	=		্য	6,0	2.0	1.6	0
36	Transferred out	18.2	-		-	196	1 ±	5.6	2.0	1.4	0

TABLE 2.10 C. System of Nine Accounts, Summary of Transactions, 1960 Nova Scotia

ospitalization

10

14.5

19.2

0.8 (**20.0**)

(20.0) 4.2 24.2

38.7

19.6

*

4.6

24.2 38.7

0.4

		Exports	-			Less: Cor	npetitive					O	utlay plu	s saving	(row 26)	of			Capital finance:	
oreign	Rest of Canada (ex- cluding At- lantic Prov- inces)	New Bruns- wick	Prince Edward Island	New- found- land	New Bruns- wick	Prince Edward Island	New- found- land	All other sources	Sub-total (2++19)	Total primary inputs (1++20)	House- holds	Educa- tion	Hospi- tali- zation	Muni- cipal govern- ment	Provin- cial govern- ment	Federal govern- ment	Rest of the world	Total income (2++28)	Gross domes- tic capital forma- tion plus deficits	Total
11	12	13	14	15	16	17	18	19	20	21	. 22	23	24	25	26	27	28	29	30	31
	7									millions of	dollars									
107.6	136.5	38.1	9.2	24.3	-34.3	-7.4	-10.8	-252.5	953.4											
:2			9		-	_	3		183,8	615.1										
100	=	===	-	=	7#1	-	-	-	=	104.2										
		-	2	72	-			=	-	100.3 66.4										
-	-	-	=	12	12	-	30	=	(203.2)	(886.0)										
-	i i=i	-	_	-	_	-	-	_	5.9	39,6										
_		_	-		_	-	_	_	33.1 57.7	54.0 58.9										
-	=	-	-	4	-	-		-	5.1	5.1										
-	-8.9	-	_	~	~	-	- 1	_	9.0	-0.4										
_	-8,9	-	_	_	_	_	_	_	-8.9	-24.0 92.7										
-	(-8.9)	-	-	-	_	- 1	-	-	(296.1)	1,111.9										
-	0.0	-	-	-	-	- 1	-	_	87,4	225,0										
_	-8.9	_	_	_	-	-	-	_	383.5	1,336.9										
07.6	127.6	38.1	9.2	24.3	-34.3	-7.4	-10.8	-252.9	1,336.9		799.6	56.2	38.7	21.3	69.4	167.0	1.8		182.9	1,336.9
-	=1	-	-	-	-	529	==	_	-	790.2	-	_		2.5	8,0	83.4	18.0	(902.1)	_	902.
_	(50) (51)	_	_	_	_	- 25 L	# # P	_	- 1	3,0 2.1	-	_	06	29.4 0.5	17.0 20.5	3.3 15.1	#0.5 Ea	(52.7) (38.2)	3.5 0.5	56/1 38,1
-	-	-	-	-	-	(4)	22	-	-	39.6	달	-	-	-	6.7	2,5	7.0	(48.8)	5.2	54.0
_	- 8.9	_	_	_	_	24. 3	=	_	_	53.6 52.6	45.9	_	- 5± - 6	0.3	2.1	54.1	=	(108.0) (100.6)	15.7 224.8	123.7 325.4
-	- 1	-	-	-	-	38		-		303.1	-3.3	-	72	-	=	27	=======================================	(299.8)		299.
	4 (444)					164 - 64 50 16 - 10					(842.2)	(56.2)	(38.7)	(54.0)	(123.7)	(325.4)	(19.8)			
88	-8.9	7 2	- R - 12	35		3.0	*	18	7	92.7	59.9	-	- 15	-	-	~	280.0			432.
	127.6	38.1	9.2	24.3	-34.3	-7.4	-10.8	-252.5	1,336.9	1,336.9										
				(1.8)					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,											
											902,1	56.2	38.7	54.0	123.7	325,4	299.8		432.6	

TABLE 2.10 D. System of Nine Accounts, Summary of Transactions, 1960 New Brunswick

				Fir	ıal expenditu	e, on good	s and serv	ces, less comp	etitive impor	ts	
				Capital fo		Fed govern				al public tors	
		Current account inputs of industries	Personal expenditure (including purchases by non-resident tourists)	Gross fixed capital formation	Inventory change	Defence	Civil	Provincia]	Municipal	Education	Hospitali- zation
		1	2	3	4	5	6	7	8	9	10
No.						millions o	f dollars				
1	Sales by industries		448.5	130.8	11.2	8,4	10.8	40.8	8.2	13,6	9.0
- 1	Primary inputs:	22612				14.0	20.5	10.2	6-1	22.4	16:4
3	Wages salaries, and SLI	326.3 83.9	2	2		14.0	29_5	10.3	6.1	22.4	16.4
4	Unincorporated income	65,5	_		_		-				
5	Corporate profit Rent and interest	47.1			_	-		10.5	4.4	2.9	1.9
6	Net domestic product at factor cost (6+ +5)	(522.8)		-	_	(14.0)	(29.5)	(20.8)	(10.5)	(25.3)	(18.3)
	Indirect taxes										
Ť	Municipal and seasons and a season as a season season season	23.2	7:1	-	-	-0	=0	-		066	-
8	Provincial	20,5	34.6	=		-	=	=	. =	16	-
9	Federal	1.0	38.0	-	-	= 27°		==	-	-	
10	Education and hospital charges	=	5,1	-	-	=5:	- 21	==	_	(e.	#
	Less: Subsidies										
11	Provincial	-0.2		-		90		-	=		
12	Federal	-8.0	75	-20	· 12	57	27			72	= =
13	Capital consumption allowances	90,1	Le l					-	-		
14	Gross Domestic Product at market prices (6+ = +13)	(549.4)	(84.8)	36		(14.0)	(29.5)	(20.8)	(10.5)	(25.3)	(18.3)
15	Non-competitive imports	118.8	58:0	-	-	0.2	0.7	314	0.8	1.5	4.0
16	Total primary inputs (14+15)	768,2	142.8	=	i i	14.2	30.2	24.2	11.3	26.8	22,3
17	Total final expenditure on goods and services, less competitive imports		591.3	139.8	11.2	22.6	41.0	65:0	19.5	40.4	3 l± 3
	Income plus deficit (column 30) of:										
18	Households (2+3+33+35)	465,2	155	-	-	14.0	29.5	16,4	8.1	23.7	17,2
19	Education 10)		2.5	-		90	545	-	-	-	=
20	Hospitalization (10)	-	2,6	=	22	20	57,	=	9	-	=
21	Municipal government (7)	23,2	7.1	-	=	-	=	-	=	=	
22	Provincial government (8+11+32)	20.3	34.6	1 =	-	=		-	18	- 8	
23	Federal government (9+12+31)	8.5	38.0	-	=	-	=1		1	=	2
24	Rest of the world (15+34+36)	160.9	58.0		=	0.2	0.7	7.8	3,2	3.1	5.1
25	Total outlay		a casa ca			50 1000B				permanence.	
26	Capital finance: CCA plus saving	90.1	=	-	-	=	-		-	-	-
27	Total primary (18+ +24+36)	768.2	142.8	-	5	14.2	30.2	24.2	11.3	26.8	22,3
28	Total (1+27)		591.3	130.8	11,2	22.6	41.0	65.0	19.5	40.4	31.3
29				(14	2.0)	(63	.6)		(15	6.2)	
30	Estimated allocation of profit, rent and interest:										
	Estimated anotation of profit, fent and interest.										
	Profits:										
31	Federal tax	15.5	=	-	=				=	=	=
32	Provincial tax	1=	7	1 25	=	34	3.1			-	=
33	Remaining in province	29.6			=	=3.0	- EX	=	===	=	=
34	Transferred out	20.4	-		=		Ħ	-		-	=
	Rent and interest:										
35	Remaining in province	25.4	=	-	-	20	20	6.1	2.0	1,3	0.8
36	Transferred out	21.7			I			4.4	2.4	1,6	1, 1

TABLE 2,10 D. System of Nine Accounts, Summary of Transactions, 1960 New Brunswick

	Final	expendi	ture on g	oods and		s, less cor						0	utlay plu	s saving ((row 26)	of			Capital		
oreign coun- tries	Rest of Canada (ex- cluding At lantic Prov-	Exports Nova Scotia	Prince Edward Island	New- found- land	Nova Scotia	Prince Edward Island		All other sources	Sub-total (2+ +19)	Total primary inputs (1+ +20)	House- holds	Educa- tion	Hospi- tali- zation	Muni- cipal govern- ment	Provin- cial govern- ment	Federal govern- ment	Rest of the world	Total income (2+_++28)	finance: Gross domes- tic cupital forma- tion plus deficits	Total	
11	inces)	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1
50.0										millions of				-							N
125.3	137.J	34.3	9.9	14.7	-36.1	-3.6	-0.9	-193.8	768.2	-											
	-	-	-	-	-		-	-	98,7	425.0											
-	= 1	-	-	-	-	-		-	-	83,9 65,5											1
-	-	-	-	-	-	(e	-	-	19.7	66.8											
-:	-	-	1	30	-		-	-	(118.4)	(641.2)											
-	-	_			=	_	-		7.1	30.3											
-	-	-	_	_	-	_	-	-	34.6 38.0	55_1 39_0											
3		-	-	-	-	_	-	-	5.1	5.1											
_		_	_	_	=	_	_	_	=	-0.2											
-	(-0,3)		-	-	7	-	-	-	-0.3	-8.3 90.1											1
_	(-0.3)	_	-	_	-	_	-	_	(202.9)	(852.3)											
-	-	-	-	-		-	-	-	68,6	187,4											
-	-0.3	_	-	_	-	-	-	-	271.5	1,039.7											
125.3	136.8	34.3	9,9	14.7	-36.1	-3.6	-0.9	-193,8	1.039.7		591.3	40.4	31,3	19.5	65:0	63.6	86.6		142.0	1,039.7	7
_	-	_	-	_	_	-	-	_	- 1	574,1	-	-	_	2.0	8.4	68.2	10.8	(663.5)	3.	663.5	
_	=			_	_	_	_	_	_	2.5 2.6	8 18	-	_	20.0	11.6 14.5	2:4 10,8	=	(36.5) (28,5)	3.9 2.8	40.4 31.3	- 1
_	5	-		-	-	_	-			30.3 54.9	.=	1.70	_	=	7.7	2.8 47.0	- 22	(40,8) (101,9)	1.3 6.5	42.1 108.4	- 1
-	-0.3	-	-	-	-	-	-	-	- i	46.2	34.8	-	-	-	1,2	7=	=	(82.2)	112.6	194.8	8
	1	-		-	-	-	-	_	!	239,0			_	2	-	2			==	239.9	1
	 I	 1		 1	 I	 I		 I	1	00.1							(97.4)			260.1	
-	-0.3	-		-	-		_		-	1,039.7	36.5	-	-	-	-	-	142.5			269.1	
125.3								-193.8	1,039.7	2,000											
	1		L	(86.6)		1	l	I													
											663,5	40.4	31-3	42-1	108.4	194.8	239.9		269,1		
																			F		

TABLE 2.10 E. System of Nine Accounts, Summary of Transactions, 1960 Atlantic Region

					Fin		ture on go	ods and servic	es,		
				Capital fo		Fee	leral nment	imports		ial public tors	
		Current account inputs of industries	Personal expenditure (including purchases by non-resident tourists)	Gross fixed capital formation	Inventory change	Defence	Civil	Provincial	Municipal	Education	Hospitali- zation
No,		1	2	3	4	5	6	7	8	9	10
						millions o	of dollars				
1 8	Sales by industries		1,443.8	440.5	26.6	51.2	58.8	121.7	21.4	41.3	31.8
li i	Primary inputs:										
2	Wages, salaries, and SLI	1,028_8	925	-	157	77.0	108,9	38.0	16.2	69,5	44.9
3 4	Unincorporated income Corporate profit	257,8	355	- 1	0.000	π /	=	- 1	-	140	=
5	Rent and interest	251,5 124,7	-	_			-	26.8	9.6	7.8	- 1
6	Net Domestic Product at factor cost (2++5)	(1,662.8)	-	_	_	(77.0)	(108.9)	(64.8)	(25.8)	7.8 (77.3)	3.1 (48.0
	**************************************					,	Not of Street, N	100.00	(20,0)	(11.3)	(40.0
7	Indirect taxes: Municipal	63.4	14.1								
8	Provincial	51.8	14.1 95.0		_	-	_	3			-
9	Federal	3.1	110,3	_	- 1	=	_	0.4	_		_
10	Education and hospital charges	_	13.1	-	-	=	- 1	-		-	-
	Less: Subsidies:										
11	Provincial	-1,1		-	-	= 1	-	5.		=	_
13	Federal Capital consumption allowances	-35,1 248,0		-	-	-		-	-	-	-
14					- 1	250	-	- 1	-	-	_
	Gross Domestic Product at market prices (6++13) Non-competitive imports	(199.9) 300.6	(232.5) 199.2	_	_	(77.0)	(108.9)	(65.2) 5.4	(25.8)	(77.3) 4.0	(48.0) 10.4
16	Total primary inputs (14+15)	2,293.5	431.7	-	_	78.2	110.4	70.6	27.6	81.3	58.4
17 T	otal expenditure on goods and services, less competitive imports		1,875.0	440.5	26.6	129.4	169.2	192.3	49.0	122.6	90.2
(r	ncome plus deficit (column 24) of:										-
	Households (2+3+33+35)	1.443.2	44	_	=	77.0	108,9	51.6	20.2	72,4	46.1
19	Education (10)	= 1	6.8	-		100			÷:		1011
	Hospitalization (10)	= 1	6.3	-	=	S	: e	0+	-	===	=
	Municipal government (7)	63.4	14.1	-	===	12	=	15	-	223	-
	Provincial government (8+1+32) Federal government (9+12+31)	50.7 16.4	95.0 110.3	-	~	850	===	-	==		==
9.4	Rest of the world (15+34+36)	471.8	199.2			1,2	1.5	0.4 18.6	7.4	8.9	12.3
25	Total outlay	Į.		de		- 1	J.	* 4	- 1]	
26 C	apital finance: CCA plus saving	248.0			_ 1	_	1	1		1	7703344
27	Total primary (18+ +24+26)	2,293.5	431.7	_	25	78.2	110.4	70.6	27.6	81.3	58.4
28	Total (1+27)		1,875.0	440.5	26.6	129.4					
29	(2 2) (at 1 transfer stands times a traver		1,075.0	(467		(298	169.2	192.3	49.0	122.6	90.2
30				(407	.1)	(296	5.0)		(454	1.1)	
E	stimated allocation of profit, rent and interest								ì		
- 1	Profits:										
31	Federal tax	48,4	S4	= =	50	==:	-	-	=-	H .	-
32	Provincial tax Remaining in province	96.0	33 i	=	9.0	-	E-10	7=1	=	20	-
34	Transferred out	86.9 116.2	5	12	50	=	-	=	VS	25 H	=======================================
	Rent and interest:										
35	Remaining in province	69.7	9	_	-	, .	-	13.6	4.0	2.9	1.2
36	Transferred out	55,0	-	15	-	:=:	-	13.2	5.6	4.9	1.9

TABLE 2.10 E. System of Nine Accounts, Summary of Transactions, 1960 Atlantic Region

						Atlan	tic Region								
Fina	al expenditui less com	e on goods and servi petitive imports	ces,				Outlay plus	saving (re	on 26) of						
Ехро	orts	Less: Competitive imports		Total		-00.	outing pius	saving (1	5w 2d) 01				Capital finance: Gross		
Foreign countries	Rest of Canada	All sources	Sub-total (2++13)	primary inputs (1+, +14)	House holds	Education	Hospitali- zation	Muni- cipal govern- ment	Provin- cial govern- ment	govern.		Total income (2+,.+22)	domestic capital formation plus deficits	Total	
11	12	13	14	15	16	17	18	19	20	-21	22	23	24	25	+
			-			millions o	f dollars			-					No
					1	1	ľ		1	1	1			r)	
392.2	304.4	-639.7	2,293.5	-											1
72		91	354,5	1,383.3											
-	===	-	337,3	257.8											2
34	-	되	- 2	251,5											3 4
341	-	링	47.3	172.0											5
-	===	5 %	(401.8)	(2,064.6)											6
= 1	51	_	14,1	77,5											
25	-	-	95.0	146.8											7
-	941	-	110.7	113.8											8
-	27	-	13,1	13,1											10
=	80	-	(2)	-1,1											11
-	-9.2		-9.2	-44.3											12
	(0.0)	a -	1875	248.0											13
(A)	(-9.2) -	_	(625.5) 223.5	(2,618.4) 524,1											14
															15
-	-9.2	-	849.0	3,142.5											16
392.2	295.2	-639.7	3,142.5		1,875.0	122,6	90.2	49.0	192.3	298.6	47.7		467.1	3,142.5	17
20	72	-	_	1,819.4		194		4.5	22.2						
= 1	175	-	-	6.8		=	16	4.5 51.6	32.2 47.9	212.3 7.4	38,3	(2,106.7) (113,7)	8.9	2,106.7 122.6	
	\—	:==:		6.3	120	257		1.1	46.2	30.2		(85.8)	4.4	90.2	
	-		_	77,5 145.7	120	0-6	-	96	16.3	5.6		(99.4)	7.4	106.8	
=	-9_2	·	_	117.9	103.4	-	-	0.4	4.2	163.4		(309.5)	29.6	339.1	
=	-		-	720.9	-5.2		3	-	4.2			(225.7) 715.7	493.8	719.5 715.7	23
			i National		(1,973.2)	(122.6)	(90.2)	(106.8)	(339.1)	(719.5)	(86.0)			715.7	1
Ξ	=	=	-	248.0	133.5	_			(003,1)	(, 1, 1, 2, 1, 2, 1, 2, 1, 2, 1, 2, 1, 2, 1, 2, 1, 2, 1, 2, 1, 2, 1, 2, 1, 2, 1, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2,	629.7			1,011.2	25
=	-9.2	-		3,142.5										1,011.2	27
392.2	295.2	-639.7	3,142.5												
	(47.7)														28 29
					2,106.7	122,6	90.2	106,8	339.1	719.5	715.7		1,011.2		1
								- 11-	4		,,,,,,		1,011.2		30
															31
															32 33
															34
													ſ		
				VA											35
															36

TABLE 2.11A. System of Nine Accounts, 1960 Production Account – Industries

Item No.		New- foundland	Prince Edward Island	Nova Scotia	New Brunswick
			millions of d Dr. Primary		
	Wages, salaries and SLI – To households (71)	235.8	35.4	431,3	326.3
- 1	Unincorporated income — To households (77)	42.1 (25.1)	(5.5)	104.2 (47.0)	83.9 (47.1)
4	To: Households (79)	12.3	3.2	28.8	25.4
5 6 C	Rest of the world (218) Corporate profits	12.8 (77.0)	2.3	18.2	21.7
- 1	To:	(77.0)	(8.7)	(100.3)	(65.5
7 8	Federal government (181) Provincial government (158) Profit after tax: To:	13.5	1.7	17.7	15.5
9	Households (84) Rest of the world (218)	19.9 43.6	5.3 1.7	32.1	29.6
11	Factor income (1 + 2 + 3 + 6)	380.0	77.2	50,5 682.8	20,4 5 22. 8
12 I	ndirect taxes	(12.9)	(4.8)	(55.8)	(44.7
13 14	Municipal government (134)	4.3	2.2	33.7	23.2
15	Provincial government (156) Federal government (179)	8.0 0.6	0.2	20,9	20.5 1.0
16 L	ess: Subsidies	(- 9.5)	(- 3.0)	(~ 15.5)	(- 8,2
17 18	Provincial government (157)	- 0.5 - 9.0	- 3.0	- 0.4 - 15.1	- 0.2 - 8.0
19 C	Capital consumption allowances (228)	51.3	13.9	92.7	90.1
20	Gross Domestic Product at market prices originating (11 + 12 + 16 + 19)	434.7	92,9	815.8	649.4
21 N	Non-competitive imports (208)	60.6	20.3	137,6	118.8
22	Total primary inputs (20 + 21)	495.3	113.2	953.4	768.2
			Primary inputs aggreg		
23 24 25 26 27 28	To: Households (1 + 2 + 4 + 9) Municipal governments (13) Provincial government (8 + 14 + 17) Federal government (7 + 15 + 18) Rest of the world (5 + 10 + 21) Capital finance account (19) Total primary inputs	310.1 4.3 7.5 5.1 117.0 51.3 495.3	71.5 2.2 2.4 - 1.1 24.3 13.9	596,4 33.7 20,5 3.8 206,3 92,7 953,4	465,2 23,2 20,3 8,5 160,9 90,1 768.2
			Cr. Receipts from less total competit		
R	eccipts from sales of goods and services to:				
29 30 31	Households (52) Of which purchased by non-resident tourists (53,196) Education (schools, colleges, universities) (91)	290.9 (2.8) 5.2	71.8 (6.2) 1.8	619.2 (15.5) 20.3	448.5 (15.3) 13.6
32 33	Hospitalization (105) Municipal government (excluding purchases related to hospitals or educa-	6.5	1.4	14.5	9.0
34	tion) (119)	3.7	0.9	8.6	8.2
35	tion) (141)	29.4	8.7	42.4	40.8
36 37 38	shared-cost programmes, etc.) (166) Industries (226) Gross fixed capital formation (224) Inventory change (225)	24.4 (116.0) 108.1 7.9	10.9 (26.1) 24.4 1.7	54.8 (182.9) 177.2 5.7	19.2 (142.0) 130.8 11.2
39	Rest of the world Exports (189)	(186.8)	(38.2)	(315,7)	(321.3)
10	To: Foreign countries (190)	152.6	6.7	107.6	125.3
41 42	Nova Scotia (191) New Brunswick (192)	17.9	7.4 3.6	38.1	34.3
43 44	Prince Edward Island (193) Newfoundland (194)	0.4	4.7	9.2 24.3	9.9 14.7
45 46 L	Rest of Canada (195)	15.0	15.8	136.5	137.1
40 L	ess: Competitive imports (201) From: Nova Scotia (202)	(- 167.6)	(- 46.6)	(- 305,0)	(- 234.4)
48 49	Nova Scotia (202) New Brunswick (203) Prince Edward Island (204)	- 11.7 - 9.1 - 4.6	- 5.5 - 8.1	= 34.3	- 36.1 - 2.6
50 51	Newfoundland (205)	- 4.6 - 142.2	- 0.4 - 32.6	- 7.4 - 10.8 - 252.5	- 3.6 - 0.9 - 102.8
51	Rest of Canada and foreign countries (206) Total final sales less total competitive imports (29 + 31 + 36 +	- 142.2	- 32.6	= 252.5	-193.8
	39 + 46)	495.3	113.2		

TABLE 2.11B. System of Nine Accounts, 1960 Income and Outlay Account — Households

Item No.		New- foundland	Prince Edward Island	Nova Scotia	New Brunswick
110.			millions o		
52 53	Consumer goods and services from industries (29) Of which purchased by non-resident tourists (30, 196)	290.9 (2.8)	71.8 (6.2)	619.2 (15.5)	448.5 (15.3)
54	Indirect taxes (55 + + 59)	(33.1)	(12.8)	(101.8)	(84.8)
55 56 57 58 59	To: Education (private payments) (98) Hospitalization (private payments) (112) Municipal government (135) Provincial government (160) Federal government (183)	1.0 1.3 0.7 21.0 9.1	0.3 0.3 0.4 6.3 5.5	3.0 2.1 5.9 33.1 57.7	2.5 2.6 7.1 34.6 38.0
60	Non-competitive imports (209)	58.9	16.6	78.6	58.0
61	Total personal consumption before adjustment (52 + 54 + 60)	382.9	101.2	799.6	591.3
62	Less purchased by non-resident tourists (53)	- 2.8	- 6.2	- 15.5	- 15.3
63	Add resident tourist expenditure out of province (215)	4.6	1.6	12.2	16.2
64	Total personal consumption (61 + 62 + 63)	384.7	96.6	796.3	592.2
65 66	Income tax: To: Provincial government (161) Federal government (184)	20.1	2.6	45.9	34.8
67	Total outlay (64 + 65 + 66)	404.8	99.2	842.2	627.0
68	Personal saving (including retained earnings of locally controlled business) (227)	29.6	7.5	59.9	36.5
69	Total outlay and saving (67 + 68)	434.4	106.7	902.1	663.5
			Cr. Ir	ncome	
70	Wages, salaries and SLI, and military pay	(290.7)	(52.5)	(615.1)	(425.0)
71 72 73 74 75 76	From: Industries (1) Education (92) Hospitalization (106) Municipal governments (120) Provincial government (142) Federal government (167)	235.8 12.9 7.5 1.6 10.2 22.7	35.4 3.0 1.8 0.5 2.8 9.0	431.3 31.2 19.2 8.0 14.7 110.7	326.3 22.4 16.4 6.1 10.3 43.5
77	Unincorporated income – From industries	42.1	27.6	104.2	83.9
78	Rent and interest	(13.3)	(3.7)	(38.8)	(35.6)
79 80 81 82	From: Industries (4) Education (94) Hospitals Municipal governments (122)	12.3	3.2	28.8 1.6 0.4 2.0	25.4 1.3 0.8 2.0
83	Provincial government (144)	1.0	0.5	6.0	6.1
84	Corporate profits after tax – From industries	19.9	5.3	32.1	29.6
85	Income earned in domestic production (70 + 77 + 78 + 84)	(366.0)		(790.2)	
86	Transfers received From:	(68.4)	(17.6)	(111.9)	
87 88 89 90	Municipal governments (127) Provincial government (149) Federal government (171) Rest of the world (remittances, gifts and miscellaneous property in-	14.5 46.9	1.3 13.8	2.5 8.0 83.4	2.0 8.4 68.2
70	comes)	7.0	2.5	18.0	10.8
	Total income (85 + 86)	434.4	106.7	902.1	663.5

TABLE 2.11C. System of Nine Accounts, 1960 Income and Outlay Account – Education

ltem No.		New- foundland	Prince Edward Island	Nova Scotia	New Brunswick
			millions o		
91	Goods and services purchased from industries (31)	5.2	1.8	20.3	13.6
92	Wages, salaries and SLI – To households (72)	12.9	3.0	31.2	22,4
93	Interest	(1.7)	(0.2)	(3.0)	(2.9)
94	Households (80)	- 1	-	1.6	1.3
95	Rest of the world (219)	1.7	0.2	1.4	1.6
96	Non-competitive imports (210)	0.6	0.5	1.7	1.5
97	Total outlay (equals total expenditure on goods and services)	20.4	5.5	56.2	40.4
			Cr. In	come	
98	Indirect taxes from households (fees, etc.) (55)	1.0	0.3	3.0	2.5
99	Transfers received:				
	From:				
100	Municipal governments (128)	0.2	2.0	29.4	20.0
	School boards		***	***	100000
	Debt payment		***	9#3#(0#)	***
101	Provincial government (150)	(16.4)	(2.9)	(17.0)	(11.6)
	School boards	15.5	2.4	13.0	9.0
	Vocational schools and universities	0.4	0.1	1.8	0.7
	Other	0.5	0.4	2.2	1.9
102	Federal government (172)	(1.3)	(0.3)	(3.3)	(2.4)
	Vocational grants	0.3	0.3	0.6	1.0
	University grants	0.7	=	2.3	1.4
	Grants to school boards	0.3	-	0.4	-
103	Total income (98 + 100 + 101 + 102)	18.9	5.5	52.7	36.5
104	Deficit (+) or surplus (-) (230)	+1.5	_	+ 3.5	+ 3.9
	Total income and net borrowing (103 + 104)	20.4	5.5	56.2	40.4

TABLE 2.11D. System of Nine Accounts, 1960 Income and Outlay Account — Hospitalization

Item No.		New- foundland	Prince Edward Island	Nova Scotia	New Brunswick
			millions o		
105	Goods and services purchased from industries (32)	6.5	1.4	14.5	9.0
106	Wages, salaries and SLI – To households (73)	7.5	1.8	19.2	16.4
107	To:	(0.1)	(0.3)	(0.8)	(1.9)
108	Households (81)	_		0.4	0.8
109	Rest of the world (220)	0.1	0.3	0.4	1.1
110	Non-competitive imports (211)	1.9	0.6	4.2	4.0
111	Total outlay (equals total expenditure on goods and services)	16.0	4.1	38.7	31.3
			Cr. In	come	
112	Indirect taxes from households (fees, etc.) (56)	1.3	0.3	2.1	2.6
113	Transfers received:				
	From:				
114	Municipal governments (129)	=	-	0.5	0.6
115	Provincial government (151)	(9.2)	(2.0)	(20.5)	(14.5)
	Provincial share of hospital services	3.7	0.9	8.9	8.5
	Cost of provincially-operated hospitals	9.0	1.1	9.6	4.1
	Construction grants and other contributions	- 3.5	-	2.0	1.9
116	Federal government (173)	(5.1)	(1.2)	(15.1)	(10.8)
	Federal share of hospital services and construction grants	5.1	1.2	10.9	8.3
	Cost of (federal) veterans' hospitals	-	=:	4.2	2.5
117	Total income (112 + 114 + 115 + 116)	15.6	3.5	38.2	28.5
118	Deficit (+) or surplus (-) (231)	+ 0.4	+ 0.6	+ 0.5	+ 2.8
	Total income and net borrowing (117 + 118)	16.0	4.1	38.7	31.3

TABLE 2.11E. System of Nine Accounts, 1960
Income and Outlay Account – Municipal Governments

Item No.		New- foundland	Prince Edward Island	Nova Scotia	New Brunswick
				of dollars Outlay	
119	Goods and services purchased from industries (33)	3.7	0.9	8.6	8.2
120	Wages, salaries and SLI – To households (74)	1.6	0.5	8.0	6.1
121	Interest	(0.8)	(0.5)	(4.0)	(4.4)
122	Households (82)	-	-	2.0	2.0
123	Rest of the world (221)	0.8	0.5	2.0	2.4
124	Non-competitive imports (212)	0.2	0.1	0.7	0.8
125	Total expenditure on goods and services (119 + 120 + 121 + 124)	6.3	2.0	21.3	19.5
126	Transfers paid	(0.5)	(2.0)	(32.7)	(22.6)
127	Households (87)	_	_	2.5	2.0
128	Education (100)	0.2	2.0	29.4	20.0
129	Hospitalization (114)	_	-	0.5	0.6
130	Provincial government (162)	0.1	77	0.3	-
131	Federal government (186)	0.2	-	-	=
132	Total outlay (125 + 126)	6.8	4.0	54.0	42.1
			Cr. I	ncome	
133	Indirect taxes	(5.0)	(2.6)	(39.6)	(30.3)
134	Industries (including all residential property taxes) (13)	4.3	2.2	33.7	23.2
135	Households (licences, fees, etc.) (57)	0.7	0.4	5.9	7.1
136	Transfers received	(1.7)	(0.5)	(9.2)	(10.5)
137	Provincial government (152)	1.5	0.4	6.7	7.7
138	Federal government (174)	0.2	0.1	2.5	2.8
139	Total income (133 + 136)	6.7	3.1	48.8	40.8
140	Deficit (+) or surplus (-) (232)	+0.1	+ 0.9	+ 5.2	+1.3
	Total income and net borrowing (139 + 140)	6.8	4.0	54.0	42.1

TABLE 2.11F. System of Nine Accounts, 1960
Income and Outlay Account – Provincial Government

Item No.		New- foundland	Prince Edward Island	Nova Scotia	New Brunswick
110,				ns of dollars . Outlay	
141	Goods and services purchased from industries (34)	29.4	8.7	42.4	40.8
142	Wages, salaries and SLI – To households (75)	10.2	2.8	14.7	10.3
143	Interest	(3.3)	(1.4)	(11.6)	(10.5)
144 145	Households (83)	1.0	0.4	6.0 5.6	6.1 4.4
146	Non-competitive imports (213)	1.3	0.4	0.7	3.4
147	Total expenditure on goods and services (141 + 142 + 143 + 146)	44.2	13.3	69.4	65.0
148	Transfers paid	(42.4)	(6.7)	(54.3)	(43.4)
149	Households (88)	14.5	1.3	8.0	8.4
150	Education (101)	16.4	2.9	17.0	11.6
151	Hospitalization (115)	9.2	2.0	20.5	14.5
152	Municipal governments (137)	1.5	0.4	6.7	7.7
153	Federal government (185)	0.8	0.1	2.1	1.2
154	Total outlay (147 + 148)	86.6	20.0	123.7	108.4
			Cr. I	ncome	
	Receipts from:				
155	Industries	(7.5)	(2.4)	(20.5)	(20.3)
156	Indirect taxes (14)	8.0	2,4	20.9	20.5
157	Less: Subsidies (17)	- 0.5	74141	- 0.4	- 0.2
158	Corporate income tax (8)	=	- 1	=	-
159	Households	(21.0)	(6.3)	(33.1)	(34.6)
160	Indirect taxes (58)	21.0	6.3	33.1	34.6
161	Personal income tax (65)	-	-	2	_
162	Municipal governments (130)	0.1	-	0.3	_
163	Federal government (175)	(51.3)	(11.0)	(54.1)	(47.0)
	Tax equalization	15.4	3.7	21.0	17.5
	Atlantic Provinces subsidy	17.1	3,2	9.6	9.2
	Tax rental adjustment	5.0	1.1	11.2	9,3
	Public utility income tax rebate	0.1	-	0.3	0.1
	Shared cost programmes	13.7	3.0	12.0	10.9
164	Total income (155 + 159 + 162 + 163)	79.9	19.7	108.0	101.9
165	Deficit (+) or surplus (-) (233)	+ 6.7	+ 0.3	+ 15.7	+ 6.5
	Total income and net borrowing (164 + 165)	86.6	20.0	123.7	108.4

TABLE 2.11G. System of Nine Accounts, 1960
Income and Outlay Account — Federal Government

Item No.		New- foundland	Prince Edward Island	Nova Scotia	New Brunswick
			millions of	dollars	
			Dr, Out	lay	
166 167 168	Goods and services purchased from industries (35)	24.4 22.7 0.7	10.9 9.0 0.3	54.8 110.7 1.5	19.2 43.5 0.9
169	Total expenditure on goods and services (166 + 167 + 168)	47.8	20.2	167.0	63.6
170	Transfers paid	(104.8)	(26.4)	(167.3)	(131.5)
171 172 173 174 175 176	Households (89) Education (102) Hospitalization (116) Municipal governments (138) Provincial government (163) Rest of the world (subsidy on coal exports to Central Canada) (223)	46.9 1.3 5.1 0.2 51.3	13.8 0.3 1.2 0.1 11.0	83.4 3.3 15.1 2.5 54.1	68.2 2.4 10.8 2.8 47.0
177	Total outlay (169 + 170)	152.6	46.6	334.3	195.1
			Cr. Inco	ome	
178 179 180 181 182 183 184 185 186	Receipts from: Industries Indirect taxes (15) Less: Subsidies (18) Corporate income tax (7) Households Indirect taxes (59) Personal income tax (66) Provincial government (153) Municipal government (131)	(5.1) 0.6 - 9.0 13.5 (29.2) 9.1 20.1 0.8 0.2	(-1.1) 0.2 -3.0 1.7 (8.1) 5.5 2.6 0.1	(3.8) 1.2 - 15.1 17.7 (103.6) 57.7 45.9 2.1	(8.5) 1.0 - 8.0 15.5 (72.8) 38.0 34.8 1.2
187	Total income (178 + 182 + 185 + 186)	35.3	7.1	109.5	82.5
188	Excess of federal government spending over federal government receipts (235)	+ 117.3	+ 39.5	+ 224.8	+112.6
	Total income plus net federal government fiscal transfer to the Province (187 + 188)	152.6	46.6	334.3	195.1

TABLE 2.11H. System of Nine Accounts, 1960 Income and Outlay Account — Rest of the World

Note: All transactions non-resident to the province, except for Federal Government.

Item No.		New- foundland	Prince Edward Island	Nova Scotia	New Brunswick
		Dr. Payments of non-resident transact (receipts of the province)		actors	
189 190 191 192 193 194 195	Payments to industries: Exports of goods and services (39) To: Foreign countries (40) Nova Scotia (41) New Brunswick (42) Prince Edward Island (43) Newfoundland (44) Rest of Canada (45) To households: Purchases by non-resident tourists routed through household account (30, 53)	(186.8) 152.6 17.9 0.9 0.4 - 15.0	(38.2) 6.7 7.4 3.6 - 4.7 15.8	(315.7) 107.6 	(321.3) 125.3 34.3 - 9.9 14.7 137.1
197	Total exports (189 + 196)	189.6	44.4	331.2	336.6
198 199	Transfers to households (remittances, gifts and miscellaneous property income) (90) Deficit of the province on current transactions with "rest of the world" (234)	7.0 161.1	2.5	18.0 280.0	10.8
200	Total (197 + 198 + 199)	357.7	92.9	629.2	489.9

TABLE 2.11H. System of Nine Accounts, 1960 – Concluded Income and Outlay Account – Rest of the World

Item No.		New- foundland	Prince Edward Island	Nova Scotia	New Brunswick
		Cr. Re	eceipts of non-res	ident transa	ctors
201	Receipts from sale of: Competitive imports to industries (46)	(167.6)	(46.6)	(305.0)	(234.4)
201	Competitive imports to industries (46)	(107.0)	(40.0)	(303.0)	(234.4)
202	Nova Scotia (47)	11.7	5.5	24.0	36.1
203	New Brunswick (48)	9.1	8.1	34.3	2.6
204	Prince Edward Island (49)	4.6	0.4	$\frac{7.4}{10.8}$	3.6 0.9
205 206	Newfoundland (50) All other (51)	142.2	32.6	252.5	193.8
207	Non-competitive imports	(124.2)	(38.8)	(225.0)	(187.4)
201	To:	(124.2)	(30.0)	(223.0)	(107.4)
208	Industries (21)	60.6	20.3	137.6	118.8
209	Households (60)	58.9	16.6	78.6	58.0
210	Education (96)	0.6	0.5	1.7	1.4
211	Hospitalization (110)	1.9	0.6	4.2	4.0
212	Municipal governments (124)	0.2	0.1	0.7	0.8
213 214	Provincial government (146)	1.3 0.7	0.4	0.7 1.5	3.4
214	Federal government (168)	4.6	1.6	12.2	16.2
					1
216	Total imports (201 + 207 + 215)	296.4	87.0	542.2	438.0
217	Remittable and remitted profit and interest	(61.3)	(5.9)	(78.1)	(51.6)
218	Industries (5 + 10)	56.4	4.0	68.7	42.1
219	Education (95)	1.7	0.2	1.4	1.6
220	Hospitalization (109)	0.1	0.3	0.4	1.1
221 222	Municipal governments (123)	0.8	0.5	2.0 5.6	2.4 4.4
223	Provincial governments (145)	2.3	0.9	3.0	4.4
223	(176)	_	=>	8.9	0.3
	Total (216 + 217 + 223)	357.7	92.9	629.2	489.9

TABLE 2.11I. System of Nine Accounts, 1960 Consolidated Capital Finance Account

	<u> </u>		T		
Item No.		New- foundland	Prince Edward Island	Nova Scotia	New Brunswick
		millions of dollars			
			Dr. Dispos	ition	,
224	Industries:	1001	24.4	155.2	120.0
224 225	Gross fixed capital formation (37)	108.1 7.9	24.4	177.2 5.7	130.8
226	Gross domestic capital formation (36)	116.0	26.1	182.9	142.0
			Cr. Sou	rce	
227	Personal saving (including retained earnings of locally controlled business) (68)	29.6	7.5	59.9	36.5
228 229	Capital consumption allowances – Industries (19) Deficit (-) or surplus (+) of provincial public sectors (230 + +	51.3	13.9	92.7	90.1
	233)	(- 8.7)	(- 1.8)	(-24.9)	(- 14.5)
230 231	Education (104) Hospitalization (118)	1.5 0.4	0.6	3.5 0.5	3.9
232	Municipal governments (140)	0.1	0.9	5.2	1.3
233 234	Provincial government (165)	6.7	0.3	15.7	6.5
234	Deficit of the province on current transactions with "rest of the world" (199)	161.1	46.0	280.0	142.5
235	Deduct: Excess of federal government spending over federal govern-	117.2	20.5	224.0	
236	ment receipts (188) Net capital inflow from "rest of the world" not covered by federal	117.3	39.5	224.8	112.6
	government transfers (234-235)	(43.8)	(6.5)	(55.2)	(29.9)
	Finance of gross domestic capital formation (227 + + 235)	116.0	26.1	182.9	142.0

TABLE 2.12 A. Domestic Product and Expenditure, 1960 Newfoundland

Dr. Gross Domestic Product	Millions of dollars	Cr. Expenditure on the Gross Domestic Product	Millions of dollars
Add: Wages and salaries and SLI (1 + 92 + 106 + 120 + 142 + 167)	290.7 42.1 77.0 31.1	Personal consumption before adjustment ^{1,2} (61)	382.9 87.0
Net Domestic Product at factor cost	440.9	Expenditure on goods and services by federal government (169)	47.8
Plus: Indirect Taxes (12 + 54)	46.0	Gross domestic capital formation (36, 226)	116.0
Less: Subsidies (17 + 18 + 223)	- 9.5	Exports: 3 To: Foreign countries (40, 190)	152.6
Net Domestic Product at market prices	477.4	Canada (41 + + 45)	34.3
Plus: Capital consumption allowances (19). Equals:	51.3	Less: Imports ²	(- 291.9) - 167.7 - 124.2
Gross Domestic Product at market prices	528.7	Expenditure on the Gross Domestic Product at market prices	528.7

Includes purchases by non-resident tourists.
 Excludes resident tourist expenditures out of province.
 Excludes purchases by non-resident tourists.

TABLE 2.12 B. Domestic Product and Expenditure, 1960 Prince Edward Island

Dr. Gross Domestic Product	Millions of dollars	Cr. Expenditure on the Gross Domestic Product	Millions of dollars
Add: Wages, salaries and SLI (1 + 92 + 106 + 120 + 142 + 167)	52.5 27.6 8.7 7.9	Personal consumption before adjustment ^{1,2} (61)	101.2 24.9
Net Domestic Product at factor cost	96.7	Expenditure on goods and services by federal government (169)	20.2
Plus: Indirect taxes (12 + 54)	17.6	Gross domestic capital formation (36, 226)	26.1
Less: Subsidies (17 + 18 + 223)	- 3.0	Exports ³ To: Foreign countries (40, 190)	6.7
Net Domestic Product at market prices	111.3	Canada (41 + + 45)	31.5
Plus: Capital consumption allowances (19) Equals:	13.9	Less: Imports ²	(- 85.4) - 46.6 - 38.8
Gross Domestic Product at market prices	125.2	Expenditure on the Gross Domestic Product at market prices	125.2

Includes purchases by non-resident tourists.
 Excludes resident tourist expenditures out of province.
 Excludes purchases by non-resident tourists.

TABLE 2.12 C. Domestic Product and Expenditure, 1960 Nova Scotia

Dr. Gross Domestic Product	Millions of dollars	Cr. Expenditure on the Gross Domestic Product	Millions of dollars
Add:		B. 1	
Wages, salaries and SLI (1 + 92 + 106 + 120 + 142 + 167)	615.1	Personal consumption before adjustment 1,2 (61)	799.6
Unincorporated income (2)	104.2 100.3	Farmer dita.	
Corporate profit (6)	66.4	Expenditure on goods and services by provincial public sectors (97 + 111 + 125 + 147)	185.7
Net Domestic Product at factor cost	886.0	Expenditure on goods and services by federal government (169)	166.9
Plus: Indirect taxes (12 + 54)	157.6	Gross domestic capital formation (36, 226)	182.9
æss: Subsidies (17 + 18 + 223)	- 24.4	Exports ^{3,4}	(306.8)
Equals:		To: Foreign countries (40, 190)	107.6
Net Domestic Product at market prices	1,019.2	Canada ⁴ (41 + + 45 - 223)	199.2
Plus:	1,012.2	Less: Imports ²	(- 530.0)
Capital consumption allowances (19)	92.7	Competitive imports (201)	- 305.0 - 225.0
Equals:		Non-competitive imports (207)	223.0
Gross Domestic Product at market	1,111.9	Expenditure on the Gross Domestic Product at market prices	1,111.9

Includes purchases by non-resident tourists.
Excludes resident tourist expenditures out of province.
Excludes purchases by non-resident tourists.
Excludes \$8.9 million federal subsidy on coal shipments.

TABLE 2.12 D. Domestic Product and Expenditure, 1960 **New Brunswick**

Dr. Gross Domestic Product	Millions of dollars	Cr. Expenditure on the Gross Domestic Product	Millions of dollars
Add:			
Wages, salaries and SLI (1 + 92 + 106 + 120 + 142 + 167)	425.0 83.9	Personal consumption before adjustment ^{1,2} (61)	591.3
Corporate profit	65.5 66.8	Expenditure on goods and services by provincial public sectors (97 + 111 + 125 + 147)	156.2
Net Domestic Product at factor cost	641.2	Expenditure on goods and services by federal government (169)	63.6
Plus: Indirect taxes (12 + 54)	129.5	Gross domestic capital formation (36, 226)	142.0
Less: Subsidies (17 + 18 + 223)	- 8.5	Exports ^{3,4}	(321.0)
Equals:		To: Foreign countries (40, 190)	125.3
Net Domestic Product at market prices	762.2	Canada (41 + + 45 - 223)	195.7
Plus: Capital consumption allowances (19)	90.1	Less: Imports ²	(- 421.8) - 234.4 - 187.4
Equals:		Non-competitive imports (201)	- 10/. 4
Gross Domestic Product at market prices	852.3	Expenditure on the Gross Domestic Product at market prices	852.3

1 Includes purchases by non-resident tourists.
2 Excludes resident tourist purchases out of province.
3 Excludes purchases by non-resident tourists.
4 Excludes \$300,000 federal subsidy on coal shipment.

TABLE 2.13 A. Provincial Disposable Income, 1960 Newfoundland

Disposition	Millions of dollars	Source	Millions of dollars
Personal expenditure on consumer goods		Wages, salaries and SLI	290.7
and services:		Unincorporated income profits and investment	42.1
Industries	288.2	Income originating in:	
Non-competitive imports	63.5	Corporate industries	
Indirect taxes	33.0	Local government	5.9
Total	384.7	Sub-total: Net Domestic Product at factor cost	(440.8)
1044	30117	Add: Total indirect taxes	46.0
Local governments expenditure on goods and services:		Less: Indirect taxes to federal government	- 9.7
	38.1	Deduct: Total subsidies	- 9.5
On own output	44.8	Add:	7.0
Non-competitive imports	4.0	Subsidies from federal government	9.0
Non-competitive imports	7.0	Add:	
Total	86.9	Transfers from federal government	104.8
10001	00.5	Property income, wages, salaries and transfers from rest of the world	7.0
		Deduct:	7.0
Saving:		Interest from industries to rest of the	
Personal saving	29.6	world	- 12.8
Local governments	- 8.7	Profits from industries to rest of the world Interest from local governments to rest of the	- 43.6
		world	- 4.9
Total	20.9	Transfers from local governments to rest of	
		the world	- 1.0 - 33.6
Decrinais I diamondale income	492.5		
Provincial disposable income	492.5	Provincial disposable income	492.5

TABLE 2.13 B. Provincial Disposable Income, 1960 Prince Edward Island

Disposition	Millions of dollars	Source	Millions of dollars
Personal expenditure on consumer goods		Wages, salaries and SLI	52.5
and services:		Unincorporated income, profits and investment	27.6
Industries	65.5	Income originating in:	
Non-competitive imports	18.2	Corporate industries	14.2
Indirect taxes	12.8	Local government	2.4
mandet taxes	12.0	Sub-total:	
Total	96.5	Net Domestic Product at factor cost	(96.7)
Total	70.3	Add:	17.6
		Total indirect taxes	17.6
T 1		Less:	_ 5 7
Local governments expenditure on goods and services:		Indirect taxes to federal government Deduct:	- 5.7
	10.5	Total subsidies	- 3.0
On own output	10.5	Add:	3.0
Industries	12.8	Subsidies from federal government	3.0
Non-competitive imports	1.6	Add:	3.0
		Transfers from federal government	26.4
Total	24.9	Property income, wages and salaries and	
		transfers from rest of the world	2.5
		Deduct:	
Saving:		Interest from industries to rest of the	
Personal saving	7.5	world	- 2.3
Local governments	- 1.8	Interest from local governments to rest of	- 1.7
THE SAME WATER CONTROL AND		the world	- 2.0
Total	5.7	Transfers from local governments to rest of	
		the world	- 0.1
		Direct taxes to federal government	- 4.3
Provincial disposable income	127.1	Provincial disposable income	127.1

TABLE 2.13 C. Provincial Disposable Income, 1960 Nova Scotia

Disposition	Millions of dollars	Source	Millions of dollars
Personal expenditure on consumer goods and services:		Wages, salaries and SLI	651.1
Industries	603.7	Unincorporated income, profits and investment	104.2
Non-competitive imports	90.8	Income originating in: Corporate industries	147.3
Indirect taxes	101.8	Local government	19.4
muncet taxes	101.0	Sub-total:	
Total	796.3	Net Domestic Product at factor cost	(886.0)
		Add: Total indirect taxes	157.6
Local governments expenditure on goods and		Less:	50.0
services:	02.5	Indirect taxes to federal government Deduct:	- 58.9
On own output	92.5	Total subsidies	- 15.5
Industries	85.8	Add: Subsidies from federal government	15.1
Non-competitive imports	7.3	Add:	13.1
Total	185.6	Transfers from federal government	158.4 18.0
Saving:		Deduct:	10.0
Personal saving	59.9	Interest from industries to rest of the world	- 18.2
Local governments	- 25.0	Profits from industries to rest of the world	- 50.5
Total	34.9	Interest from local governments to rest of the world	- 9.5
		world	- 2.1 - 63.6
Disposable income	1,016.8	Direct taxes to federal government	1,016.8

TABLE 2.13 D. Provincial Disposable Income, 1960 New Brunswick

Disposition	Millions of dollars	Source	Millions of dollars
Personal expenditure on consumer goods and		Wages, salaries and SLI	425.0
services:	422.2	Unincorporated income, profits and investment	83.9
Industries	433.3	Income originating in:	
Non-competitive imports	74.2	Corporate industries	112.7
Indirect taxes	84.8	Local government	19.7
Total	592.3	Sub-total: Net Domestic Product at factor cost Add:	(641.3)
		Total indirect taxes	129.5
Local governments expenditure on goods and services:		Less: Indirect taxes to federal government	- 39.0
On own output	74.9	Total subsidies	- 8.2
Industries	71.6	Add:	
Non-competitive imports	9.7	Subsidies from federal government	8.0
Total	156.2	Add: Transfers from federal government	131.2
Saving:			10.8
Personal saving	36.5	Deduct: Interest from industries to rest of the world	- 21.7
	- 14.5	Profits from industries to rest of the world	-20.4
Local governments	- 14.3	Interest from local governments to rest of the	0.5
Total	22.0	World	9.5
		the world	- 1.2 - 50.3
Provincial disposable income	770.5	Provincial disposable income	770.5

TABLE 2.14. Balance of Payments, Atlantic Provinces, 1960

	New- found- land	Prince Edward Island	Nova Scotia	New Bruns- wick
		millions of	dollars	
Receipts of residents:	i) C			
From:				
Federal government	(160.9)	(49.3)	(339.0)	(201.9)
Sales of goods and services by industries (166)	24.4	10.9	54.8	19.2
Wages, salaries and SLI (167)	22.7	9.0	110.7	43.5
Subsidies to industries (180)	9.0	3.0	15.1	8.0
Transfers to households (171)	46.9	13.8	83.4	68.2
Transfers to provincial public sectors (172,+	57.9	12.6	75.0	63.0
From:				
Rest of the world	(196.6)	(46.9)	(349.2)	(347.4)
Exports including tourism (189 + 196)	189.6	44.4	331.2	336.6
Transfers to households (remittances, gifts, miscellaneous property income) (198)	7.0	2.5	18.0	10.8
Net capital inflow from rest of the world not covered by federal government transfers	43.8	6.5	55.2	29.9
Total receipts of residents	401.3	102.7	743.4	579.2
Payments by residents:				
To:				
Federal government	(44.3)	(10.1)	(124.6)	(90.5)
Direct and indirect taxes paid by:				
Industries (179 + 181)	14.1	1.9	18.9	16.5
Households (182)	29.2	8.1	103.6	72.8
Transfer from provincial government (185)	0.8	0.1	2.1	1.2
Transfer from municipal government (186)	0.2	-	100	020
To:				
Rest of the world	(357.0)	(92.6)	(618.8)	(488.7)
Competitive imports (by industries) (201)	167.6	46.6	305.0	234.4
Non-competitive imports (excluding federal government) (207 less 214)	123.5	38.5	223.5	186.5
Tourist expenditures by households out of province (215)	4.6	1.6	12.2	16.2
Remittable and remitted profit and interest (217).	61.3	5.9	78.1	51.6
Total payments by residents	401.3	102.7	743.4	579.2

CHAPTER 3

THE INPUT-OUTPUT TRANSACTION ACCOUNTS

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Complete solution input-output models of the type pioneered by Leontief are admittedly simplistic. Structural relations of proportionality are locked into the models in the form of fixed coefficients. Despite the simplicity of the model, however, input-output analysis has established itself as a powerful technique for exploring relations of interdependence between economic activities and has found many and varied applications in scores of countries. 2

Academic purists have, for decades, scoffed at the proportionality assumptions of the Leontief model, while input-output research has laboured diligently to assemble the large quantities of information which these systems demand. The resources available to industrial and governmental bureaucracies make it feasible to achieve a high degree of disaggregation in data compilation and great speed in the processing of large systems. These developments hold out the possibility of closing the gap between assumptions made and the likely behaviour of economic transactions. The final breakthrough in the transition from the original Leontief models will come when we are able to devise systematic procedures which change structural coefficients in response to changes in the levels of activity and prices so as to simulate solutions which conform to the social and economic environment (including the constraints) within which the model is set. Such systems will require much more information than the conventional Leontief models. Moreover, there is scope here for the exercise of insights which combine a mastery of techniques with a full understanding of the technological and behavioural relationships of the particular economy for which a simulation model is built. As P.N. Mathur commented in his introduction to the first of the two volumes of papers presented at the Fourth International Conference on Input-Output Techniques in Geneva in January 1968: "The great beauty of Leontief's system is that it gives meaningful results after systematically emcompassing many thousands of separate bits of information simultaneously without losing sight or sacrificing the individuality of a single term. It can assimilate very specific

ideas provided they are themselves empirically articulated and nothing definitely known need be ignored in interpreting the results. Naturally, more and more practical users, organizations and governments are turning to this tool to solve their practical economic problems. Even more important Leontief has supported a genuine scientific tradition in economic analysis. His philosophy of research will make it possible to sustain, to extend, and some day to surpass the very deep economic insights that he has contributed" (5).

From the start, our system of accounts for the Atlantic Provinces was designed to lead towards a planning model in which the structural parameters and coefficients of the system could be changed in response to changes in exports and personal consumption, given capacity constraints, available new technologies, fiscal structure, governmental priorities and available sources of finance:

"The type of accounting framework we have constructed suggests experiments along lines of iterative and mathematically incomplete solutions of a type which has been made feasible by modern computer techniques. One would here be concerned with the medium run, meaning a time period of perhaps three to five years. In such a perspective, investment is no longer autonomous but will bear a relationship to projected changes in external and personal expenditures; investment will also generate technical progress which must be reflected in the technical coefficients of the industries. The input-output system is essentially a static global equilibrium system with no time dimension and with a complete solution. For purposes of exploring the application of inputoutput analysis to rational development planning one must go beyond the limitations of static general equilibrium analysis; one must reach in the direction of moving solutions - with a time dimension in which parameters and coefficients are changing along the way and which more closely approximate the real world in which, as is well known, general equilibrium is never reached . . . " (21).

The theoretical basis for these new developments in input-output analysis was laid by the work of many scholars, including Ragnar Frisch, (15) Richard Stone (45,46) and Tadek Matuszewski (32,33,34,37). Frisch's Real Financial Interflow Table opened visions of possibilities which promise realization. Stone's more pedestrian but systematic investigations of methods for generating input structures by combining data on the output of commodities by industries with data on the

¹ Although it is possible to follow this chapter without prior familiarity with input-output analysis, the uninitiated is advised to consult standard textbooks. At the introductory level W. Miernyk's *The Elements of Input-Output Analysis* is lucid and readable (38). A more comprehensive treatment is contained in Chenery-Clark, *Inter-Industry Economics* (8). See also Chapter 3 of *The Input-Output Structure of the Canadian Economy*, 1961 (13).

²For a convenient overview of input-output theory and practice see reports of the International Conferences on Input-Output Techniques; (3,4,5,6). See also Input-Output Bibliographies prepared jointly by the Harvard Economic Research Project and the Statistical Office of the United Nations (42,47, 48,49,50).

use by industries of commodities opened up the question of the influence of a changing commodity composition of output on input requirements.³ Matuszewski acted on the simple but very useful proposition that the assumption of constant market shares — which in itself is a sensible one — releases input-output analysis from the traditional constraint of square input matrices. Operating simultaneously in commodity and industry space, he demonstrated a technique for effecting changes in market share and input coefficients which liberate input-output analysis from the straightjacket of proportionality.⁴

The work of Matuszewski and his colleagues had an important influence on the Dominion Bureau of Statistics, where the imaginative direction and theoretical contribution of Mr. T. Gigantes placed input-output compilation and analysis on the international frontiers of input-output development and research (16,17,18,19). Our association at Statistics Canada with Mr. Gigantes since the mid-1960's has resulted in continuous collaboration and discussion which has been of invaluable mutual benefit.

The Atlantic Provinces input-output models will, we hope, prepare some of the ground work for simulation models of provincial economic systems. Having said this, we hasten to record that the input-output models developed in this study are general solution models of the Leontief type.

Within these limitations however, we have made improvements which exploit to the full the possibilities of conventional models. Improvements are made in four directions.

- The system is extended to comprise both commodities and industries. As a result the input matrix is no longer constrained to be square and all impact calculations can be obtained both in commodity and in industry space.
- 2. Final demand categories are normalized to yield spending patterns, analogous to industry input coefficients. The complete solution yields the impact

- of these spending patterns on commodity requirements, industry output levels, primary inputs, imports, employment, etc.
- 3. The system is progressively closed: first, with respect to households and subsequently also with respect to the revenues and expenditures of local public sectors. The effect of this last step is to reduce "leakages" to imports, remittances to the federal government and depreciation. This third version of the complete system takes us one step nearer to tracing income-to-expenditure relationships through the fiscal system.
- 4. The system is fully inter-regional with respect to the four Atlantic Provinces, i.e., the exports of each of the four Atlantic Provinces to each of the others are the imports of each of the four from the others. While inter-provincial commodity movements within the Atlantic Provinces are small, the model, if extended to all Canadian provinces provides a full inter-regional system.

Our desire to build an input-output model embodying these four features governed the choice of accounting framework outlined in Chapter 2. Indeed, all categories of the flow accounts for the base years 1960 and 1965 are essential to the implementation of the model.

The system was from the start, designed as a technical aid to economic policy-making. The work done in elaborating final demand spending patterns indicates the possibility of disaggregating these in a number of directions. Even more interesting, perhaps, is the advance made in transforming income generated, both in households and in the revenue account of provincial and municipal governments into expenditures on goods and services.

Finally, the use of market share and import coefficients in directing requirements for commodities toward demand for the output of industries (or imports) opens the way to devising a systematic procedure whereby the coefficients could be changed as part of a simulation model.

II. THE DESIGN OF THE INPUT-OUTPUT FLOW ACCOUNTS

The input-output accounts which are presented here constitute an expansion of the system of accounts of the previous chapter. They record the value of individual commodities produced, imported, exported and used within the provincial economy; and the cost items incurred in the industries which produce these commodities.

We use a diagrammatic schema to explain the format of the input-output accounts. Each block, or matrix, represents a major component, or sub-component of the system. In line with the method of presentation used in the previous chapter we present the (aggregated) account of the province of Nova Scotia (12 x 12), 1965 as an illustrative example. In addition, we present the (aggregated) account of the Atlantic Region as a whole (12 x 8). In both cases the flow tables are inputs of commodities to industries and outputs of commodities by industries. In the Atlantic Region example, however, the rectangular nature of the system

³ See Stone, Input-Output Relationships 1954-1966 (45).

⁴ See Matuszewski, "Modifiable Rectangular Input-Output Matrices" (37).

is more readily discernible. The illustrative examples are intended to assist the reader to find his way through the thickets of matrix algebra in Chapter 4 without losing track of the economic meaning of the exercise. In addition to the two sets of illustrative flow accounts presented in Section IV of this chapter, the flow tables for each of the four Atlantic Provinces for 1965 and for the region as a whole are presented as a tabular appendix to this volume.⁵

In the diagrams which follow and throughout the remainder of this study matrices are denoted by capital letters and vectors by lower case letters. Column vectors are unprimed; row vectors are primed. Symbols have

been assigned only to those vectors which are necessary to the exposition of the analytical models.⁶

Outputs and Supply

The basic data input consists of the flow matrices J and M. All other variables, such as domestic commodity outputs q, industry outputs g, total competitive imports of commodities m, total supply z etc, are defined in terms of J and M.

- 1. J (n x m) is the matrix of outputs of one or more of m commodities produced by one or more of n industries.
- M (s x m) is the matrix of competitive imports of commodities supplied by one or more of s sources.

CHART 3.1

Outputs and Supply

	1 Commodities m	Industry outputs
Industries	1 n	g
Total commodity outputs	q′	
		Total imports
Sources of competitive imports	M M	S
Total competitive imports	m'	
Total supply	z'	

⁵ Impact tables for 1965 and comparable tables for 1960 will be published in Volume II of this study. Definitional and conceptual differences between the flow tables for 1960 and 1965 are discussed in Volume II which summarizes the methods of construction of the flow tables.

 $^{^6}$ Vectors to which no specific symbols have been assigned are described by summation. e.g., the (column) vector of the row sums of a matrix A having m rows and n columns is Ai_n ; the (row) vector of the column sums is $\mathrm{i}'_m A$.

- 3. q' = i'n J is the set of domestically produced commodity outputs.
- 4. $g = Ji_m$ is the set of industry outputs. Each entry represents the value of output of one of the n industries in the system. It is self evident that i'ng = q'im.
- 5. m' = i'_sM is the set of total competitive imports from all sources. Each entry represents the competitively imported supply of one of the m commodities of a type and kind similar to the corresponding locally produced commodities.
- 6. z' = q' + m' is the row vector of total supply of each of the m commodities in the system.

7. Finally s = Mi_m is a column vector of aggregate competitive imports by source.

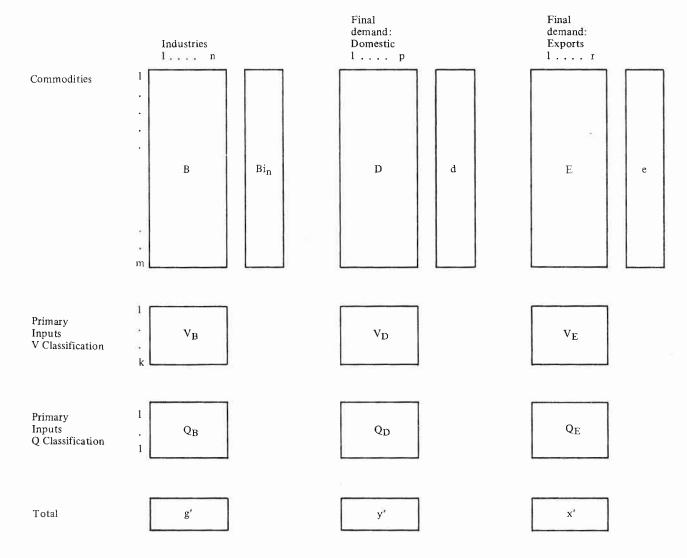
Inputs and Demand

The basic data input here consists of the flow matrices B, D, E, and V_B , V_D and V_E . Variables d and e are derived from D and E and matrices Q_B , Q_D , and Q_E are rearrangements of V_B , V_D and V_E .

8. B(m x n) is the matrix of inputs of m commodities into each of the n industries. The total supply of each of the m commodities is recorded in the matrices J and M. The matrix B therefore does not indicate whether a purchase by an industry was supplied from other domestic industries or from competitive imports.

CHART 3.2

Inputs and Demand



The accounting identity of commodities in the system evidently is:

- 9. D_(m x p) is the matrix of requirements of each type of domestic final use.
- 10. E_(m x r) is the matrix of commodity requirements of each category of exports.
- 11. d = Dip is the vector of commodities required by all domestic final users.
- 12. $e = Ei_r$ is the vector of commodities required by all categories of exports.
- 13. z = Bi_n + d + e is the vector of commodities demanded for all uses, i.e. total intermediate, domestic final and exports use.
- 14. VB (k x n) is the matrix of k primary inputs to each of the n industries. The primary inputs are arranged by type of factor income, type of indirect tax or subsidy, etc.
- 15. VD and VE are matrices of k primary inputs to the set of p domestic users and the set of r export categories, respectively.
- 16. Evidently $g' = i(m + k) \frac{B}{V_B}$ is the row vector of in-

$$y' = i(m + k) \frac{D}{VD}$$
 is the row vector of total V_D final domestic expenditure categories.

$$x' = i(m + k) \stackrel{E}{\underset{V_E}{\cdot}}$$
 is the row vector of exverse by destination.

17. QB, QD and QE are, as stated above, re-arrangements of primary inputs, classified according to the income-outlay accounts of Chapter 2, e.g., provincial government, federal government, rest of the world, etc.

Evidently
$$i'_kV_B = i'_lQ_B$$

 $i'_kV_D = i'_lQ_D$
 $i'_kV_E = i'_lQ_E$

Balance of Supply and Demand

18. Total supply z' is equal to total demand, i.e. i'_n B' + d' + e' where i'_n B' is the set of total intermediate uses of commodities, d' are total commodity requirements for final domestic use and e' are total commodity requirements for export.

III. DIMENSIONS AND CLASSIFICATIONS OF THE ATLANTIC PROVINCES FLOW TABLES 1960 AND 1965

Although the 1960 transaction accounts for each of the four Atlantic Provinces were initially constructed at the level of 180 major commodities (excluding non-competitive imports) and 97 intermediate activities (industries), the requirements of reliability in the balancing of supply and demand throughout the interregional system of accounts, subsequently forced us to

reduce industry dimensions from 97 to 71. All commodities in the system were initially coded to a principal industry classification of 97 such industries. Listings of classifications of commodities and industries are found in the Appendix to this chapter. In these listings the industry numbering of our tables is cross-classified to the Standard Industrial Classification of Statistics Canada.

Dimension of Commodity by Industry Transaction Matrices (J and B)

Input-output tabulations	Atlantic Region	New- foundland	Prince Edward Island	Nova Scotia	New Brunswick
1. Original tabulation (1960)	71 × 71	1	1	1	1
2. Non-confidential, 1960 (large) aggregation	717,11	47 × 47	41 × 41	58 x 58	56 x 56
3. Non-confidential, 1960 (small) aggregation	34 × 34	31 × 31	29 x 29	33 x 33	33 x 33
4. Revised (confidential) (1965)	71 × 71	55 x 55	47 × 47	67 x 67	68 x 68
5. Non-confidential, 1965 (small) aggregation	34 × 34	31 × 31	29 x 29	33 x 33	33 x 33
6. Illustrative aggregation (1965)	12 x 8			12 × 12	

¹ No longer available.

In the above inventory of Atlantic Provinces input-output tables, each transaction table consists of a pair of two tables, one recording the output of commodities by industries, and the other the input of commodities into industries and into final using sectors. Commodities were aggregated on a "principal products of industry" basis and the number of commodities are consequently equal to the number of industries.

A full system of four Atlantic provincial inputoutput flow tables with estimates of inter-provincial movements of goods within the Atlantic Region was initially completed for the year 1960. Definitions were standardized for all four Atlantic Provinces. While most of the 71 industries of the system existed in each of the four provinces, some did not. For this reason the dimensions of the tables are of necessity different in each of the four Atlantic Provinces. Where an industry does not exist in any particular Atlantic Province, it is removed from the matrices J and B and the commodities which are produced by this industry in other Atlantic Provinces are re-defined as a non-competitive import to the province which uses them but does not produce them. Commodities which are not produced in any of the four Atlantic Provinces at all are, of course, also defined as non-competitive imports. The individual provincial tables, based on the original (confidential) tabulations for 1960, varied in dimension according to the industrial structure of each of the four provinces. Flow tables and analytical models for individual provinces for 1960 are no longer available on the full (confidential) range of industries and commodities for 1960.

The most detailed tables available for 1960 are the so-called non-confidential (large) tabulations. In these tables the level of aggregation is governed by the requirements of the Statistics Act and the co-operation of respondents who granted permission to publish data. Where authorization of publication could not be obtained from the respondents, further aggregation had to be undertaken in order to achieve compliance with the Statistics Act. Thanks to the generous co-operation of the great majority of the firms from whom permission was requested, the non-confidential 1960 tables show a great deal of commodity and industry detail. These 1960 tables were later aggregated to a standard 34 x 34 basis, in order to achieve comparability with the 1965 tables. The full set of analytical models for 1960 is thus available for both the "large" (non-confidential) and "small" (non-confidential) dimensions.

In updating and revising the tables from the 1960 to the 1965 basis, we began with the original (confidential) 1960 (71 x 71) tables. After removing industries which did not exist in any one particular province, and adding industries which came into existence between 1960 and 1965 we arrived at detailed tables for 1965 of dimension similar to the confidential (large) 1960 tables. While analytical results are available at this level of

detail, the transaction flow matrices are confidential under the terms of the Statistics Act and cannot, for this reason, be reproduced here.

In 1965 we did not succeed in obtaining the permission (clearances) necessary to publish transaction tables in the detail possible for 1960. The dimensions of the largest non-confidential (transactions) matrices consistent with the requirements of the Statistics Act vary substantially from province to province. These dimensions reflect the varying degrees of success achieved by Statistics Canada and co-operating provincial government agencies in the Atlantic Provinces concerning the release of data pertaining to 1965. Available (i.e., non-confidential) transaction flow accounts are significantly more detailed in the cases of Nova Scotia and Newfoundland than they are in the cases of New Brunswick and Prince Edward Island. In these latter two provinces, the refusal by a small but crucial number of firms to grant consent to the release of certain 1965 data makes it impossible to publish the full set of inter-industry flow transactions which we have compiled at Statistics Canada. As was stated earlier, analytical results are not confidential and thus available at a greater level of detail.

Final Using Sectors

As regards final using sectors, all our transaction tables contain a uniform set of 15 final using sectors composed of 9 domestic and 6 export activities.

Domestic Final Using Sectors (D) are:

- 1. Personal consumption (inclusive of expenditure by foreign tourists)
- 2. Capital formation (exclusive of government capital formation)
- 3. Inventory change
- 4. Federal government Defence
- 5. Federal government Civil
- 6. Provincial government (current and capital)
- 7. Municipal government (current and capital)
- 8. Education (current and capital)
- 9. Hospitalization (current and capital)

Export activities (E) are:

- 10. Exports to foreign countries
- 11. Exports to the rest of Canada (excluding the Atlantic Region)
- 12. Exports to Nova Scotia
- 13. Exports to New Brunswick
- 14. Exports to Prince Edward Island
- 15. Exports to Newfoundland

Primary Inputs

Primary Inputs of type VB, VD, VE were originally classified in 15 mutually exclusive categories (with appropriate sub-totals such as "factor income").

- 1. Wages and salaries
- 2. Unincorporated business income
- 3. Profit
- 4. Rent and interest
- 5. Depreciation
- 6. Taxes Municipal
- 7. Taxes Provincial (fuel)
- 8. Taxes Provincial (general)
- 9. Taxes Federal
- 10. Subsidies Provincial
- 11. Subsidies Federal
- 12. Education and hospital charges
- 13. Non-competitive imports⁷ (originating outside the Atlantic Region)
- 14. Non-competitive imports⁷ (originating in some other Atlantic Province) (listed and itemized)
- 15. Employment (in numbers)

In the version QB, QD and QE, the first 14 items of V were re-arranged into the following categories:

- 1. Household income
- 2. Provincial revenue (net of subsidies)
- 3. Federal revenue (net of subsidies)
- 4. Municipal revenue
- 5. Import leakage
- 6. Depreciation

The column sum of primary inputs of Type V is at all times equal to the column sum of primary inputs of Type Q.

Intermediate Commodities and Industries

As indicated above, the number of commodities and industries contained in the final transaction matrices depends on a number of considerations, including (a) the accuracy and detail of the original construction of the accounts; (b) the provisions of the Statistics Act and the degree of co-operation exhibited by respondents and (c) criteria of convenience and comparability.

In Appendix II, the reader will find listings of commodities and industries classified and cross-classified to the corresponding S.I.C. categories. We begin this listing with the set of commodities and industries used to compile the original tables for 1960; we proceed to

the 71 industry classification of the confidential 1960 tables; we then list the categories of the non-confidential (large) tables for 1960; finally we list the categories of the non-confidential (small), so called 34 sector tables. These are the flow tables initially released in the paper delivered by the author in 1969 (22). For 1965 we commence by listing the categories of the largest tables available — which are however non-publishable in flow terms on account of the constraints imposed by the Statistics Act; there follow the categories of the non-confidential (small) or so-called 34 sector aggregations. Eight commodity and industry classification lists are found at the conclusion of this chapter:

- 1. Commodities (180) and industries (97) used to compile the original 1960 tables.
- 2. Industries (71) of the completed (confidential) 1960 tables, (commodities aggregated on a principal products basis of 71 industrial sectors), 1960.
- 3. Industries of the non-confidential (large) transaction tables for each of the four Atlantic Provinces, 1960.
- 4. Industries of the non-confidential (small) transaction tables for each of the four Atlantic Provinces, 1960.
- 5. Commodities (169) used in the compilation of the (confidential) tables for 1965.
- 6. Industries (71) of the completed (confidential) 1965 tables.
- 7. Industries of the confidential (large) transaction tables for each of the Atlantic Provinces, 1965.
- 8. Industries of the non-confidential (small) transaction tables for each of the Atlantic Provinces.

Transaction Flow Tables

In the Appendix to this study we reproduce the input-output transaction flow tables for each of the Atlantic Provinces and for the Atlantic Region as a whole for 1965 in their small (34 x 34) version. We reproduce also the set of five transaction flow accounts for 1960 in the small (34 x 34) dimensions.⁸

The reader can satisfy himself that the transaction account for the Atlantic Region as a whole consists of the sum of its four (provincial) components, except in the case of shipments of commodities within the Atlantic Region. Where an exported commodity is the provincial product of an industry which does not exist in the (Atlantic) province of destination; it has been re-classified as a non-competitive import to the province of destination. As a result, the sum of (inter-regional) exports from all Atlantic Provinces to all other Atlantic

⁷ Listing of Non-competitive Import Classes is to be found at the conclusion of this chapter, (Appendix).

⁸ Non-confidential (large) flow tables for each of the four Atlantic Provinces for 1960 are available at Statistics Canada. It should be noted that in these tables secondary and by-products have been transferred to form an amended interindustry flow matrix. These large 1960 tables are the only detailed flow tables for the Atlantic Region which meet the requirements of the Statistics Act with respect to nonconfidentiality.

Provinces will exceed the sum of competitive (interregional) imports into Atlantic Provinces originating from other Atlantic Provinces.

The reader may also satisfy himself that the primary inputs and final demands of each of the transaction tables shown here correspond to the system of provincial accounts as set out in Chapter 2.

In the fifth section of this chapter we outline the methods we used to construct the input-output transaction accounts. Further details regarding data sources are to be found in Volume II which also contains analytical results which derive from our models. (Similar analytical results exist for each of the four Atlantic Provinces, and may be made available to users if demand justifies the expense of re-production.)

IV. ILLUSTRATIVE EXAMPLES OF TRANSACTION TABLES FOR 1965, NOVA SCOTIA (12 x 12) AND ATLANTIC REGION (12 x 8)

In Tables 3.1A and 3.2A we present a transaction account for Nova Scotia as an illustrative example. Commodities and industries have each been aggregated to 12 categories for convenience of presentation. It should be noted that there is no particular reason why the number of industries in the system should equal the number of commodities. Indeed, in the illustrative example pertaining to the Atlantic Region as a whole (Tables 3.1 AR and 3.2 AR) there are eight industries and twelve commodities.

Transaction Matrix Output and Supply Flows (Tables 3.1)

The output matrix J consists of the first 12 rows of Table 3.1 NS. Row 13 shows the supply of domestically produced products; Column 13 shows the output of the industries of Nova Scotia. Thus for example, total output of the agricultural industry is \$62.2 million composed of \$54.1 million of agricultural products, \$3.2 million forest products and \$5.0 million dwelling services. The forest products of \$3.2 million represent the output of farm wood lots; \$5.0 million represent the estimated value of dwelling services provided by farm houses. Thus while the production of agricultural commodities is only \$54.1 million the agricultural industry has an output of \$62.2 million. In the case of the forest industry, we have a somewhat different situation. Here the output of the industry is \$18.0 million, composed of \$17.3 million of logs and \$0.7 million secondary wood products. Total output of primary forest products, however, is \$20.8 million of which \$3.2 million is produced in the agricultural industry.

In other words, the agricultural industry produces secondary products, and forest products are not produced exclusively in the logging industry.

In the case of some industries there exists a one-to-one relationship between industry and commodity. Thus for example, \$21.5 million of food and clothing products are produced in the foods and clothing industry and no other industry produces these products.

To the output of domestically produced commodities found in row 13 are added similar competitively imported commodities, from various sources. Thus, to stay with our example, \$1.6 million agricultural products are imported from New Brunswick, \$5.9 million from Prince Edward Island and \$16.8 million from all other sources. Total imports from all sources were thus \$24.4 million which, when added to domestic supply of \$54.1 million yield a total supply of \$78.5 million. This supply is used to satisfy intermediate demand of \$22.5 million, domestic final demand of \$48.3 million and exports of \$7.7 million. Finally, we may note that total competitive imports by source are obtained in column 13. Thus Nova Scotia's competitive imports from New Brunswick are \$32.3 million, Prince Edward Island \$12.5 million, Newfoundland \$7.5 million and imports from all remaining sources \$383.7 million. (These figures correspond to the aggregative accounts of Chapter 2.) In Table 3.1 AR we have a matrix showing the industrial origin of each of the 12 commodities in the system. In the case of the Atlantic Region as a whole, there is only one source of competitive imports.

Transaction Matrix: Inputs and Demand Flows (Tables 3.2 NS and 3.2 AR

Under columns 1 to 12 of Table 3.2 NS representing industries in Nova Scotia, we have the matrices B, VB, and QB. Thus inputs to the agricultural industry are composed of \$0.3 million agricultural

products, \$0.7 million forestry products, etc. Total intermediate input of commodities to the agricultural industry is \$30.0 million. Primary inputs of \$32.2 million are composed of taxes \$2.3 million, subsidies -\$2.4 million, etc. In terms of the "income-outlay" arrangement of primary inputs, we have household income \$26.9 million; net payments to municipal governments \$2.2 million, etc.

Under columns 13 to 21 representing categories of domestic final demand, we have the matrices D, VD and QD. Thus personal consumption of households uses \$48.4 million agricultural products; \$0.2 million primary forestry products; \$1.7 million primary fish products, etc. Total personal expenditure on goods and services supplied by industries or competitively imported is \$820.7 million. In addition persons also pay \$124.9 million in indirect taxes and purchase \$90.0 million of non-competitive imports. In the matrix QD, these latter two items totalling \$214.9 million are re-arranged according to the sector which receives them as income. Row 31 records total expenditure of each of the categories of domestic final demand. Column 22 (rows 1 to 13) is the vector d representing total domestic final demand for each type of commodity. Thus domestic final users purchase \$1,239.8 million goods and services supplied by industries or competitively imported. Column 22 (rows 14 to 26) shows total expenditure by all domestic final users for indirect taxes (\$124.8 million); non-competing imports (\$103.0 million); wages and salaries of public sectors (\$270.4 million), etc.

Under columns 23 to 28, representing exports by destination we find the matrices E, VE and QE. The latter two are normally empty. In the case of Nova Scotia, however, federal subsidies relating to shipments of coal to Central Canada are entered in rows 15 to 25 of column 24. Thus, Nova Scotia's export sales to

Canada (excluding exports to the other Atlantic Provinces) were \$189.9 million. These shipments were composed of \$24.1 million of coal, \$47.6 million of various food and textile products, \$74.6 million steel and metal products, etc. The subsidization of coal shipments to Central Canada of \$14.0 million means that Nova Scotia producers received \$14.0 million more than Central Canadian purchasers paid for the coal. The federal government paid the difference. Total exports, to all destinations were \$378.6 million and vector e yields the commodity composition of these exports (column 29).

We may note that total demand for commodities as shown in column 31 equals total supply as shown in line 20 of Table 3.1 NS. Further, note that the sum of primary inputs into industries of (line 27, column 30) \$1,196.5 million is equal to the final sales of industries \$1,632.4 million (line 13, column 22 plus column 29) less competitive imports of \$435.9 million. Further the sum of all primary inputs \$1,710.8 million (line 27, column 31) equals delivery of all goods and services for final sale, less competitive imports. Thus total final domestic uses (line 31, column 22) of \$1,768.1 million plus total exports (line 31, column 29) of \$378.6 million, less competitive imports of \$435.9 million is equal to \$1,710.8 million. The reader is invited to re-examine the production account of industries in Chapter 2 where current cost of final sales is equal to receipts for final sales less competitive imports (\$1,710.8 million).

Table 3.2 AR shows the same data for the Atlantic Region as a whole. The reader may compare these tables with the accounts for the Atlantic Region (1965) presented in the previous chapter. Clearly the transaction flow accounts are an integral extension of the system of provincial accounts presented in Chapter 2.

V. SUMMARY OF METHODS OF CONSTRUCTION OF THE FLOW ACCOUNTS FOR 1960 AND 19659

Many years ago, at a relatively early stage of our work, a somewhat impatient research assistant leaned back in his chair, put his feet on the desk and announced that he could not understand why it was taking us so long to construct the estimates. The matter is simple, he pronounced: all you people have to do is to draw a large rectangle of rows and columns and proceed to fill in the empty boxes! While the final result is indeed a large matrix of entries, the matter is, unfortunately, not quite so simple. Needless to say the young man in question soon exhausted his patience and that of the research team.

An inter-industry flow table is essentially a double-entry accounting system which records the flow of goods and services between various economic units. Along the rows, we record purchases of locally produced plus imported products, according to sector of purchase, both intermediate and final. Reading down the columns we record the cost structure of producing and final use sectors as reflected in their purchases of intermediate goods and services and primary inputs. The accounting framework of the Atlantic tables embodies the following six main features:

Six Principal Features of the Atlantic Tables

- 1. Separate accounts for each province Because the province is a crucial unit of economic decision making, it was decided from the start to build up all estimates on a provincial basis. While this occasionally created problems of statistical estimation which would not have arisen on a regional basis, (as for instance the difficulty of allocating revenues and costs of air and rail transportation to a province) the errors introduced are considered to be a small price to pay for the advantages of obtaining input-output tables and integrated accounts on a provincial basis.
- 2. Standardization of sectors and estimation of inter-provincial flows From the point of view of the Atlantic Provinces as a region, it obviously makes a difference whether one Atlantic Province tends to import goods from another Atlantic Province, or from a source external to the region. In the former case the benefit

from generated income and employment accrues to another Atlantic Province. In the latter case, the feedback will stimulate incomes and employment in other parts of Canada or in foreign countries. Inter-provincial trade within the region was thus estimated in the finest commodity detail possible. This was in any event necessary to obtain, separately for each province, an estimate of imports from sources external to the Atlantic Region. Four separate input-output tables were constructed in order to permit the exploration of inter-dependence of economic activity within each province and between provinces.

- 3. Policy-oriented selection of final demand sectors Final demand was disaggregated in order to show the commodity composition of exports separately for each of five geographic destinations, and the commodity composition of competitive imports from each of four regions. Public sector expenditures were disaggregated by level of government and, in some cases, by function, such as education and hospitalization.
- 4. Competitive and non-competitive imports distinguished The total absence of direct data on imports either by commodity or by using sector, dictated a procedure whereby competitive imports had to be obtained as the residual difference between the sum of all uses and provincial output. This treatment will be elaborated upon subsequently.
- 5. Commodities or products distinguished from industries or activities Our flow matrix of inputs to industries records the use by industries of commodities, or products, and contains more rows than columns. It is accompanied by a row matrix of outputs of commodities by industries of equal dimensions, also rectangular.
- 6. Estimation of transactions between all final using sectors The usual categories of primary inputs were transformed into "national accounting" sectors. This transposition is necessary to facilitate the estimation of further rounds of income and employment induced within the system by expenditure of revenues received by households and local governments, as has already been explained in the previous chapter.

Three Basic Steps in the Construction of Input-output Accounts

The construction of a complete system of inputoutput accounts essentially involves three basic steps — with numerous statistical and conceptual

⁹ A more detailed description of sources used is contained in Volume II of this study. An extremely comprehensive account of sources and methods used in constructing the 1960 tables exists in 6 volumes – Atlantic Provinces Input-Output Study (24...29). These reference volumes are on file at the Input-Output Division of Statistics Canada in typed and bound volumes.

problems to be settled along the way. For each of the four Atlantic Provinces we proceeded in the following way:

- (a) Recording and estimation of outputs and inputs of all producing sectors.
- (b) Estimation of expenditures by all final users.
- (c) The balancing and reconciliation of the accounting system, so that total supply equals total demand and the resulting estimates are in accordance with independently available economic data.

In updating the 1960 tables to 1965 we again followed these three steps for each province, the only difference being that we worked at a somewhat more aggregated level.

We proceed to elaborate on methods used after examining a number of problems which had to be faced.

Criteria for Choosing Industrial Sectors

The tables were compiled in rectangular form with 180 commodity rows (excluding non-competing imports) and 97 industry columns. Because the tables were meant to serve the dual purpose of describing the economy as it really was in the base year, and as it might become in the process of the implementation of development plans, it was necessary to select industrial sectors which would fulfill the following requirements: (a) isolate the key resource activities upon whose fortunes the region is heavily dependent; (b) form sectors which are sufficiently detailed to describe the rather scanty inter-industry structure and yet sufficiently important to warrant the additional work both in compilation and manipulation of a large matrix in programming; (c) keep in mind the basic assumption of input-output systems, i.e., proportionality between output of products and inputs to the producing sectors; in practical terms this meant that sectors must be sufficiently large to exhibit some stability. On our worksheets we carried every three-digit S.I.C. manufacturing industry found in the Atlantic Provinces. We aggregated industries which were too small to be significant and so arrived at a set of 97 industries for 1960. Procedures followed in the 1965 revisions were similar although here we undertook a further aggregation to 71 industries at an earlier stage than for 1960. The reader is referred to the Appendix of this chapter for a list of the original 97 industries and a listing of the principal 180 commodities.

Commodity Classification and Levels of Aggregation

We arrived at the 180 commodity groups mentioned above by a process of successive aggregation from very fine commodity detail, each step in aggregation being forced by non-availability of detail on the purchasing side. We began by recording the output of

commodities in all the detail in which it could be obtained; in the case of manufactured goods, this meant recording the detail in which value of shipments is reported to the Annual Census of Manufactures. Materials used by manufacturing industries were similarly recorded and coded in full detail. In the initial stages of the study, we thus recorded the output, in each of the four Atlantic Provinces, of some 300 manufactured commodities. We coded each commodity by the Canadian Standard Commodity Classification at the 5-digit level. While this code was of some assistance in the process of matching inputs to outputs, we later abandoned the S.C.C. classification in favour of a commodity classification based on the "principal industry" attribute of the commodity. In that system each commodity was given a code linking it with the industry which normally produces that commodity. The total provincial output of a commodity exceeds the output of the industry to which it is principal wherever the commodity in question is also a secondary product or by-product of some other industry. In the listing of commodity rows in the Appendix, the "principal industry" is indicated in the fifth column.

The first aggregation of commodities was largely dictated by the availability of reliable data on inputs and by the results of our survey of the geographic disposition of the output of commodities. Materials used are not generally reported in the same degree of detail as are shipments, and in order to match recorded inputs with recorded outputs, we had to aggregate outputs to the level of data on inputs. Furthermore, replies to our survey of the geographic disposition of output were often not available in full commodity detail. The results of that survey were used to form the first aggregation of commodities. The original set of 300 manufactured commodities were thus reduced to approximately 260 commodities.

In allocating inputs of the non-manufacturing sectors, available information was generally not nearly as detailed as in the case of manufacturing. This forced us to the second level of aggregation. The results of this second aggregation yielded the 180 rows of the input-output tables listed in the Appendix. The listing of sub-commodities and the corresponding numbers in the extreme right hand column to the first level of aggregation mentioned above.

Absence of Data on Provincial Imports and Exports

The most serious difficulty in constructing provincial input-output tables is the absence of data on imports into the province. One does not know the external supply available to meet provincial demand, and there is no alternative but to build autonomous estimates of all intermediate and final demand categories. When this is done, competitive imports into the province from sources external to the region appear as the

residual shortfall between total demand and local supply. Total demand equals provincial use plus exports. Local supply equals provincial output plus imports from other Atlantic Provinces. The shortfall (residual) estimate of imports originating from sources external to the Atlantic Region is thus given by the identity:

Provincial output

plus Imports from other Atlantic Provinces

less Provincial use

less All exports out of the province

equals Residual imports from sources external to the region.

These residual imports cannot however be separated into goods originating from other Canadian provinces and goods originating from foreign sources. The procedure calls for the greatest attainable accuracy of estimates on the demand side, including estimates of exports. The procedure rests on the assumption that there is no re-export or transshipment of commodities. (We do, of course, show both in- and out- movements of some commodities. This was done where we were able to obtain direct information on the provincial exports of a commodity whose total provincial demand exceeds provincial production.) Through-movements or transshipments do not appear in the tables. Thus, winter grain shipments through Maritime ports appear neither as an import nor as an export. However, the transportation, storage and distribution services associated with the handling of goods passing through the region for export out of Maritime ports as well as similar services associated with the handling of imported goods destined for other Canadian provinces entering by Maritime ports, are included in the tables as exports of transportation, distribution and associated services. (For example, in Nova Scotia the estimated value of such services exported to the rest of Canada was \$29 million in 1965.)

To reduce the underestimate of imports by "netting out", we worked with the most disaggregated commodity detail which the data would permit. As broader commodity groups were built up by aggregation, an increasing number of cases of simultaneous export and imports appeared. This phase of the study yielded the first set of estimates of imports into the Atlantic Provinces which has ever been made and also the first set of carefully constructed estimates of exports out of the Atlantic Provinces. 10

Imports into the region equal the sum of the inflow of non-Atlantic products into the four provinces. Imports into any one province are equal to the sum of non-Atlantic inflows and inflows of products from the other Atlantic Provinces. In order to estimate these flows, for each of the Atlantic Provinces and for the Atlantic Region as a whole, interprovincial flows between the four provinces had to be estimated independently. To this end a survey of all manufacturing establishments included in the 1960 Census of Manufactures was conducted. Each establishment was asked to dispose of the commodities produced in 1960 with respect to five geographic destinations: each of the three Atlantic Provinces, foreign markets, and shipments to the rest of Canada. Establishments were requested to report on the disposition of the output of all commodities normally produced by the 3-digit S.I.C. group to which the surveyed establishment belonged.

The above discussion relates only to "competitive imports". Estimates of the import of non-competitive goods presented fewer difficulties.

Competitive and Non-competitive Imports

The problem here is well known. The smaller the economy one deals with, the more non-competitive imports there will be, if one defines this term to refer to commodities not produced within the economy. Further, the finer the commodity detail, the more non-competitive imports there will be. (If one were to go to the ultimate length of defining a commodity by brand name, almost all imports would become noncompetitive.) As stated above it is desirable to work with fine commodity detail, as long as data permit, because this leads to less loss of information concerning trade. On the other hand, it is not desirable to force too many commodities into the non-competitive group - even if the data would permit it - because this amounts to constraining the import content of all purchasing activities, both productive and final, to bear a strictly proportional relationship to output. This neither represents the real world – where the proportion of imported purchases tends to rise in years of exceptionally high economic activity - nor is it useful in terms of building a policy-oriented model which facilitates the exploration of "import-substitution" by varying the competitive import coefficient for one or more commodities.

In our tables competitive imports are channelled through the delivering (row) sector. The input coefficients of the purchasing sectors are thus less influenced by trading patterns, and more closely approximate so-called "technical" coefficients in the sense that they represent a purchase of input regardless of its geographical source of supply.

We proceeded as follows. Initially we defined as non-competitive any commodity not produced in the Atlantic Region in 1960. If a commodity was produced

¹⁰ A comparison of our estimates of exports to foreign countries with those made by John Earl is found in *Part VI of the APIO Study*, (29). Earl's study was confined to exports from the Atlantic Region to foreign countries. Estimates of Atlantic exports to Canadian destinations (external to the Atlantic Region) were not made by Professor Earl. See *A Report on the Exports of the Atlantic Region*, prepared by John F. Earl for the Atlantic Provinces Research Board, May 1964 (mimeo).

in any one of the four provinces, in however small a quantity, its import into the region was initially defined as competitive. Our experience was that in allocating materials used in manufacturing it was not difficult to identify intermediate material purchases which originated outside the region, because the Census of Manufactures provides very detailed data on materials used. In cases of doubt a comparison of unit value of the comparable locally produced material enables us to decide whether these materials were in fact the same commodity. If all data on purchases were as good as data on intermediate goods purchased by manufacturers, the problem of deciding which commodities should be treated as non-competitive imports could be settled with reference only to conceptual considerations.

With reference to conceptual considerations alone, we were faced with a choice: a more embracing classification of "non-competitive" imports facilitates estimation of the direct and indirect importrequirements of a given program of final purchases - on the assumption of constant market structures. A classification which puts a larger part of marginal commodities into the "competitive" group, yields more flexibility regarding constancy of the coefficients, but implies a sacrifice of information and necessitates independent estimates of imports of the commodity in question for the year for which the projectors are made. We may illustrate the point with primary steel products. We know the range of primary steel products which were produced in the region in 1960. They were specialized steel commodities, mainly for export out of the area. We had data on the exports of these commodities out of the region. Further, we knew the type of primary steel commodities being purchased by manufacturing and construction industries and we knew that many of these were not produced in the area in any significant quantities (for instance, steel plate, structural steel, etc.). We thus had a choice: (a) we could make two commodity groups, one composed of products of a type being made locally and exported and the other classified as a non-competitive import, or (b) we could define one wider commodity group "steel products" in such a way that one would have exports and imports for this commodity. The second of these alternatives sacrifices information. One might nevertheless opt for this treatment of "steel products" as a competitive import in order to explore "import substitution" by means of changing import coefficients. There exists yet a third possibility: one could insert a dummy column representing the cost structure of the industry which produces those steel products which are in fact being imported. One could then explore the implications of increasing the local output of this (dummy) industry. In fact we finally decided to treat those steel products which are definitely not made in the province, as non-competitive imports.

To a large degree, however, designation of imports between competitive and non-competitive is determined by the inadequacy of the data regarding purchases by non-manufacturing and by final demand sectors. To cite another example: we can estimate final demand purchases of fruit (exclusive of Atlantic Provinces products such as apples and blueberries). It is known that the bulk of fresh fruit is essentially non-competitive for climatic reasons. As it is difficult to distinguish final expenditure on fruit between fruit of a type which is, or might be locally produced, all import of fruit becomes "competitive". The same holds true for "fresh vegetables" where local production is very small and cannot be expanded significantly. In some cases, like wheat or corn, we have classified the commodity as a non-competitive import and transferred the local product to some other commodity group such as "miscellaneous agricultural output". Non-competitive imports estimated are listed in the Appendix to this chapter.

Commodities and Industries: More Rows than Columns

All industries produce more than one commodity. Some commodities are produced by more than one industry. This troublesome fact constitutes one of the many difficulties which face anybody engaged in constructing or using input-output tables. There is no ideal solution. Obviously, it is advantageous to set up the accounts in such a way that we preserve the maximum amount of information. For this reason among others we opted for a rectangular input matrix which has more (commodity) rows than (industry) columns.

Industries Producing More Than One Commodity

This in itself would not be too troublesome. Suppose that an industry produces three commodities but that none of these three are produced by any other industry. For input-output analysis this means that we must assume a common cost structure for each of the three commodities - a common set of commodity inputs. There is no way to escape this. However, we still wish to preserve three rows for the three commodities. We need the three rows because the origin of supply with respect to local and imported source is likely to be different for each of the three commodities. Although we show the three rows, the situation does not depart from the one-for-one correspondence between groups of products and industrial sectors. If all cases were like this, one would have essentially a square table in which additional information concerning the origin and disposition of commodities or products is recorded.

Commodities Produced by More Than One Industry

This is the truly troublesome situation. It becomes more troublesome the higher the degree of aggregation of commodity groups. Such aggregation, however, increases the number of commodities for which we assume the cost structure to be common. One can identify three types of cases in which a commodity or services is produced by more than one industry: secondary products, by-products, and own-account production. These cases can be classified with respect to conditions of

demand and supply. By independent demand we mean that the demand is independent of the demand for other commodities produced in the industry. By independent supply we mean that the output of the commodity by the producing industry is independent of the output of other commodities produced in the industry. In the case of own-account services, such as transportation, demand is linked with the output of the associated commodity, but supply is not necessarily linked.

Three cases can be summarized as follows:

	Demand	Supply
Secondary products	Independent	Independent
By-products	Independent	Dependent
Own-account services	Dependent	Can be treated either way

Secondary Products

Where a commodity is produced by more than one industry, it is defined as principal to one and secondary to one or several other industries. The demand for the commodity is independent of the demand for other commodities produced in the industries which produce it. Examples of secondary products are pulpwood produced in agriculture (wood-farming) as well as in the logging industry; frozen fruit produced by the fish processing industry as well as by the fruit and vegetable processing industry. Here we proceed by recording the commodity as an output to more than one industry. We could then assume that all increases in demand for this type of commodity would be produced by the principal producing industry. This is reasonable because the materials involved in producing the commodity more closely approximate the cost structure of the industry to which it is principal than that to which it is secondary. But one is not forced to proceed like this. One can assume that the increase in demand will be produced by both the industries, and in any proportion desired, including that in which these products were produced in the base year. This latter (constant market share) assumption is in fact the one we opted for. By adopting the rectangular form of input and output matrices we have gained more flexibility. Obviously such a system can do all that the conventional inter-industry table can do, and more. Our system contains additional information, which it gives it more flexibility.

By-products

A product may be produced in two industries: in one industry, it is a by-product, in the other it is produced as an independent activity. If no such other industry exists, we postulate an import of the commodity. Ideally one would wish to assume that demand for this product from the two sources of supply be allocated in such a way that the industry to which it is a by-product does not produce more of its principal product than is otherwise required. Thus, for instance

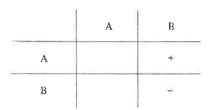
one would not wish to allow an increase in demand for sulphuric acid to yield a surplus of supply of primary steel. Rather, one would wish to use the supply of sulphuric acid associated with a given demand for primary steel products and obtain the balance from the industry which normally produces this product, or from imports.

Transfers of Secondary and By-products

In the 1965 tables no distinction was made between secondary and by-products. Although this treatment sacrifices this distinction, it is, on balance, a superior treatment to the transfer technique, which we used in the preparation of the 1960 tables. The combination of the fixed market share assumption with the usual fixed input is fully described in Chapter 4. With the use of a fixed market share assumption, an increase in demand for any commodity is directed toward the industries which produce it in proportion to the ratios in which the commodity was produced in the base year.

In the 1960 tables, however, secondary and by-products were originally treated by transfers.

In the case of secondary products the industry (A) actually producing the secondary product (B) is assumed to "sell" it to industry (B) to which the product is principal. The latter industry (B) thus makes a "purchase" of the commodity (B) from industry (A) and sells it in the commodity row (B) representing output of a type principal to itself.



This "purchase" falsely increases input into industry B which is cancelled out by making a compensating negative entry on the principal diagonal of B. Industry output levels in both A and B remain unchanged, while the supply of the commodity recorded in row B is augmented by the amount of secondary production (of commodity B) undertaken in industry A. An increase in demand for the principal product of industry B thus activates industry A, which supplies a portion of demand for this product, produced with the techniques of industry A. There is a corresponding reduction in demand for the product produced with techniques of industry B.

In the case of by-products the industry (A) producing the commodity (B) as a by-product is also assumed to "sell" it to the industry to which it is primary (B). The transfer, however, is effected by

considering this "sale" as a "negative input" of commodity (B) to the industry (A), matched by a corresponding purchase from itself on the principal diagonal of A.



Here again, industry output levels in both A and B remain unchanged, while the supply of the commodity recorded in row B is diminished by the amount

produced in A. An increase in demand for the principal product of B, however, does not stimulate industry A in which it is a by-product, while any increase in demand for the principal product of industry A automatically augments the supply of commodity B.

As a result of these transfer procedures, entries in the rows representing the principal products will be negative whenever the amount transferred exceeds normal intermediate purchases recorded in that cell. The transfer of secondary and by-products to their appropriate principal product rows enables us to obtain correct estimates of residual imports for commodities whose domestic supply does not originate wholly in one industry. An illustration of the resulting negative entries that appear in the 1960 tables is given below:

Purchases by the Forestry Sector, 1960

	Newfound- land	Prince Edward Island	Nova Scotia	New Brunswick
	· ·	thousands	of dollars	
From agriculture:				
Actual purchases of agricultural products	179.0	14.6	156.6	182.4
+ Transfers:				
Purchases from farm wood lots	81.0	989.9	4,109.9	6,050.0
Purchases from sawmills	-	-		5.9
= Entry in input-output tables after transfers made	260.0	1,004.5	4,266.5	6,238.3
From forestry:				
Actual purchases of forestry products	0.7	0.0	0.0	4.0
- Compensating entry	- 81.0	- 989.9	- 4,109.9	- 6,055.9
= Entry in input-output tables after transfers made	- 80.3	- 989.9	- 4,109.9	- 6,051.9

Own-account transportation - Where the secondary activity is own-account work, which is directly related to the output of the principal activity of the industry the demand for the principal product induces a related demand for the secondary activity. (Examples: ore which is mined and hauled to tide water, or beer which is delivered to retail outlets by fleets of trucks belonging to the manufacturer.) Own-account transportation may be treated in one of two ways: one can integrate the transportation activity with the producing activity or one can transfer the own-account activity and its associated costs to the sector to which it is principal - in this case the transportation sector. In no case should the producing industry be permitted to produce transportation services as a distinct secondary activity. In the first case own-account transportation disappears from view: its costs are integrated with those of the industry, and the value of output is correspondingly raised to delivered cost. In the second case, the industry should "buy" the transportation services associated with delivery of its product and pass these transportation charges on to the purchaser in the form of a higher price. The buyer thus purchases the product at a valuation which includes the transportation margin.

This treatment seems suitable wherever we have the situation that no buyer in fact has access to a commodity before certain additional delivery services have been added to it. This permits us to deal also with industries which produce some but not all of their related transportation. Here one can proceed in one of two ways. One can remove own-account transportation from these industries and transfer it to the transportation sector and then make the purchaser of the product buy the transportation margin. Alternately, one can take the mixed situation as it is and let the purchasing sector buy the difference between the product at purchaser's price and the apparent producer price, remembering that the apparent producer price includes a certain amount of transportation. Thirdly, one can do as suggested above, and make the producer buy the whole transportation margin and pass on the cost in the form of a higher "producer price".

Own-account construction - Own-account construction was treated differently. Own-account construction activity was removed from the account of the industry undertaking it and all associated costs were transferred to the account of the construction industry. A purchase by an industry of own-account repair construction was treated as a purchase from the construction industry. We did not permit construction to appear as the output of any industry other than the construction industry, defined to include own-account work. Alternatively one might have permitted the industries to undertake their own-account construction work in which case one would have to make sure that their costs would include all wages, construction materials and overheads associated with their own-account construction activity.

Distribution margins and revaluation of inputs at "producer" value – Whereas data on inputs into the producing sectors and data on purchases by final demand sectors are normally collected at "purchaser" value, all transactions in the input-output accounts should be entered at "producer" value. The method used to estimate gross margins on commodity inputs and final purchases consisted in revaluing the quantities of commodities purchased by each industry at producer prices and deducting the amounts so obtained from the recorded purchaser price. This gross margin is then allocated to its various sub-components: transportation costs, wholesale and retail distribution, markups and taxes of various types. We calculated gross margins at the commodity level in which inputs were recorded. Inputs were initially recorded at purchaser value and the transaction was subsequently revalued at estimated producer prices. To estimate the correct producer price, we used the following information: average unit producer price of provincially produced output; average gross wholesale margins by type of wholesale establishment; data on transportation costs from various sources and estimates of federal and provincial indirect taxes based on the tax rates prevailing in 1960 and 1965.

As is well known, the basic problem lies in finding the correct price at which to revalue each transaction. Reported prices – producer's and purchaser's – are averages of transactions of commodity categories, each category consisting of several items of varying unit values. For example, input may be described simply as "lumber", and the unit value may range from the value of one specific type of cheap lumber to the value of special types of expensive lumber. More often than not it is an average value of two or more types. Thus several adjustments are necessary, although the extent to which adjustments are necessary are minimized by the detailed commodity level at which the calculations were made. A separate and independent revaluation was made for each transaction; the percentage margin on the purchase of commodity A by industry B might be different from the percentage margin on the purchase of commodity A by industry C. Revaluations from purchaser to producer were made for each 3-digit S.I.C. industry. A tabulation showing the weighted average of margins on commodities purchased by all producing sectors as well as the final demand sectors in 1960 is attached to the notes on Sources and Methods in Volume II. The same percentages were applied to the 1965 data, with adjustments for changes in sales taxes where applicable.

Margins on purchases by final users were similarly calculated. It was assumed that the total gross value of output of retail distribution services were included in margins on goods purchased by the personal expenditure sector. Margins associated with the operation of motor vehicles, that is, dealer margins on new and used cars, sales margins on gasoline, oil and parts were not included in the general distribution sector. Similarly, taxes paid on the purchase of gasoline were not included in the margins, but were shown as a separate row in the tables. Details of the treatment of motor vehicle operation are outlined below.

The procedures which we followed here in the estimation of margins did not grant any a priori assurance that the grand sum of estimated margins on all transactions would equal the output of freight transportation plus the services of the wholesale and retail industry, as it should. In fact, we found a remarkably close balance in every province, and we did not have to seriously adjust estimated margins to bring supply and demand for margins to equality.

1. Estimation of Output and Inputs of All Producing Sectors

The notes which follow are intended to give a very brief sketch of some of the methods used in constructing the estimates. For each industrial sector (column) we had to obtain data on:

- (a) the gross value of output of the goods and services produced;
- (b) the geographic (market) disposition of the output of all locally produced goods;
- (c) the input structure, i.e., detail concerning expenditures on intermediate goods and services and on the purchase of all primary factors (including noncompetitive imports).¹¹

Agriculture

The output of the Agricultural Sector consists of farm cash receipts, income in kind, including dwelling services (farmhouses), and the value of inventory changes. The sum of these items yields an estimate of gross farm income. Gross output thus exceeds cash

¹¹ It is implicit in these remarks that we constructed our estimates primarily by the collection of data on inputs (or purchases) rather than data on the industrial disposition of output (or sales).

receipts by the value of non-cash income. Production of pulpwood on farm woodlots is included in the output of the agricultural industry. In the 1965 tables, the agricultural sector was divided into three sub-sectors according to size of farm: large farms were defined as those with a gross value of output in excess of \$10,000 per annum; small farms as those yielding between \$2,500 and \$10,000, and subsistence farms are "farms" with a value of output of less than \$2,500 per annum. The input structure of these three sub-sectors was estimated separately. Unfortunately separate treatment had to be abandoned because we could not develop reliable estimates of commodity output from each of the three sub-sectors. In view of the relative magnitude of subsistence agriculture in the Atlantic Provinces, it would be useful from an economic and a social point of view, to maintain at least two agricultural sectors, one commercial and the other non-commercial. It is unfortunate that we did not have the time to undertake the surveys that would be necessary to make reliable estimates of the composition of output by sub-sector.

Much effort was put into determining the geographic disposition of agricultural output. In the 1960 estimates this was done both in quantities and values. Apart from potato and apple shipments, data on interprovincial movements were fragmentary. The Atlantic Provinces are known to be a deficit area in agricultural products, particularly meats and dairy products, and there was little out-of-province movement. Estimates of farm operating expenses were derived from DBS sources, including estimates of unincorporated business income and wages and salaries paid and received as income in kind.

Primary Forestry

The output of the primary forestry sector consists primarily of logging operations, excluding the production of wood on farm woodlots. The main problem here was that of establishing the appropriate value of the output of the sector. Many logging establishments use the services of independent logging contractors and also purchase wood from other logging establishments. There is thus a problem of avoiding duplication in estimates of the gross value of output. Furthermore, where logging operations are integrated with sawmills or pulp and paper mills, additional valuation difficulties arise in estimating the disposition of output of forestry. In the 1960 tables, we relied on the DBS Annual Census of Logging both to establish value of shipments and inputs into the sector. In the 1965 tables adjustments were made. These adjustments on the output side necessitated adjustments to inputs. Inter-company purchases netted out of output must also be removed from inputs, thus no purchase of primary forestry products from the primary forestry industry appears in the tables. The inclusion of estimates of the output of small logging operators is balanced by an increase in unincorporated business income on the expenditure side.

Fishery

The output of the primary fishery was built from data on the value of landed catch of fish in two segments: molluscs and crustaceans (shellfish) and groundfish, pelagic and estuarial (all other fish). Four fishery sectors were thus constructed, two primary and two secondary (processing and handling). Differences in the nature of the lobster fishery and groundfishery suggested that it would be useful to separate the cost structures of these two types of fishing. A substantial addition was made to the value of landed catch in Newfoundland and Nova Scotia to allow for the value added on green salting of fish by fishermen. The cost structure of the two primary sectors was built from miscellaneous information relating to the costs of operating various types of fishing craft in the Atlantic Region.

After deduction of a small amount estimated to be direct sale by fishermen to consumers and fish retained for their own consumption, the total primary catch of shellfish and groundfish was fed into the two secondary fish processing industries. The secondary fish products industry was built up to the estimated value of final fish products (shellfish and groundfish). The secondary industries were assumed to purchase the transportation services involved in moving fish to the processing plant, and they were assumed to produce, as part of the gross value of this output, the distribution services associated with the handling of fish and fish products. One reason that dictated this treatment was the impossibility of separating sales and purchases of primary fish from sales and purchases of final fish products. The secondary fish products industry thus constructed therefore differs from the fish products industry as defined by Statistics Canada. It is composed of a combination of manufacturing (processing) and distribution (handling) activities which transforms fish landed at beaches into final sales of fish products.

Estimates of the geographic disposition of the output of final fish products were extremely difficult to make. This is a case where we suffered from a surfeit of data, for it was never too clear whether available data related to intermediate or final fish products. For exports of fish products Trade of Canada data, by port of exit, as well as a special survey on fish exports to the United States by province of origin, provided the main source of information. Estimates of shipments to Central Canada were obtained as a residual difference between output on the one hand and foreign exports and local consumption on the other. It is to be expected that our estimates are more reliable for the Atlantic Region as a whole than they are for any single province, because of the massive inter-provincial transfers of fish and fish products within the Atlantic Region.

Mining

The Mining Sector was estimated in five subsectors of the Standard Industrial Classification: metal mining, coal mining, non-metallic mineral mining, quarries and sandpits, and contract drilling. (In 1965 contract drilling was treated as a "primary" business service bought by the mining sector.) Data on output and inputs as well as the disposition of output were obtained from Statistics Canada sources and the Department of Mines. Direct surveys were used to supplement regular Statistics Canada data to break down items such as fuel costs and the costs of materials and supplies of mines.

In Newfoundland, over 80% of the output of metal mining consists of iron ore mined in the Labrador — Schefferville area. All the costs, incomes and value added associated with metal mining have been channelled through the Newfoundland economy. This treatment has probably resulted in an overstatement of the impact of metal mining on the economy of Newfoundland, for it is known that many of the inputs do not come from Newfoundland sources, and it is probable that a good part of the incomes earned in iron ore mining are spent outside that province.

Manufacturing

Data on manufacturing outputs and inputs were obtained from the DBS annual Census of Manufacturing. While this census yields much excellent information on commodity outputs and inputs, three areas are poorly documented in the Census. Special surveys were thus necessary to convert the data to a form suitable for the input-output tables. These areas are: (i) expenditures on services; (ii) the item classified as "operating supplies", the commodity detail of which needs to be determined; (iii) primary factor inputs apart from wages and salaries. Two further problem areas required additional survey data; one concerned the use of containers by industries. (Here we needed information to break down the global figure of container use reported in the Census.) The other concerned the geographic disposition of all locally manufactured goods. In this latter case an elaborate survey was undertaken and questionnaires were sent to all manufacturers included in the 1960 Census of Manufactures. This survey was vital in order to establish reliable estimates of shipments into each province and (indirectly) reliable estimates of residual imports into each province. An implicit assumption of our procedure was that manufacturers in the Atlantic Provinces know the final destination of their shipments. The survey has no way of detecting whether a shipment of goods reported as sold in the producing province was not in fact re-sold outside the province. If this was in fact the case, out-of-province shipments (and residual imports) would be underestimated.

Data on major commodity inputs were supplemented by information yielded by the several surveys mentioned above. These intermediate inputs, along with reported wages and salaries and an estimate of supplementary labour income, were subtracted from the reported gross value of output in each industry, leaving a

"gross surplus" which was then broken down into the remaining primary inputs: — profits, interest and depreciation. This was done with the aid of a large sample of financial statements of firms operating in each industry, collected under the Company and Labour Unions Reporting Act.

A general problem in processing reported input data arises because it is not always clear whether the value of intermediate commodities used reported by manufacturers really represents production costs only, as they are supposed to, or whether some own-account activity, such as construction, transportation or distribution has also been included. The problem presents itself particularly with respect to estimates of wage bill and of fuel costs. Thus for example, the reported wage bill in a manufacturing industry was reduced by an estimate of the wages and salaries component of own-account construction, where we had reason to believe that own-account construction took place. All costs related to own-account construction activity were attributed to the construction activity industry. On the whole, however, data on the manufacturing sectors were good, and even where there were gaps in information, it was decided to tolerate no "unallocated" inputs (or outputs), on the grounds that an informed guess at an early stage of the process of estimation when one is close to the details, is better than a guess made later when one is less clear about what is being guessed.

Construction Activity

The construction industry was built in three major sub-sectors: residential, non-residential and engineering construction. The output of the sectors were taken to be the value of construction activity as reported in the Statistics Canada publication Construction in Canada. The definition of construction used in that publication and in our input-output tables is based on the activity rather than the establishment concept. Thus ownaccount new and repair construction of all private business and public sectors is removed from the accounts of these sectors and included in the construction industry. Industries are thus not shown as purchasing materials or paying wages connected with their (own account) construction activity; instead, the equivalent gross value is shown as a purchase by the industry of construction activity from the construction sector.

Whereas it is simple to identify the users of residential construction, it is difficult to allocate reported repair construction expenditures between building and engineering repairs. For this reason we were able to present only one row of (non-residential) repair construction. All inputs of construction to intermediate sectors represent repair work. All new construction is shown as capital formation of private business or one of the five public sectors. These latter may also purchase repair construction done on current account.

The construction industry was initially divided into 19 sub-sectors and inputs were calculated separately for each of these. The information available to build the cost structures of the 19 sub-sectors in 1960 was quite limited, but in 1965 we were fortunate to benefit from the detailed studies of cost structures in the construction industry done by the Quebec Bureau of Statistics for their input-output tables for 1961.

Transportation

The transportation industry was built up from eight sub-sectors representing air, rail, water, bus services, moving and storage, trucking, taxicabs, warehousing and services incidental to transportation. Although we estimated separate cost structures for each of these eight sub-sectors, we were not able to show more than one "transportation" commodity in the tables because we could not allocate intermediate uses of transportation services separately to the eight types of carriers without a great deal more research. It is nevertheless useful to have separate input structures for the different carriers. One can explore the effects of changing the "mix" of transportation services in the economy. The case is similar to that of the construction industry. Furthermore, as with construction, the transportation industry is built on an activity basis and transportation services are produced by the transportation industry only.

It proved quite difficult to allocate transportation revenues and expenditures to a provincial basis. Even the regional accounts of the two main carriers - Air Canada and the Canadian National Railways - do not coincide with the boundaries of the four Atlantic Provinces. Essentially, cost structures for air and rail transport were built up from the best estimates of their provincial revenues and expenditures obtainable from Air Canada and the CNR. Insofar as it was possible to identify them provincially, the various subsidies paid to the railways on account of their operations in the Atlantic Provinces were removed from the estimate of revenues. Transportation revenues shown in the tables thus represent the sum of actual receipts from users, and subsidies to the industry are shown as a negative input rather than as direct revenue.12

Although truck transportation is a major activity in inter-industry transactions, existing statistics on the industry are not at all suitable for input-output analysis. The major difficulty lies in establishing the value of output of the trucking industry. The difficulty is compounded by the need to determine a provincial value of output and by the existence of considerable own-account transportation. The trucking industry in the Atlantic tables is a larger industry (activity) than the set of trucking establishments covered by Statistics Canada

publications; it is extended to include private and for-hire activity and own-account truck transportation carried on by manufacturing and service industries, e.g., dairies, bakeries and the construction industry. In addition, in our tables trucking includes estimates of garbage collection services, snow removal and towing services all of which involve road transportation. The first estimates of cost structures were built up from gasoline consumption statistics. We subtracted the use of gasoline by all other industries and by final sectors from total provincial net sales of gasoline (in gallons). The remainder was assumed to be used by all forms of trucking included in this sector. Other costs were built up from estimates of average costs per truck scaled up by the number of trucks estimated from Motor Transport Traffic. Operating revenues were based on revenue per truck.

Estimates of revenues and expenditures in truck transportation were necessarily among the weakest in the tables, and the value of output of the sub-sector was finally established only during the balancing stage of our work.

Communications and Utilities

Revenues and expenditures on telephone services and electric power are well documented in Statistics Canada publications. In the other areas such as cable and telegraph, radio and television broadcasting, data are reported on a Canada-wide basis and provincial shares were determined by referring to supplementary sources. Operating statistics for water utilities were estimated from annual reports of the larger municipalities in the region. Costs of water to users were derived from ratios of water and sewerage payments reported in a special Survey of Selected Business Expenses carried out by Statistics Canada. In the 1965 tables the activities of the Post Office were classified to the industrial sector rather than to the public sector, as was done in 1960. Revenues from the sale of stamps, meters, money orders, etc. are balanced against expenditures on wages, rents, etc. published in the Public Accounts of Canada. Provincial revenues were estimated largely by summing the uses, since the attempt to distribute total Canada revenue provincially yielded strange results.

The main source of operating revenue in radio and television broadcasting is advertising, which is shown as being bought in total by the advertising industry and then sold to the various industrial users.

Distribution

The output of wholesale and retail trade is defined as the gross trading margins, i.e., total sales (adjusted for inventory changes), less cost of goods sold. Thus goods are shown as moving directly from producer to user, without recording the distribution sector as an intermediary. The output and cost structure of the wholesale and retail distribution sectors were estimated separately.

¹² The large hauling subsidies paid to rail and water carriers for carrying Maritime coal to Central Canada are treated as a negative export revenue (see below).

Revenues and expenditures were derived from the Census of Merchandising and from a large sample of financial returns from different types of retail establishments.

Automobile dealers which are included in the Census of Merchandising were excluded from our distribution sector. We chose to include this activity in a Motor Vehicle Operation and Maintenance industry, specially created to deal with all expenditures relating to motor vehicle repair and operation (except gasoline). This sector is perhaps unique in input-output work, at least in Canada. The output or revenue of the sector is composed of the following items: gross trading margins on the sale of gasoline, lubricating, oil, new and used passenger cars, the costs of repair work including parts, passenger car licences and insurance, and traffic fines. In short, the sector includes everything related to motor vehicles except for the factory gate value of new cars and the cost (to the retailer) of gasoline and oil. This treatment is useful for analytical work and its advantages are threefold: firstly, it avoids the necessity of estimating and charging individual items such as tires, or licences, to each of the many using sectors, and it enables us to charge expenses reported simply as "maintenance of cars and trucks" to a sector which will automatically allocate the components of these expenditures on a proportional basis. Secondly, it means that the large and important service activity related to the motor vehicle is not lost in the general distribution sector. Thirdly, it allows us to deal with the fact that services connected with the automobile are in fact a mixture of distribution and repair services, and it is neither possible nor desirable to separate them.

Travel and Entertainment

This is a "dummy" sector which allocates reported expenditures on travel and entertainment to transportation, motor vehicle maintenance, hotels and restaurants, etc.

Dwelling Services

This sector shows the transactions involved in the ownership of buildings for dwelling purposes only. The gross revenue or output includes cash rents, imputed rents of owner-occupied buildings and cash rents of farm dwellings. Expenses of the sector are few but large: repairs, taxes, insurance, mortgage, interest, depreciation and net interest earned by renting of dwelling space. The sector has no wage bill, no employment and no inputs of commodities. Its only intermediate inputs are construction repair and various financial charges.

Financial Services

The estimation of the revenues and expenditures in the financial services creates conceptual and statistical problems whose solution inevitably involves some degree of arbitrariness. This is so at the national level and the problem is evidently compounded at the provincial level. The industry is composed of chartered banks, finance companies, insurance companies, real estate agencies and equipment rental companies. There are serious statistical difficulties in determining the value of the output of the services produced and the industrial and final allocation of these services to using sectors. Financial services were initially estimated from the using side, by summing all the industrial and final uses. The sum of costs to the users yields "gross receipts" which are conceptually not equal to "output" of the service. To overcome this problem, chartered banks are given an imputed output of services defined to be the excess of interest received over interest paid on deposits, plus actual service charges. As everybody knows there are no such data at the provincial level. Estimates of provincial wages and salaries paid by banks were obtained from the Labour Division of Statistics Canada. The relationship between total wages and salaries paid by banks in Canada and total output of banking services was used to estimate the value of provincial output.

Finance companies were treated similarly, the value of output being defined as the difference between interest earned and interest paid. For all insurance, excluding life insurance, output is defined to be the difference between premiums earned and claims incurred. For life insurance, the balance on annuity funds is added because it is in effect a sinking fund, and therefore part of the current year's operating surplus. Dividends paid to policy holders are not included in the claims, but are treated as part of the corporate surplus which is subsequently transferred to persons. The total output of life insurance services is sold directly to persons.

The real estate industry provides the service of gross land and building rents to commercial and industrial enterprises and to the public sectors. The gross value of output was calculated as the sum of the uses, for the reason that this was considered the most feasible way of arriving at a self-balancing estimate of output. Similarly, the output of equipment rental was initially built up from estimated expenditures made on such services.

Hotels, Restaurants and Caterers

This sector sells the services of providing accommodation, meals and other refreshment. Revenues were derived in a manner similar to the distributive trades. We subtracted the estimated cost of food products from the reported gross revenue of the sector, to obtain an estimate of the value of services rendered. Households are the major purchaser of the service and household purchases include expenditures by tourists in the region.

Personal and Business Services

In our tables personal services are composed of the expenditures on domestic servants, doctors, dentists

and similar private practitioners, religious, charitable and community organizations and amusement and personal services as defined in the Census of Merchandising and Services. Estimates of expenditures on these services were built up from a wide variety of sources, but there came a point when the only source available was the population census — that is, we used an estimate of individual or household expenditure and multiplied it by the population.

Business services are composed of advertising services, legal, accounting and other professional and technical services. Advertising revenues of radio and television broadcasting stations and newspapers are channelled through the business services sector to users, instead of being sold directly. This makes the revenues and expenditures of our advertising agencies much larger than those reported in the Census of Merchandising.

In the 1965 tables services to primary industries, i.e., veterinary services and contract drilling were treated as an additional service sector called Primary Services. Inputs into the several component services of the sector were estimated separately and then aggregated into one industry.

It can be seen that in many cases estimation of the output of services was intimately bound up with the uses of the service. Thus, some of the estimates of outputs of services were not finalized until the last balancing stage of the work. This method of proceeding may appear precarious to some readers, but the relatively poor quality of direct statistical information in these service sectors left us with no alternative procedures.

2. Estimation of Expenditure Patterns of Final Users

Final demand was estimated in nine domestic and six export sectors. These are personal consumption, fixed capital formation of industries, inventory change, federal government spending on defence within the region, federal government civilian expenditures on goods and services, provincial and municipal government expenditures on goods and services, and expenditures of the hospital and education sectors.

Exports were estimated for each of the following six destinations: each of the four Atlantic Provinces, the rest of Canada, and foreign markets. Imports are recorded by five sources — from each of the four Atlantic Provinces and (residually) from the "rest of the world" including the rest of Canada. Each category of final demand was disaggregated with respect to the commodity and service composition of purchases. The estimation of purchases at this level of detail for each of the four provinces proved to be an extremely difficult and time-consuming task, particularly in the case of personal consumption expenditure and expenditures by the five public sectors.

Personal Consumption Expenditure

Estimates of final personal expenditure were obtained by summing estimates of expenditures by persons on major groups of commodities and services. The Census of Retail Trade was used to give total estimates of personal expenditure on major groups of goods and Family Expenditure Survey data were used to obtain a breakdown into finer commodity detail. Estimates were made in 60 commodity groups which were further subdivided into 105 detailed commodities. All estimates of retail sales to persons were revalued to producer price at the individual commodity level. Percentage margins on personal expenditure on commodities are listed in Volume II and actual values of margins or markups for 1960 are listed in a detailed statistical report on Personal Consumption Expenditure. (27)

Because Census of Retail Trade data are compiled on an establishment basis, these data had to be converted to a commodity basis and classified according to the commodity categories of the input-output tables.

Estimates of personal expenditure on services were made by 13 groups of services, and a variety of sources was used including the Census of Merchandising. These estimates were intimately related to the estimation of the revenue and expenditures of the various service sectors. The output of domestic services or medical and dental services, for example, is purchased almost exclusively by persons; thus the estimate of the revenue of these service sectors simultaneously determines the estimate of personal expenditure on their output (and visa versa). For these reasons, the personal consumption account was the last one to be completely balanced. Further detail concerning methods of estimating sources of statistical data and supplementary tabular material for 1960 are contained in Volume II of this study.

For the 1965 tables, initial estimates of personal consumption expenditures were made by the Atlantic Development Board. Before attempting commodity supply-demand balances we attempted to fit total consumption expenditure for each province into our set of multi-sectoral accounts (described in Chapter 2). However, it was found that these initial estimates were high in relation to provincial income. This conclusion was confirmed by the difficulties encountered in arriving at individual commodity balances. The estimates originally made by the staff of the ADB were therefore revised downwards. We again used the Census of Retail Trade (1966) as firm data. The assumption was made that personal expenditures on commodities in 1965 would bear approximately the same relationship to expenditures derived from the 1966 Census, as the 1960 expenditures at retail sale price bore to the 1961 Census. Percentage margins (from producer to retail valuation) from 1960 were applied to the 1965 expenditures.

Public Sector Expenditures

It is obvious that the economic impact of public expenditure on the provincial economy is of direct relevance to the policy maker. We thus undertook a very detailed analysis of the sources of revenue and the commodity and service composition of expenditures of the following five public sectors: federal government, provincial government, municipal government, education and hospitalization.

In these five sectors expenditures on goods and services are financed almost exclusively from the general revenues of the three levels of government. Government expenditures fall into two major categories: (i) transfers of purchasing power and (ii) payment for goods and services. In our accounts, services rendered by wage and salary earners and rentiers (bond holders) are purchased directly by the public sectors; i.e., there is no public administration industry within the input-output table — public administration is treated as final demand.

It is by no means easy to construct a consistent set of accounts of the transactions of the public sectors with each other and with the other sectors of the economy. Some of the available information is compiled by calendar year, while other information is available only by fiscal year. Furthermore, compilations of public accounts from different administrative sources may show somewhat different figures for the same transaction. We relied heavily on the work done by the Public Finance Division of Statistics Canada in reconciling differences of this kind. In general we recorded payments made by one sector to another as income of the receiving sector, even where such revenues might, in turn, be passed on to yet another sector. There are, however, some important exceptions to this rule. Thus, in constructing the hospital sector, federal contributions to hospital insurance schemes are shown as a transfer from the federal to the hospital sector. Similarly, provincial grants for public schools have been shown as a transfer from the provincial government to the education sector, even though they might be administered by municipalities on behalf of school boards. Likewise, debt charges paid by municipalities on behalf of the public school system are shown as expenditures of the education sector.

Federal government outlays in the Atlantic Region were of three kinds: direct purchase of goods and services; transfer payments made to persons and transfers made to other levels or functions of government; and finally subsidies paid to industries. Our estimates of federal expenditures on goods and services in the region in 1960 were made independently in two distinct ways. One method was based on data pertaining to expenditures classified by the receiving establishment and the other on data pertaining to the commodity or functional character of the expenditures. Correspondingly the two major sources of information were the *Public Accounts of Canada* and unpublished data obtained from

"Treasury Vote Runs". From the first source we obtained payments by federal departments to establishments located in the Atlantic Provinces. The second source gave us purchases made through Atlantic federal government agencies on behalf of federal government departments. These latter data, so called "Treasury Vote Runs", provide information by type of commodity and service purchased. In the *Public Accounts* a list is shown of suppliers and contractors who received payments by government departments, of \$10,000 and over. These suppliers and contractors were coded, by province, according to the Standard Industrial Classification. Estimates were built up by federal government departments, using nine departmental divisions. Our justification for showing detail of spending pattern by federal government departments lies in the fact that it might be justifiable to assume constancy of spending patterns within a department, where it is not justifiable to make such assumptions with respect to total federal spending on goods and services.

By using "Treasury Vote Runs", it was possible, though extremely laborious, to collect and summarize data on federal government expenditure, by province and by department, and by detailed classification of the type of commodity and service purchased. Expenditures were classified in 22 groups or "standard objects of expenditure", when expenditures had to be aggregated.

We used "Treasury Vote Runs" to estimate most items of expenditure, but information on wages and salaries, military pay and allowances were obtained directly from Statistics Canada sources. Similarly, capital expenditures on construction and equipment were taken from the Business Finance Division of Statistics Canada. Wages and salaries and materials associated with ownaccount construction work done by government departments were removed from expenditures on these items and shown as a purchase of construction activity from the construction industry. Subsidies and federal transfer payments to persons and local governments were obtained from the Public Accounts of Canada for the four provinces. For further detail the reader is referred to Chapter 2 of this volume and to the Notes on Sources contained in Volume II of this study.

We balanced the revenue and expenditure side of each of the five public sectors. On the revenue side we showed sources of funds from other public sectors, from business and from households; and on the expenditure side, expenditures on goods and services as well as on transfers to households and to other levels of government. From this we obtained an estimate of the overall deficit and shortfall — that is, the excess of expenditure over revenue — in each of the local public sectors. In the initial stages of the work we did not have estimates of federal revenues arising in the province against which to match federal expenditures. At a later stage of the study we estimated and reconciled federal personal income taxes, corporation taxes and federal sales taxes yielded by each province.

In the provincial government sector we began with the figures of Gross Provincial Expenditure reported in Financial Statistics of Provincial Governments from which were deducted federal shared cost and other grants for educational and hospital purposes. The remainder was used as the total provincial expenditure figure against which revenues were balanced. From this total we deducted expenditures on transfers to municipal governments and to the federal government (if any), transfers to school boards, etc. and hospitals as well as direct provincial government expenditures on educational and hospitalization services, transfers to persons, debt charges and subsidies to industries. (The information was taken from provincial Public Accounts and from various Statistics Canada publications.) The remainder was taken as the (functional) expenditure on the purchase of goods and services by the provincial government. This total was then broken down into its commodity and service components with the aid of the Public Accounts of each of the four Atlantic provincial governments. A similar procedure was followed for the municipal government accounts.

Estimates of expenditures on education in each province were obtained by summing five types of educational institution: school boards, private schools, government educational expenditures, provincial business colleges and universities and colleges. Revenue and expenditure accounts were made for each of these sub-groups by using a variety of sources including annual reports of municipalities and departments of education. The nature of the data dictated the five groups of which the sector was composed. Similarly, the hospital sector was built up in four sub-categories – federal, provincial, municipal and private - following the administrative jurisdiction of the hospitals and the data available. Expenditures by large categories were obtained from the Public Accounts and Hospital Statistics and further broken down into a commodity group, using samples available for specific hospitals.

Estimates of revenues and expenditures in the public sectors were done at the Atlantic Development Board for the 1965 tables. The methods used were in the main, the same as for 1960. However, in order to arrive at the finer commodity detail of expenditures we used the 1960 distribution of expenditures and applied the same trade margins on purchases, except where there was specific information to the contrary, as in the case of construction and equipment purchases.

Capital Formation

The two remaining sections of domestic final demand — capital formation and inventory change — created fewer problems by comparison with personal consumption and the public sectors. Changes in inventory occur predominantly in the manufacturing industries and data on these changes were obtained from the *Census of Manufactures*. The inventory changes

shown in the tables represent changes in stocks of finished products only, held by the producers. These inventories of finished products are valued at producer values, on a cost of production basis.

The main problem encountered is the familar one, namely that the Census data refer to changes in the industry total, which for input-output purposes, must be distributed on a commodity basis. The commodity composition of inventory changes of finished products was devised by intelligent guesswork, based on the commodity distribution of output in each industry.

Fixed capital formation was derived from Statistics Canada data published in Private and Public Investment in Canada. It should be noted that the column total in the tables is not the same as total new investment expenditures in the publication mentioned. The reason is to be found in the fact that total capital formation in the input-output tables represents capital expenditures of industries only. To obtain total expenditure on new construction and equipment, capital account purchases by the public sector have to be added to the capital expenditures of industries. In the tables we have shown public sectors purchasing both new and repair construction and new and repair machinery and equipment. One reason we opted for this treatment was because it was difficult to identify what was new and what was repair in public sector purchases, particularly of machinery and equipment. Furthermore, the public sector was defined differently for our purposes than the classification used in Private and Public Investment in Canada.

The distribution of capital and repair expenditures was made in the following way: from tables showing "value of construction work, by type of structure" in the publication Construction in Canada, we deducted items representing public sector capital outlays (e.g., roads), thus leaving an aggregate estimate of construction expenditure for the private (industrial) sector. We then reconciled the deducted public sector expenditures with figures from the Business Finance Division of Statistics Canada. A similar process was followed for machinery and equipment purchases, using Private and Public Investment in Canada.

Exports

The export sectors of final demand were built up from an extensive survey carried out for the 1960 tables. This survey, already mentioned earlier in this chapter, was a mail survey in which questionnaires were sent to all manufacturing establishments included in the 1960 Census of Manufactures in the Atlantic Provinces. Each establishment was asked to dispose of the commodities produced in 1960 with respect to five geographic destinations: each of the three Atlantic Provinces, foreign markets, and shipments to the rest of Canada. The commodities listed for this disposition were those produced by the 3-digit S.I.C. group to which the

establishment belonged. Response to the survey was very good and gaps were filled by direct inquiry in the area and by prorating on the basis of completed returns. We used a variety of sources to determine the out-of-province shipments of primary products. Department of Agriculture bulletins were used to distribute agricultural output both by quantity and value for the 1960 tables. Publications of the Department of Mines, Forestry and Fisheries were similarly used to make a geographic distribution of the output of these sectors. In some cases, Trade of Canada data were used, but only as a guide, since the "port of exit" nature of these data inflates the value of Atlantic exports.

For the 1965 tables similar sources were used to allocate the output of primary industries. Various provincial government departments and the Atlantic Development Board studies provided information on commodity movements of wood and wood products, pulp and paper and secondary fishing. In manufacturing, estimates for Nova Scotia were based on an Export Survey for 1966 carried out by the Department of Industries of that province. Data on the movements of iron and steel products were supplied by the Voluntary Economic Planning Board of Nova Scotia. The New Brunswick Department of Industry Survey of the Geographical Destination of Selected Manufactures (1965) provided some commodity detail. The DBS survey -Destination of Shipments of Manufactures (1967) — was found to be of limited use because returns were made at the 3-digit S.I.C. level. As a result it was not possible to determine commodity movements. Where the DBS survey was our only source of information, the commodity mix of industry exports was assumed to be similar to its 1960 composition.

The Updated and Revised Tables for 1965

As mentioned previously, the methods used to construct tables for 1965 were the same as for 1960, that is, the recording and estimation of outputs and inputs of all producing sectors, the estimation of expenditures of final users, and the final balancing of the accounts of the four provinces. The main difference between the procedure for 1960 and 1965 was that we worked with somewhat less detail in 1965 than in 1960. A list of the 71-industry classification at which the 1965 tables were balanced is presented at the end of this chapter. However, to the extent that all outputs and a large part of inputs were recorded and estimated anew and separate balancing and reconciliation undertaken, the 1965 tables are new tables rather than a mechanical updating of the 1960 tables. We now outline the areas in which we proceeded differently from 1960.

The agricultural sector was defined as in 1960, but an attempt was made to subdivide the sector into three meaningful groups, according to size: large farms, small farms and subsistence farms. Although we estimated both inputs and outputs by size of farm, the final tables show only one agricultural sector, since we were unable to dispose of the output by type of farm.

The output of primary forestry was again defined to exclude the output of wood produced on farm woodlots, but estimates of the output of small logging operators were added to the DBS output figures as published in the Annual Census of Logging. The upward revisions were calculated from information from the Department of Forestry and a study on forestry in the Atlantic Provinces done by the Atlantic Development Board.¹³ The definition of the logging industry in use at the DBS in 1965 excludes operators with output less than 60m. cu. ft. per annum. According to this definition, there was no logging industry in Prince Edward Island in 1965. We however found it more convenient for analysis and comparison to show a nominal amount as the output of forestry in Prince Edward Island rather than to eliminate the industry altogether. Such action would have created the problem of having an output of forest products as a secondary product of agriculture without having a principal producer.

The fishery sector, both primary fishing and secondary, was treated in the same way as in 1960, and so was mining, with the small difference that contract drilling, which was included with the outputs and inputs of metal mining in 1960, was removed and included as part of a new industry called Services to Primary Industries. This industry consists of services incidental to agriculture and mining, such as veterinary services and breeding services, and contract drilling.

As in 1960 the most detailed work was done on the manufacturing sector. From the Census of Manufactures 1965 the following information was recorded at the 3-digit S.I.C. level of manufacturing establishments in each province:

- (a) value of shipments by commodity group,
- (b) value of change in inventory of finished goods,
- (c) wages and salaries,
- (d) employment,
- (e) number of establishments.

Examination of these series suggested that new cost structures should be estimated for many industries because there had been significant changes in value of shipments or in the number of establishments. From data in the Census of Manufactures 1965 new cost structures were estimated for 62 manufacturing industries which existed in 1960-32 in Nova Scotia, 21 in New Brunswick and 9 in Newfoundland. In addition, new cost structures were estimated for 20 industries which were not in existence in 1960, such as motor vehicle manufacturing in Nova Scotia and petroleum refining in Newfoundland. For the remaining industries, commodity and service inputs were derived by applying 1960 coefficients.

¹³ Forestry in the Atlantic Provinces, Background Study No. 1, Atlantic Development Board, Ottawa 1968.

Construction was again treated on an activity basis and the same three sub-sectors were built: residential, non-residential and engineering construction. We used the detailed studies on the cost structures in the construction industry in Quebec in 1961 to build the estimates for the four Atlantic Provinces in 1965.

In the service sectors outputs were recorded wherever data were available, such as transportation (except trucking) and utilities. The 1966 Census of Merchandising was used to build estimates of retail trade, but output of wholesale trade is an estimate based on changes in retail trade between the 1961 and 1966 Census, for at the time of our work, the Census data on wholesale trade had not been processed. New estimates were made of the output of other services - financial services, dwelling services, personal and business services. Methods of estimation were similar to those used in 1960, and in many cases 1960 coefficients were applied in order to complete the input structures where data were deficient. Only one change was made in the classification of services: whereas in 1960 postal services were included with other federal government services, in 1965 postal services were treated as a separate service industry, in which revenues from the sale of stamps, etc. were balanced against expenditures on wages, rents, etc. as published in the Public Accounts of Canada.

Estimates of expenditures by the final using sectors in 1965 were made in much the same way as in 1960. These methods were outlined in the preceding paragraphs, including the selected surveys used to determine the composition and destination of exports from the region.

3. The Balancing of the Input-output Tables

The balancing of the four tables was done in two stages: first an internal (arithmetic) balance was achieved and then further balancing and iterative corrections were undertaken with respect to independently available economic statistics (check totals) and with respect to the economic sense of the figures.

Arithmetic Balancing

This involves the first attempt to put the tables together, that is, to combine all the information gathered thus far on intermediate and final users of the output of industries, so that total use or demand is equal to total output or supply. The process inevitably involves adjustments to some of the original estimates - of intermediate use, of final use, or of output. Just how much adjustment is necessary depends, of course, on the accuracy of the original estimates, and indeed sometimes on the accuracy of the original data. It is at this point in the work that the value of earlier guessing at a detailed level, rather than at a more aggregated one, becomes apparent: for it is now easier to establish where an inaccurate estimate may have been made. On our worksheets we summed the intermediate and final uses of each commodity, compared this total use with the available local commodity supply (provincial output plus imports from the other Atlantic Provinces) and obtained a residual which was our first estimate of imports originating outside the region. (Residual imports were permitted only for goods.) The supply-demand balances for all goods in the system were made simultaneously with respect to each of the four provinces in the system. Accuracy of estimates of residual imports originating outside the Atlantic Region into each of the four Atlantic Provinces thus depends on the accuracy of estimates of provincial output, on the one hand, and provincial uses, both final and intermediate, on the other. Where adjustments were necessary, these adjustments were usually made in the service sectors or in the final users, where data were likely to have been weaker at the outset. Any adjustment made in one sector necessarily sets in a train a chain of complementary and compensating adjustments in other industries. Balancing is thus an iterative process in which it becomes increasingly more difficult to make any changes at all. When the arithmetic balance has been achieved, and total commodity supplies equal total demands, for all commodities, one can proceed to the next stage.

Economic Balancing

After the tables have been brought into their (initial) arithmetic balance, and after the column sums of every component of final demand have been examined, evaluated and, where necessary, adjusted, attention focusses on the resulting row sums of primary inputs. Every input-output flow account contains an internal arithmetic identity between the sum of all primary inputs and the sum of all final demands. Insofar as we had made careful independent estimates of all components of final demand, all indirect economic indicators concerning the likely aggregate magnitude of final demand components such as personal consumption or federal expenditures etc. had already been embodied in our original estimates of final demand. Because the grand sum of all primary inputs is determined by the grand sum of all final demands (including competitively imported commodities, which are treated as a negative final demand) "economic balancing" is chiefly a question of confronting the provincial income estimates implied in the row sums of primary inputs with independent evidence and indicators. Estimates of primary inputs were made in fifteen categories, and later aggregated to seven rows in the published tables. The fifteen original categories were (1) taxes, subdivided into federal, provincial (general), provincial (fuel) and municipal; (2) subsidies, sabdivided into federal and provincial; (3) non-competitive imports, subdivided and classified into non-competitive imports from each of the other Atlantic Provinces and from the "rest of the world"; (4) wages and salaries and supplementary labour income; (5) unincorporated business income; (6) depreciation, and (7) remaining surplus, subdivided into profit, and rent and interest. After having examined, reconciled and where necessary corrected the indirect tax and subsidy items in the primary inputs and made offsetting changes to maintain arithmetic balance, we arrive at the ultimate confrontation, i.e., the comparison of provincial income components such as wages, salaries and supplementary labour income or corporate profits with the provincial breakdown of national accounts estimates made by Statistics Canada for Canada as a whole. This confrontation of independently arrived at estimates provides a useful check on the accuracy of the inputoutput tables and on the accuracy of Canada's national accounts. It should here be noted that the National Accounts Division of Statistics Canada produces estimates of personal income on a provincial breakdown; they do not estimate intermediate expenditure items on a provincial breakdown. We, on the other hand, obtained income estimates which were strongly influenced by our estimates of final expenditures – especially final expenditures on services.

In "economic balancing" we found errors in our input-output estimates. Thus our original allocation of federal indirect taxes, for example, proved to be an underestimate when confronted with global estimates of the provincial contribution to total Canadian federal government indirect tax receipts. This bias towards an underestimate resulted from our impression that exemption of producers from taxation on materials used in further production was more widespread than in fact it proved to be. On investigation it became evident that producers paid a considerable portion of commodity taxes and thus we allocated these taxes to industries, on the basis of each industry's consumption of taxable inputs, after having allocated to the personal consumption sector those federal indirect taxes which are clearly paid by households. An underestimate of taxes clearly implies an overestimate of some other item of primary input. One now must make a compensating downward adjustment in one or more primary inputs of each of the industries. Where feasible, we adjusted the surplus. Where, however, the cost profile of the industry did not make this appear reasonable, another item had to be reduced.

We should recall, at this time, that the full set of primary inputs is arranged in two fashions: (i) according to type (V matrix) and (ii) according to sector of receipt (Q matrix).14 Thus, for example, all wages, salaries, military pay and supplementary labour income, as well as all unincorporated income are considered to be household income; as is that portion of profit and rent and interest earned by all the producing sectors in the system which is estimated to be remittable to provincial residents. Net revenues of the various levels of government in the system of accounts are clearly equal to the sum of indirect taxes received less subsidies paid plus estimates of corporation tax receivable. Revenues of the "rest of the world" are composed of receipts for sale of non-competitive imports plus profits, rent and interest remitted or remittable to non-residents by virtue of the estimated control of the latter over industrial assets. Where industries appeared to be controlled by non-residents we treated the entire surplus – before corporate taxes – as a remitted or remittable to the "rest of the world". (This might have resulted in an underestimate of corporate tax deriving from economic activity located in the Atlantic Region.) These estimated "splits" of profit, rent and interest between "households", federal and provincial governments, and the "rest of the world" were guided by auxiliary information on corporate ownership deriving largely from the Corporations and Labour Unions Returns Division of Statistics Canada. Capital consumption allowances were estimated separately for each industrial sector.

It is obvious, self evident and proper that in the course of the construction of the transaction flow tables we relied heavily on Statistics Canada data and we accepted certain Statistics Canada estimates as unchallengeable fixed points in the system. We did this in the case of fixed capital formation and construction activity. 15

In spite of our deliberate efforts to "bend" expenditure data downwards in order to keep it in conformity with Statistics Canada national accounts estimates, we were forced to arrive at the conclusion that there existed, at that time, a downward bias in Canada's national accounts estimates, resulting in 1960 in a downward bias in Statistics Canada estimates of provincial personal income of perhaps 5% to 7%.

It should be related that national accounts estimates made by Statistics Canada were revised in 1969, (14) and that upward revisions of personal income for each of the Atlantic Provinces, except Prince Edward Island, brought the national accounts estimates much closer to our 1960 estimates. The current revisions to the national accounts entail further, although smaller, upward adjustments to the estimates of provincial personal income in the Atlantic Provinces.

Conclusion

Clearly the construction of input-output accounts provides, among other benefits, a useful and effective evaluation of the quality and compatibility of the entire system of economic statistics, as well as a severe test of the skill and care exercised by the research team which undertakes to construct input-output tables. We are well aware of the fact that some of the figures in these tables could be improved. Experience gained in the construction of the 1960 tables has undoubtedly resulted in some improvements of estimates for 1965. We hope that others will continue to work where we have left it, and that the next set of input-output accounts for the Atlantic Provinces will embody further improvements both of data and of methods.

¹⁴ See Chapter 2 and earlier sections of this chapter.

¹⁵ We became convinced in the course of our study that Statistics Canada estimates of fixed capital formation and of construction activity tended to be low, i.e., appeared to underestimate the activities. We did not, however, have any statistically reliable means of making upward adjustments. We, therefore decided to make them fixed parts in the system – in spite of our awareness that they tended to be low.

TABLE 3.1 NS. Output and Supply Flows, J, M Nova Scotia, 1965 Model I (12 x 12)

		IVAO	del 1 (12 x 12	, 				
		Agricultural products	Forestry products	Primary fish	Mining products	Food, textiles	Wood, paper products	Steel, metal products
Item No:		1	2	3	4	5	6	7
110,				th	ousands of doll:	ars		
1 2	Agriculture Forestry	54,108	3,174 17,312	49,82:			732	
3 4 5	Primary fishing	-			69,095		- 1	-
5 6	Food and textiles	_ 1	296	2		214,858	87,211	_
7	Iron, steel, metals, machinery	-		=		5		179,476
8	Non-metallic, petroleum, chemicals Construction	_	三	=	_	-	-	=
10	Transportation, communications	-	-	77	5		_	_
11 12	Distribution	_	_	<u> </u>) <u> </u>		_	_
13	Total commodity output	54,108	20,782	49,82	2 69,095	214,858	87,943	179,476
13	Total commonty output	51,100	20,702	73,02	3,050	211,900	0,,,,,,	
14 15 16	Imports: Nova Scotia New Brunswick Prince Edward Island	1,633 5,912	35	- 8 22		15,777 6,137	2,312	5,343 96
17 18	Newfoundland	70 16,826	70	6,00	5,630	300 107,840	129 38,351	192,753
19	Total imports	24,441	105	6,30	7 5,775	130,055	40,793	198,192
20	Total commodity supply	78,549	20,888	56,12	74,870	344,913	128,736	377,669
21	Total intermediate demand	22,458	14,151	48,91	22,036	30,057	56,604	98,947
22	Total domestic final demand	48,314	374	1,72	12,677	202,625	22,462	169,860
23	Total exports	7,775	6,363	5,48	6 40,156	112,230	49,669	108,861
24	Total demand	78,549	20,888	56,12	9 74,870	344,913	128,736	377,669
		Non-metallic, petroleum, chemicals	Con- struction	ti coi	inspor- ition, nmuni- itions	Distri- bution	All other services	Total industry output
		8	9		10	11	12	13
			t	t	housands of dol	llars	Ť	
1	Agriculture			-	1200	-	4.957	62,239 18,044
2	Primary fishing		3(1	_	12	-	= 1	49,822
4	Mining		20	-	-	= 18	= 1	69,095 214,858
5 6	Food and textiles		3	-	12	- 1	-	87,507
7 8	Iron, steel, metals, machinery	93,2	05 57	-		_	=	179,981 93,257
9	Construction		- 25	6,356	217.555	-	-	256,356 217,765
10 11	Transportation, communications		-	-	217,765	195.977	_	195,977
12	All other services		7	-	-	-	426,692	426,692
13	Total commodity output	93,7	62 25	6,356	217,765	195,977	431,649	1,871,595
14	Imports:				_		=	-
		3,3		20	3,313	=	256	32,289
15	Nova Scotia		S 7 T	- C	-	悪	크세	12,520 7,481
15 16	New Brunswick	1			- 11			
15 16 17 18	New Brunswick Prince Edward Island Newfoundland Residual	22,1	82 87	=	2 212	-	256	
15 16 17 18 19	New Brunswick Prince Edward Island Newfoundland Residual Total imports	22,1 26,7	82 87 09	=	3,313	105 077	256	435,950
15 16 17 18	New Brunswick Prince Edward Island Newfoundland Residual	22,1	82 87 09		3,313 221,078	195,977	256 431,905	435,950
15 16 17 18 19	New Brunswick Prince Edward Island Newfoundland Residual Total imports	22,1 26,7	82 87 09 72 25	=		195,977	8	435,950 2,307,543 675,023
15 16 17 18 19	New Brunswick Prince Edward Island Newfoundland Residual Total imports Total commodity supply	1 9 22,1 26,7 120,4	82 87 09 72 25 84	6,356	221,078		431,905	435,950 2,307,543 675,025 1,239,839
15 16 17 18 19 20	New Brunswick Prince Edward Island Newfoundland Residual Total imports Total commodity supply Total intermediate demand	19 22,1 26,7 120,4	82 87 09 72 25 84 3 40 22	6,356 4,007	221,078 121,782	38,444	431,905 130,351	383,658 435,950 2,307,5 43 675,025 1,239,839 392,649

TABLE 3.2NS. Inputs and Demand Flows, B, D, E
Nova Scotia, 1965
Model I (12 x 12)

	Model I (12 x 12)							
		Agri- culture	Forestry	Primary fishing	Mining	Food, textiles		
Item No.		1	2	3	4	5		
			ť	housands of dollars				
1	Agricultural products	305	21	= 1	920	22,045		
3	Forestry products Primary fish	660	-	_	839	48,919		
2 3 4 5	Mining products Food, textiles	466 11,458	13	147 2,624	89	228 14,698		
6 7	Wood, paper products	184 1.016	532	1,215 4,572	1,796 7,146	8,558 4,517		
8	Non-metallic, petroleum, chemical products	4,123	326	3,225	688	1,824		
10	Construction	1,790 1,641	230 540	230 2,157	1,020 2,017	1,329 11,291		
11 12	Distribution	1,460 6,940	180 418	1,019 2,470	581 4,457	4,607 7,537		
13	Total intermediate inputs	30,044	2,269	17,660	18,636	125,557		
	Section and the section of the secti	30,011	2,203	17,000	10,050	123,337		
14 15	Taxes	2,306 - 2,377	900	1,372 - 205	1,545	2,362		
16	Subsidies	300	22	300	993	20,121		
17 18	Wages and salaries Unincorporated business income	6,299 19,789	5,601 5,144	11,250 13,892	35,804 3,000	42,084 2,945		
19	Profit, rent, interest Depreciation	875 5,003	2,351 1,753	2,359 3,192	5,302 3,813	17,200 4,577		
21	Household income Education and hospitalization	26,926	12,845	27,321	39,401	54,591		
20 21 22 23 24	Provincial revenue	- 37	931	1,381	1,143	1,550		
25 26	Municipal revenue	2,250 - 2,247	$\begin{bmatrix} 11 \\ 210 \end{bmatrix}$	- ²⁰ - ⁵⁴	589 1,440	1,421 3,683		
	Import leakage	300	22	300	4,071	23,466		
27	Total primary inputs	32,195	15,775	32,161	50,458	89,290		
28 29	Factor incomes	26,963 31,895	13,098 15,752	27,501	44,106	62,229		
30	Gross Domestic Product Employment	10,750	2,200	31,861 9,500	49,465 7,427	69,169 13,059		
31	Total output	62,239	18,044	49,822	69,095	214,846		
		Sawmills, pulp and paper, printing	Iron, steel, inetals, machinery	Non-metallic, petroleum, chemicals	Con- struction	Transportation, communications		
		6	7	8	9	10		
			t	housands of dollars				
1	Agricultural products Forestry products	12,638	4		83			
2 3 4	Primary fish	12,036		===				
5	Mining products Food, textiles	313	6,400 20	949 20	5,803 328	28 69		
6	Wood, paper products Steel, metal products	8,419 3,012	1,626 34,239	393 1,458	23,493 31,428	563 6,313		
8 9	Non-metallic, petroleum, chemical products Construction	1,949 395	5,479 3,943	1,670 1,091	22,475 211	10,219 4,821		
10	Transportation, communications	6,568	16,926	2,636	22,710	17,365		
11	Distribution	2,487 5,470	6,468 4,578	1,042 3,575	13,674 17,399	4,224 32,460		
13	Total intermediate inputs	41,259	79,682	12,838	137,605	76,064		
14	Taxes	1,046	2,269	444	2,365	10,506		
15 16	Subsidies	4,313	-,599 23,828	56,238	10,595	- 6,814 1,512		
17	Non-competitive imports Wages and salaries	24,725	58,805	7,431	84,823	88,161		
18 19	Unincorporated business income Profit, rent, interest	4,171 9,655	531 10,700	95 12,534	8,000 9,067	8,500 9,933		
20	Depreciation Household income	2,336 31,441	5,162 61,133	3,674 9,220	3,900 97,459	29,900 97,610		
21 22 23	Education and hospitalization	564	660	696	313	9.823		
24	Municipal revenue	888	1,947	168	1,130	1,531		
25 26	Federal revenue Import leakage	2,094 8,923	1,356 30,038	2,699 63,958	2,565 13,382	- 3,066 5,901		
	Total primary inputs	46,248	100,297	80,417	118,750	141,700		
27	Total primary inputs							
28	10 Octobrace Probable PHERM substant depending	38.552	70,037	20,060	101,889	106,595		
28	Factor incomes Gross Domestic Product	38,552 41,935 6,216	76,469	24,180	108,154	140,188		
	Factor incomes							

TABLE 3.2NS. Inputs and Demand Flows, B, D, E—Continued Nova Scotia, 1965 Model I (12 x 12)

	173	Odci I (12 x 12)				
		Distri- bution	All other services	Personal consumption	Capital formation	Inventory change
ltem No.		11	12	13	14	15
			t1	housands of dollars		
1 2 3 4 5 6 7 8 9 10 11 12	Agricultural products Forestry products Primary fish Mining products Food, textiles Wood, paper products Steel, metal products Non-metallic, petroleum, chemical products Construction Transportation, communications Distribution All other services	3 276 666 62,180 865 594 18,359 919 18,505	7,920 235 9,681 2,531 4,437 18,351 19,570 1,780 26,542	48,396 1,89 1,724 6,560 198,271 14,861 50,315 37,335 54,110 131,730 277,198	88,027 119,642	- 495 145 - 2,940 293 213 537 1,077
13	Total intermediate inputs	42,371	91,050	820,691	207,669	4,712
14 15 16 17 18 19 20 21 22 23	Taxes Subsidies Non-competitive imports Wages and salaries Unincorporated business income Profit, rent, interest Depreciation Household income Education and hospitalization Provincial revenue	2,713 2,677 79,988 16,830 39,742 11,654 120,066	52,442 - 4,207 25,871 94,491 39,431 84,950 42,661 188,629	124,874 90,043 		- - - - - - - -
24 25 26	Municipal revenue	1,851 6,555 11,077	38,113 6,763 44,166	3,295 62,471 90,043	=	_ _ _
27	Total primary inputs	153,605	335,641	214,917	=	-
28 29 30	Factor incomes Gross Domestic Product Employment	136,561 150,928 29,925	218,873 309,769 37,263	124,874	· =	_ _ _
31	Total output	195,976	426,691	1,035,609	207,669	4,712
		Federal government defence	Federal government civil	Provincial government	Municipal government	Educa- tion
		16	17	18	19	20
			t	housands of dollars	590	
1 2 3 4 5 6 7 8 9 10 11	Agricultural products Forestry products Primary fish Mining products Food, textiles Wood, paper products Steel, metal products Non-metallic, petroleum, chemical products Construction Transportation, communications Distribution All other services	2,030 1,033 664 20,557 1,645 10,136 1,862 2,799 4,522	100 3 - 104 376 311 4.252 505 26,361 2,577 1,173 1,422	17 10 58 2,454 2,038 485 33,361 8,375 1,750 6,196	25 37 640 175 255 678 430 7,811 3,400 500 3,043	2,889 1,847 880 14,425 4,105 1,710 2,691
13	Total intermediate inputs	45,251	37,187	54,744	16,994	28,585
14 15 16 17 18	Subsidies Non-competitive imports Wages and salaries Unincorporated business income Profit, rent, interest Depreciation Household income	1.459 87,740 - 87,740	68,303 	1,398 20,008 18,231 27,239	1,000 10,085 3,005 11,530	3,100 53,853 6,576 56,889
20 21 22 23 24 25	Provincial revenue Municipal revenue Federal revenue	-			2,560	6,640
21 22 23 24 25 26	Provincial revenue Municipal revenue Federal revenue Import leakage	1,459	616	12,398		·
21 22 23 24 25	Provincial revenue Municipal revenue Federal revenue Import leakage	-	616 68,919	39,637	14,090	63,529
21 22 23 24 25 26	Provincial revenue Municipal revenue Federal revenue Import leakage Total primary inputs Factor incomes Gross Domestic Product	1,459		·		

TABLE 3.2NS. Inputs and Demand Flows, B, D, E. — Concluded Nova Scotia, 1965 Model I (12 x 12)

		Hospital-	Total domestic		Exports	
		ization	final demand	Foreign	Canada	New Brunswick
ltem No,		21	22	23	24	25
			tì	ousands of dollars		
1	Agricultural products	271	48,314 374	3,465	1,860	1,013
3	Forestry products Primary fish	Ξ.	1,724	5,650	712	5,486
4 5	Mining products	354 2,418	12,677 202,626	10,923 51,319	24,128 47,579	3,107 5,420
6 7	Wood, paper products	813 1,607	22,462 169,860	36,462 19,781	9,176 74,587	1,160 10,903
8	Non-metallic, petroleum, chemical products	581 10.613	42,940 222,349	980	272	1,870
10 11	Transportation, communications	1,820 2,868	76,250 142,531	3,042 6,000	20,000 9,000	:=:
12	All other services	2,661	297,734		2,618	1,198
13	Total intermediate inputs	24,010	1,239,845	137,625	189,934	30,159
14 15	Taxes Subsidies	_	124,874	-	- 14,000	_
16 17	Non-competitive imports Wages and salaries	5,510 30,431	103,127 270,420	=	=	_
8	Unincorporated business income		-			=
19 20	Profit, rent, interest Depreciation	1,999	29,811	=	-	_
22	Household income	30,888	282,589 8,668	=	-	_
23	Provincial revenue	=	50,439 3,295	_	-	_
5	Federal revenue	7,053	62,471 120,769	<u> </u>	- 14,000 -	_
27	Total primary inputs	37,941	528,234	:=:	- 14,000	_
8	Factor incomes	32,430	300,232		-	_
9	Gross Domestic Product Employment	32,430 11,600	425,107 56,880	=	- 14,000	_
31	Total output	61,951	1,768,076	137,625	175,934	30,159
			Exports		Total	Terri
		Prince Edward Island	Newfoundland	Total	intermediate demand	Total demand
		26				
	1	26	27	28	29	30
		26		28 nousands of dollars		30
1 2	Agricultural products	12		nousands of dollars	22,458	78,549
2	Forestry products Primary fish	12	1,425	7,775 6,363 5,486	22,458 14,151 48,919	78,549 20,888 56,129
2 3 4 5	Forestry products Primary fish Mining products Food, textiles	12 - 526 1,952	1,425 1,470 1,470	7,775 6,363 5,486 40,156 112,230	22,458 14,151 48,919 22,036 30,057	78,549 20,881 56,129 74,865 344,91
2 3 4 5 6 7	Forestry products Primary fish Mining products Food, textiles Wood, paper products Steel, metal products	12 - 526 1,952 822 1,171	1,425 1,470 5,958 2,048 2,417	7,775 6,363 5,486 40,156 112,230 49,669 108,861	22,458 14,151 48,919 22,036 38,057 56,604 98,948	78,548 20,888 56,129 74,869 344,914 128,736 377,677
2 3 4 5 6	Forestry products Primary fish Mining products Food, textiles Wood, paper products	12 - 526 1,952 822	1,425 1,470 5,958 2,048	7,775 6,363 5,486 40,156 112,230 49,669 108,861 20,247	22,458 14,151 48,919 22,036 39,057 56,604	78,549 20,888 56,129 74,866 344,914 128,736 377,670 120,472 256,356
2 3 4 5 6 7 8 9	Forestry products Primary fish Mining products Food, textiles Wood, paper products Steel, metal products Non-metallic, petroleum, chemical products Construction Transportation, communications	12 - - 526 1,952 822 1,171 8,310	1,425 1,470 5,958 2,048 2,417	7,775 6,363 5,486 40,156 112,230 49,669 108,861	22,458 14,151 48,919 22,036 30,057 56,604 98,948 57,284	78,549 20,888 56,129 74,866 344,914 128,736 377,670 120,477 256,356 221,078
2 3 4 5 6 7 8 9	Forestry products Primary fish Mining products Food, textiles Wood, paper products Steel, metal products Non-metallic, petroleum, chemical products Construction	12 - - 526 1,952 822 1,171 8,310	1,425 1,470 5,958 2,048 2,417 8,814	7,775 6,363 5,486 40,156 112,230 49,669 108,861 20,247 23,042	22,458 14,151 48,919 22,036 39,057 56,604 98,948 57,284 34,007 121,784	78,549 20,888 56,129 74,865 344,914 128,733 377,670 120,472 256,356 221,079 195,976
2 3 4 5 6 7 8	Forestry products Primary fish Mining products Food, textiles Wood, paper products Steel, metal products Non-metallic, petroleum, chemical products Construction Transportation, communications Distribution	12 - - 526 1,952 822 1,171 8,310	1,425 1,470 5,958 2,048 2,417 8,814	7,775 6,363 5,486 40,156 112,230 49,669 108,861 20,247 23,042 15,000	22,458 14,151 48,919 22,036 39,057 56,604 98,948 57,284 34,007 121,784 38,445	78,549 20,888 56,122 74,869 344,914 128,736 377,670 120,472 256,356 221,076 195,976 431,905
2 3 4 5 6 7 8 9 10 11 12 13	Forestry products Primary fish Mining products Food, textiles Wood, paper products Steel, metal products Non-metallic, petroleum, chemical products Construction Transportation, communications Distribution All other services Total intermediate inputs	12 - 526 1,952 822 1,171 8,310 - -	1,425 1,470 5,958 2,048 2,417 8,814 	7,775 6,363 5,486 40,156 112,230 49,669 108,861 20,247 23,042 15,000 3,816	22,458 14,151 48,919 22,036 39,057 56,604 98,948 57,284 34,007 121,784 38,445 130,354 675,039	78,549 20,888 56,129 74,866 344,914 128,736 377,677 120,472 256,356 221,078 195,976 431,905 2,307,531
2 3 4 5 6 7 8 9 10 11 12 13	Forestry products Primary fish Mining products Food, textiles Wood, paper products Steel, metal products Non-metallic, petroleum, chemical products Construction Transportation, communications Distribution All other services Total intermediate inputs Taxes Subsidies Non-competitive imports	12 - 526 1,952 822 1,171 8,310 - - - 12,795	1,425 1,470 5,958 2,048 2,417 8,814 - - 22,135	7,775 6,363 5,486 40,150 112,230 49,669 108,861 20,247 23,042 15,000 3,816 392,649	22,458 14,151 48,919 22,036 30,057 56,604 98,948 57,284 34,007 121,784 130,354 675,039	78,549 20,888 56,122 74,869 344,914 128,736 377,670 120,472 256,356 221,078 195,976 431,905 2,307,531
2 3 4 5 6 7 8 9 10 11 12 13	Forestry products Primary fish Mining products Food, textiles Wood, paper products Steel, metal products Non-metallic, petroleum, chemical products Construction Transportation, communications Distribution All other services Total intermediate inputs Taxes Subsidies Non-competitive imports Wages and salaries Unincorporated business income	12 - 526 1,952 822 1,171 8,310 - - 12,795	1,425 1,470 5,958 2,048 2,417 8,814 - - - 22,135	7,775 6,363 5,486 40,156 112,230 49,669 108,861 20,247 23,042 15,000 3,816 392,649	22,458 14,151 48,919 22,036 39,057 56,604 98,948 57,284 34,007 121,784 38,445 130,354 675,039	78,549 20,888 56,122 74,865 344,914 128,73 377,670 120,472 256,356 221,076 195,970 431,900 2,307,531
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 19 19 19 19 19 19 19 19 19 19 19 19	Forestry products Primary fish Mining products Food, textiles Wood, paper products Steel, metal products Non-metallic, petroleum, chemical products Construction Transportation, communications Distribution All other services Total intermediate inputs Taxes Subsidies Non-competitive imports Wages and salaries Unincorporated business income Profit, rent, interest	12 - 526 1,952 822 1,171 8,310 - - - 12,795	1,425 1,470 5,958 2,048 2,417 8,814 - - 22,135	7,775 6,363 5,486 40,156 112,230 49,669 108,861 20,247 23,042 15,000 3,816 392,649	22,458 14,151 48,919 22,036 39,057 56,604 98,948 57,284 34,007 121,784 38,445 130,354 675,039 80,274 -14,602 146,774 539,466	78,549 20,888 56,122 74,869 344,914 128,733 377,670 120,472 256,356 221,078 195,976 431,905 2,307,531 205,144 - 28,602 249,902 809,888 122,331 234,484
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 20 20 20 20 20 20 20 20 20 20 20 20	Forestry products Primary fish Mining products Food, textiles Wood, paper products Steel, metal products Non-metallic, petroleum, chemical products Construction Transportation, communications Distribution All other services Total intermediate inputs Taxes Subsidies Non-competitive imports Wages and salaries Unincorporated business income Profit, rent, interest Depreciation Household income	12 - 526 1,952 822 1,171 8,310 - - - 12,795	1,425 1,470 5,958 2,048 2,417 8,814 	7,775 6,363 5,486 40,156 112,230 49,669 108,861 20,247 23,042 15,000 3,816 392,649	22,458 14,151 48,919 22,036 30,057 56,604 98,948 57,284 34,007 121,784 38,445 130,354 675,039	78,544 20,888 56,122 74,869 344,914 128,736 377,676 120,472 256,356 221,078 195,976 431,900 2,307,531 205,149 - 28,600 249,900 809,888 122,331 234,488 117,622 1,049,236
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 19 20 20 20 20 20 20 20 20 20 20 20 20 20	Forestry products Primary fish Mining products Food, textiles Wood, paper products Steel, metal products Non-metallic, petroleum, chemical products Construction Transportation, communications Distribution All other services Total intermediate inputs Taxes Subsidies Non-competitive imports Wages and salaries Unincorporated business income Profit, rent, interest Depreciation Household income Education and hospitalization Provincial revenue	12 526 1,952 822 1,171 8,310 - - - 12,795	1,425 1,470 5,958 2,048 2,417 8,814 	7,775 6,363 5,486 40,156 112,230 49,669 108,861 20,247 23,042 15,000 3,816 392,649	22,458 14,151 48,919 22,036 39,057 56,604 98,948 57,284 34,007 121,784 38,445 130,354 675,039 80,274 - 14,602 146,774 539,466 122,331 204,672 117,628 766,646 34,738	78,549 20,888 56,129 74,866 344,914 128,736 377,677 120,477 256,356 221,078 195,977 431,905 2,307,531 205,149 - 28,600 249,900 809,888 122,331 234,488 117,624 1,049,234 8,666 85,17*
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 19 19 19 19 19 19 19 19 19 19 19 19	Forestry products Primary fish Mining products Food, textiles Wood, paper products Steel, metal products Non-metallic, petroleum, chemical products Construction Transportation, communications Distribution All other services Total intermediate inputs Taxes Subsidies Non-competitive imports Wages and salaries Unincorporated business income Profit, rent, interest Depreciation Household income Education and hospitalization Provincial revenue Municipal revenue Municipal revenue Federal revenue	12 - 526 1,952 822 1,171 8,310 - - - 12,795	1,425 1,470 5,958 2,048 2,417 8,814 	7,775 6,363 5,486 40,156 112,230 49,669 108,861 20,247 23,042 15,000 3,816 392,649	22,458 14,151 48,919 22,036 30,057 56,604 98,948 57,284 34,007 121,784 38,445 130,354 675,039 80,274 - 14,602 146,774 539,466 122,331 204,672 117,628 766,646 34,738 49,923 21,999	78,549 20,888 56,122 74,866 344,914 128,733 377,670 120,477 256,356 221,077 195,977 431,900 2,307,531 205,149 - 28,600 249,900 809,887 122,333 234,488 117,622 1,049,233 8,666 85,177 53,219 70,477
2 3 4 5 6 7 8 9 10 11 12 13 14 11 15 11 16 17 18 19 20 20 20 20 20 20 20 20 20 20 20 20 20	Forestry products Primary fish Mining products Food, textiles Wood, paper products Steel, metal products Non-metallic, petroleum, chemical products Construction Transportation, communications Distribution All other services Total intermediate inputs Taxes Subsidies Non-competitive imports Wages and salaries Unincorporated business income Profit, rent, interest Depreciation Household income Education and hospitalization Provincial revenue Municipal revenue Huniport leakage	12 - 526 1,952 822 1,171 8,310 - - 12,795	1,425 1,470 5,958 2,048 2,417 8,814 - - 22,135	7,775 6,363 5,486 40,150 112,230 49,669 108,861 20,247 23,042 15,000 3,816 392,649	22,458 14,151 48,919 22,036 39,057 56,604 98,948 57,284 34,007 121,784 38,445 130,354 675,039 80,274 -14,602 146,774 539,466 122,331 204,672 117,628 766,646	78,549 20,888 56,129 74,869 344,914 128,736 377,670 120,472 256,356 221,078 195,976 431,905 2,307,531 205,144 - 28,602 249,902 809,888 122,331 234,484 117,622 8,668 85,177 53,215 70,471 326,378
2 3 4 5 6 7 8 9 10 11	Forestry products Primary fish Mining products Food, textiles Wood, paper products Steel, metal products Non-metallic, petroleum, chemical products Construction Transportation, communications Distribution All other services Total intermediate inputs Taxes Subsidies Non-competitive imports Wages and salaries Unincorporated business income Profit, rent, interest Depreciation Household income Education and hospitalization Provincial revenue Municipal revenue Municipal revenue Federal revenue	12 - 526 1,952 822 1,171 8,310 - - - 12,795	1,425 1,470 5,958 2,048 2,417 8,814 - - 22,135	7,775 6,363 5,486 40,150 112,230 49,669 108,861 20,247 23,042 15,000 3,816 392,649	22,458 14,151 48,919 22,036 39,057 56,604 98,948 57,284 34,007 121,784 38,445 130,354 675,039 80,274 -14,602 146,774 539,466 122,331 204,672 117,628 766,646 -23,331 204,672 21,999 205,608	78,549 20,888 56,129 74,869 344,914 128,736 377,670 120,472 256,356 221,078 195,976 431,905 2,307,531 205,149 - 28,602 249,902 809,887 122,331 234,484 117,628 1,049,236 8,668 85,177 53,215 70,471 326,378
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 19 20 21 22 22 23 24 25 26 26 27 27 27 27 27 27 27 27 27 27 27 27 27	Forestry products Primary fish Mining products Food, textiles Wood, paper products Steel, metal products Non-metallic, petroleum, chemical products Construction Transportation, communications Distribution All other services Total intermediate inputs Taxes Subsidies Non-competitive imports Wages and salaries Unincorporated business income Profit, rent, interest Depreciation Household income Education and hospitalization Provincial revenue Municipal revenue Import leakage Total primary inputs Factor incomes	12 - 526 1,952 822 1,171 8,310 - - - 12,795	1,425 1,470 5,958 2,048 2,417 8,814 - - 22,135	7,775 6,363 5,486 40,156 112,230 49,669 108,861 20,247 23,042 15,000 3,816 392,649 - 14,000 - 14,000	22,458 14,151 48,919 22,036 39,057 56,604 98,948 57,284 34,007 121,784 38,445 130,354 675,039 80,274 - 14,602 146,774 - 14,602 146,774 539,466 122,331 204,672 117,628 766,646 34,738 49,923 21,999 205,608 1,196,542	78,549 20,888 56,129 74,869 344,914 128,736 377,670 120,472 256,356 221,078 195,976 431,908 2,307,531 205,149 - 28,602 249,902 809,887 122,331 234,484 117,628 1,049,236 8,668 85,177 53,215 70,471 326,378 1,710,774
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 22 23 24 25 26 26 27 26 27 26 27 27 27 27 27 27 27 27 27 27 27 27 27	Forestry products Primary fish Mining products Food, textiles Wood, paper products Steel, metal products Non-metallic, petroleum, chemical products Construction Transportation, communications Distribution All other services Total intermediate inputs Taxes Subsidies Non-competitive imports Wages and salaries Unincorporated business income Profit, rent, interest Depreciation Household income Education and hospitalization Provincial revenue Municipal revenue Municipal revenue Import leakage Total primary inputs	12 - 526 1,952 822 1,171 8,310 - - - 12,795	1,425 1,470 5,958 2,048 2,417 8,814 	7,775 6,363 5,486 40,150 112,230 49,669 108,861 20,247 23,042 15,000 3,816 392,649	22,458 14,151 48,919 22,036 39,057 56,604 98,948 57,284 34,007 121,784 38,445 130,354 675,039 80,274 -14,602 146,774 539,466 122,331 204,672 117,628 766,646 34,738 49,923 21,999 205,608 1,196,542	78,549 20,888 56,129 74,869 344,914 128,736 377,670 120,472 256,356 221,078 195,976 431,905 2,307,531 205,149 - 28,602 249,902 809,887 122,331 234,484 117,628 1,049,236 8,668 85,177 53,219 70,471 326,378 1,710,774

TABLE 3.1 AR. Output and Supply Flows, J, M $\begin{array}{c} Atlantic\ Region,\, 1965 \\ Model\ I\ (12\ x\ 8) \end{array}$

		Agricultural products	Forestry products	Primary fish	Mining products	Food, textile		Steel, metal products
Item No.		1	2	3	4	5	6	7
				thou	ısands of dol	lars	10	
1	Agriculture	162,834	6,289	= 1				1
2	Forestry, fishing	200	91,716	96,275			960	i ne
3	Mining			=	291,300		- E	-
4	Food and textiles	=	=	==	=	515,0	092 25	
5	All other manufacturing	1	1,425	-	=		25 375,692	242,00
6	Construction	12	~	574	75		= =	
7	Transportation, communications, distribution	and 1	-	-	-		-	(6
8	All other services	-	탈	Œ.	=		= =	72
9	Total commodity output	162,834	99,430	96,275	291,300	515,1	376,677	242,00
10	Total imports	33,139	2,583	1,605	13,908	262,1	97,435	540,82
11	Total commodity supply	195,974	102,014	97,880	305,209	777,3	474,113	782,82
12	Total intermediate demand	59,420	81,242	92,311	49,970	67,2	271 150,649	249,68
13	Total domestic final demand	98,633	- 5,222	5,569	24,760	490,5		
14	Total exports	37,919	25,994	-	230,477	219,5	1	
15	Total demand	195,973	102,014	97,880	305,208	777,3	310 474,114	782,82
3	31	Non-metallic, petroleum, chemical products	Con- struction	Transport communic		istri- ition	Services, all other	Total industry output
		8	9	10	usands of do	11	12	13
1	Agriculture	-	1 -	re:	-	- 1	13,014	182,13
2	Forestry, fishing	_	=	=	_	=	=	188,95
3	Mining	=		-	_			291,30
4	Food and textiles	5	(+	-	-	-	_	515,12
5	All other manufacturing	189,844	1		-	_	-	808,99
6	Construction	_	737,13	6	-	-	-	737,13
7	Transportation, communications, distribution	=	fi fi	55	4,926	458,768	= 1	1,013,69
8	All other services	-	i a			=	997,834	997,83
9	Total commodity output	189,849	737,13	6 55	4,926	158,768	1,010,848	4,735,16
10	Total imports	70,886	22		-	-	2,108	1,024,67
11	Total commodity supply	260,736	737,13	6 55	4,926	158,768	1,012,956	5,759,84
2	Total intermediate demand	164,935	85,77	6 30	4,309	101,183	343,653	1,750,41
.3	Total domestic final demand	90,198	651,35	9 19	1,677	342,584	661,059	3,023,12
14	Total exports	5,601	-	5	8,938	15,000	8,241	986,31

TABLE 3.2AR. Inputs and Demand Flows, B, D, E Atlantic Region, 1965 Model I (12 x 8)

		Agri- culture	Forestry, fishing	Mining	Food, textiles	All other manufacturing
tem No,		1	2	3	4	5
				housands of dollar		
1	Agricultural products Forestry products	2,993 1,407	81	839	56,062 10	78,985
3 4	Primary fish Mining products	1,411	808	132	92,311 426	20,60
5 6	Food, textiles Wood, paper products	23,997 848	5,782 2,329	3,839	33,263 19,887	1,729 35,43
7 8	Steel, metal products Non-metallic, petroleum, chemical products	5,568 15,398	11,958 7,595	31,708 7,848	10,486 5,065	55,198 21,55
9 10	Construction	5,247 5,976	2,030 6,294	5,196 13,983	3,649 31,136	6,51 53,08
11 12	Distribution All other services	4,333 20,706	2,562 7,222	3,471 22,275	11,452 17,531	23,12 35,20
13	Total intermediate inputs	87,884	46,665	89,293	281,283	331,48
14	Taxes	5,506	9,014	8,764	5,686	8,17
15 16	Subsidies	- 5,900 1,358	- 689 664	- 96 12,715	66,588	-´99 146,29
17 18	Wages and salaries Unincorporated business income	18,334 57,461	67,184 36,577	90,006 7,677	96,199 5,846	195,37 8,42
19 20	Profit, rent, interest	3,428 14,065	16,905 12,628	53,871 29,069	46,664 12,855	87,37 32.86
21	Household income Education and hospitalization	79,136	117,657	100,861	124,259	223,67
22 23 24	Provincial revenue Municipal revenue	- 562 5,355	8,942 187	6,337 2,588	3,998 3,508	5,76 5,69
25 26	Federal revenue Import leakage	- 5,100 1,358	61 2,808	5,316 57,835	9,916 79,302	18,10 191,40
27	Total primary inputs	94,252	142,285	202,007	233,840	477,51
28	Factor incomes	79,223	120,667	151,555	148,710	291,17
29 30	Gross Domestic Product Employment	92,894 29,500	141,621 41,200	189,291 16,053	167,251 30,610	331,21 39,85
31	Total output	182,137	188,950	291,300	515,123	808,99
		Con-	Transportation,	Services,	D1	Capital
		struction	communications, distribution	all other	Personal consumption	formation
		struction 6	distribution 7	all other	consumption 9	
1	Agricultural products	6	distribution 7	all other	consumption 9	formation
2	Agricultural products Forestry products Primary fish		distribution 7	all other	9 s 102,038 1,792	formation
2 3 4	Forestry products Primary fish Mining products	215 _ _ 14,956	distribution	all other 8 housands of dollar. 11,362	9 8 102,038 1,792 5,569 12,210	formation
2 3 4 5 6	Forestry products Primary fish Mining products Food, textiles Wood, paper products	215 - 14,956 809 64,474	distribution 7 tl 10 267 1,090 2,943	all other 8 housands of dollar 11,362 597 20,893	9 8 102,038 1,792 5,569 12,210 479,122 37,603	formation
2 3 4 5 6 7 8	Forestry products Primary fish Mining products Food, textiles Wood, paper products Steel, metal products Non-metallic, petroleum, chemical products	215 - 14,956 809 64,474 100,544 66,378	distribution 7 to 10 267 1,090 2,943 25,511 29,157	all other 8 housands of dollar 11,362 597 20,893 8,712 11,940	9 8 102,038 1,792 5,569 12,210 479,122	formation 10
2 3 4 5 6 7 8 9	Forestry products Primary fish Mining products Food, textiles Wood, paper products Steel, metal products Non-metallic, petroleum, chemical products Construction Transportation, communications	215 - 14,956 809 64,474 100,544 66,378 496 59,503	distribution 7 10 267 1,090 2,943 25,511 29,157 13,285 88,596	all other 8 housands of dollar. 11,362 597 20,893 8,712 11,940 49,359 45,736	9 102,038 1,792 5,569 12,210 479,122 37,603 120,053 79,149 146,272	formation 10
2 3 4 5 6 7 8 9 10	Forestry products Primary fish Mining products Food, textiles Wood, paper products Steel, metal products Non-metallic, petroleum, chemical products Construction	215 - 14,956 809 64,474 100,544 66,378	distribution 7 tl 267 1,090 2,943 25,511 29,157 13,285	all other 8 housands of dollar 11,362 597 20,893 8,712 11,940 49,359	9 s 102,038 1,792 5,569 12,210 479,122 37,603 120,053 79,149	formation 10
2 3 4 5 6 7 8 9 10 11	Forestry products Primary fish Mining products Food, textiles Wood, paper products Steel, metal products Non-metallic, petroleum, chemical products Construction Transportation, communications Distribution	215 - 14,956 809 64,474 100,544 66,378 496 59,503 37,109	distribution 7 10 267 1,090 2,943 25,511 29,157 13,285 88,596 14,552	all other 8 housands of dollar 11,362 597 20,893 8,712 11,940 49,359 45,736 4,580	9 S 102,038 1,792 5,569 12,210 479,122 37,603 120,053 79,149 146,272 325,927	10
2 3 4 5 6 7 8 9 10 11 12 13	Forestry products Primary fish Mining products Food, textiles Wood, paper products Steel, metal products Non-metallic, petroleum, chemical products Construction Transportation, communications Distribution All other services Total intermediate inputs Taxes Subsidies	215 - 14,956 809 64,474 100,544 66,378 496 59,503 37,109 51,747 396,236	distribution 7 10 267 1,090 2,943 25,511 29,157 13,285 88,596 14,552 123,091 298,506 30,101 - 24,186	all other 8 housands of dollar. 11,362 597 20,893 8,712 11,940 49,359 45,736 4,580 65,878 219,062	consumption 9 102,038 1,792 5,569 12,210 479,122 37,603 120,053 79,149 146,272 325,927 619,130 1,928,870 308,812	10
2 3 4 5 6 7 8 9 10 11 12 13	Forestry products Primary fish Mining products Food, textiles Wood, paper products Steel, metal products Non-metallic, petroleum, chemical products Construction Transportation, communications Distribution All other services Total intermediate inputs Taxes	215 - 14,956 809 64,474 166,378 496 59,503 37,109 51,747 396,236	distribution 7 10 267 1,090 2,943 25,511 29,157 13,285 88,596 14,552 123,091 298,506 30,101 - 24,186 12,566 438,917	all other 8 housands of dollar 11,362 597 20,893 8,712 11,940 49,359 45,736 4,580 65,878 219,062 101,876 - 5,330 64,980	09 S 102,038 1,792 5,569 12,210 479,122 37,603 120,053 79,149 146,272 325,927 619,130 1,928,870	10 10 236,02 373,69
2 3 4 5 6 7 8 9 10 11 11 12 13	Forestry products Primary fish Mining products Food, textiles Wood, paper products Steel, metal products Non-metallic, petroleum, chemical products Construction Transportation, communications Distribution All other services Total intermediate inputs Taxes Subsidies Non-competitive imports Wages and salaries Unincorporated business income	6 215 - 14,956 809 64,474 100,544 66,378 496 59,503 37,109 51,747 396,236 15,874 31,759 231,935 20,900	distribution 7 10 267 1,090 2,943 25,511 29,157 13,285 88,596 14,552 123,091 298,506 30,101 - 24,186 12,566 438,917 72,098	all other 8 housands of dollar. 11,362 597 20,893 8,712 11,940 49,359 45,736 4,580 65,878 219,062 101,876 - 5,330 64,980 217,042 80,490	09 s 102,038 1,792 5,569 12,210 479,122 37,603 120,053 79,149 146,272 325,927 619,130 1,928,870 308,812 201,086	10 10 236,02 373,69
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 19 19 19 19 19 19 19 19 19 19 19 19	Forestry products Primary fish Mining products Food, textiles Wood, paper products Steel, metal products Non-metallic, petroleum, chemical products Construction Transportation, communications Distribution All other services Total intermediate inputs Taxes Subsidies Non-competitive imports Wages and salaries Unincorporated business income Profit, rent, interest Depreciation	215 - 14,956 809 64,474 100,544 66,378 496 59,503 37,109 51,747 396,236 15,874 13,759 231,935 20,900 26,780 13,650	distribution 7 10 267 1,090 2,943 25,511 29,157 13,285 88,596 14,552 123,091 298,506 30,101 - 24,186 12,566 438,917 72,098 92,899 92,700	all other 8 housands of dollar. 11,362 597 20,893 8,712 11,940 49,359 45,736 4,580 65,878 219,062 101,876 - 5,330 64,980 217,042 80,490 214,977 104,735	102,038 1,792 5,569 12,210 479,122 37,603 120,053 79,149 146,272 325,927 619,130 1,928,870 308,812 201,086	10
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 19 19 19 19 19 19 19 19 19 19 19 19	Forestry products Primary fish Mining products Food, textiles Wood, paper products Steel, metal products Non-metallic, petroleum, chemical products Construction Transportation, communications Distribution All other services Total intermediate inputs Taxes Subsidies Non-competitive imports Wages and salaries Unincorporated business income Profit, rent, interest Depreciation Household income Education and hospitalization	215 - 14,956 809 64,474 100,544 66,378 496 59,503 37,109 51,747 396,236 15,874 - 31,759 231,935 20,900 26,780 13,650 265,902	distribution 7 10 267 1,090 2,943 25,511 29,157 13,285 88,596 14,552 123,091 298,506 30,101 - 24,186 12,566 438,917 72,098 92,899 92,700 546,686	all other 8 housands of dollar 11,362 597 20,893 8,712 11,940 49,359 45,736 4,580 65,878 219,062 101,876 - 5,330 64,980 217,042 80,490 214,977 104,735 412,225	102,038 1,792 5,569 12,210 479,122 37,603 120,053 79,149 146,272 325,927 619,130 1,928,870 308,812 201,086	10 10 236,02 373,69
2 3 4 5 6 7 8 9 10 11 11 12 13 14 15 16 17 18 19 19 19 19 19 19 19 19 19 19 19 19 19	Forestry products Primary fish Mining products Food, textiles Wood, paper products Steel, metal products Non-metallic, petroleum, chemical products Construction Transportation, communications Distribution All other services Total intermediate inputs Taxes Subsidies Non-competitive imports Wages and salaries Unincorporated business income Profit, rent, interest Depreciation Household income Education and hospitalization Provincial revenue Municipal revenue	215 - 14,956 809 64,474 100,544 66,378 496 59,503 37,109 51,747 396,236 15,874 - 31,759 231,935 20,900 26,780 13,650 265,902 9,521 4,147	distribution 7 10 267 1,090 2,943 25,511 29,157 13,285 88,596 14,552 123,091 298,506 30,101 - 24,186 12,566 438,917 72,098 92,989 92,700 546,686 29,413 7,631	all other 8 housands of dollar 11,362 597 20,893 8,712 11,940 49,359 45,736 4,580 65,878 219,062 101,876 - 5,330 64,980 217,042 80,490 214,977 104,735 412,225 36,537 68,683	102,038 1,792 5,569 12,210 479,122 37,603 120,053 79,149 146,272 325,927 619,130 1,928,870 308,812 201,086	10 10 236,02 373,69
2 3 4 5 6 7 8 9 10 11 12 13 14 5 16 17 18 19 20 11 11 12 12 12 13 14 15 16 16 17 17 18 18 18 18 19 19 19 19 19 19 19 19 19 19 19 19 19	Forestry products Primary fish Mining products Food, textiles Wood, paper products Steel, metal products Non-metallic, petroleum, chemical products Construction Transportation, communications Distribution All other services Total intermediate inputs Taxes Subsidies Non-competitive imports Wages and salaries Unincorporated business income Profit, rent, interest Depreciation Household income Education and hospitalization Provincial revenue	215 - 14,956 809 64,474 100,544 66,378 496 59,503 37,109 51,747 396,236 15,874 31,759 231,935 20,900 26,780 26,780 265,902 9,521	distribution 7 10 267 1,090 2,943 25,511 29,157 13,285 88,596 14,552 123,091 298,506 30,101 - 24,186 12,566 438,917 72,098 92,989 92,700 546,686 29,413	all other 8 housands of dollar. 11,362 597 20,893 8,712 11,940 49,359 45,736 4,580 65,878 219,062 101,876 - 5,330 64,980 217,042 80,490 214,977 104,735 412,225 36,537	102,038 1,792 5,569 12,210 479,122 37,603 120,053 79,149 146,272 325,927 619,130 1,928,870 308,812 201,086	10 10 236,02 373,69
2 3 4 5 6 7 8 9 10 11 11 12 13 14 15 16 17 18 19 20 20 20 20 20 20 20 20 20 20 20 20 20	Forestry products Primary fish Mining products Food, textiles Wood, paper products Steel, metal products Non-metallic, petroleum, chemical products Construction Transportation, communications Distribution All other services Total intermediate inputs Taxes Subsidies Non-competitive imports Wages and salaries Unincorporated business income Profit, rent, interest Depreciation Household income Education and hospitalization Provincial revenue Municipal revenue Municipal revenue Federal revenue	215 - 14,956 8099 64,474 100,544 66,378 496 59,503 37,109 51,747 396,236 15,874 - 31,759 231,935 20,900 26,780 13,650 265,902 - 9,521 4,147 8,875	distribution 7 10 267 1,090 2,943 25,511 29,157 13,285 88,596 14,552 123,091 298,506 30,101 - 24,186 12,566 438,917 72,098 92,89 92,700 546,686 29,413 7,631 5,580	all other 8 housands of dollar 11,362 597 20,893 8,712 11,940 49,359 45,736 4,580 65,878 219,062 101,876 - 5,330 64,980 217,042 80,490 214,977 104,735 412,225 36,537 68,683	102,038 1,792 5,569 12,210 479,122 37,603 120,053 79,149 146,272 325,927 619,130 1,928,870 308,812 201,086	10 10 236,02 373,69
2 3 4 5 6 7 8 9 10 111 12 13 14 5 16 17 8 19 20 1 22 23 24 4 25 6 27 28	Forestry products Primary fish Mining products Food, textiles Wood, paper products Steel, metal products Non-metallic, petroleum, chemical products Construction Transportation, communications Distribution All other services Total intermediate inputs Taxes Subsidies Non-competitive imports Wages and salaries Unincorporated business income Profit, rent, interest Depreciation Household income Education and hospitalization Provincial revenue Municipal revenue Import leakage Total primary inputs Factor incomes	215 - 14,956 809 64,474 100,544 66,378 496 59,503 37,109 51,747 396,236 15,874 31,759 231,935 20,900 26,780 26,780 26,780 26,780 340,899 279,615	distribution 7 10 267 1,090 2,943 25,511 29,157 13,285 88,596 14,552 123,091 298,506 30,101 -24,186 12,566 438,917 72,098 92,989 92,700 546,686 29,413 7,631 5,580 33,175 715,187	all other 8 housands of dollar. 11,362 597 20,893 8,712 11,940 49,359 45,736 4,580 65,878 219,062 101,876 - 5,330 64,980 217,042 80,490 214,977 104,735 412,225 36,537 68,683 22,659 133,930 778,771	102,038 1,792 5,569 12,210 479,122 37,603 120,053 79,149 146,272 325,927 619,130 1,928,870 308,812 201,086 	10 10 236,02: 373,696
2 3 4 5 6 7 8	Forestry products Primary fish Mining products Food, textiles Wood, paper products Steel, metal products Non-metallic, petroleum, chemical products Construction Transportation, communications Distribution All other services Total intermediate inputs Taxes Subsidies Non-competitive imports Wages and salaries Unincorporated business income Profit, rent, interest Depreciation Household income Education and hospitalization Provincial revenue Municipal revenue Municipal revenue Import leakage Total primary inputs	215 	distribution 7 10 267 1,090 2,943 25,511 29,157 13,285 88,596 614,552 123,091 298,506 30,101 -24,186 12,566 438,917 72,098 92,700 546,686 29,413 7,631 5,580 33,175 715,187	all other 8 housands of dollar 11,362 597 20,893 8,712 11,940 49,359 45,736 4,580 65,878 219,062 101,876 - 5,330 64,980 217,042 80,490 214,977 104,735 412,225 36,537 68,683 22,659 133,930 778,771	102,038 1,792 5,569 12,210 479,122 37,603 120,053 79,149 146,272 325,927 619,130 1,928,870 308,812 201,086	formation

TABLE 3.2 AR. Input and Demand Flows, B, D, E—Concluded Atlantic Region, 1965

Model I (12 x 8)

		14.	iodel I (12 X	· · · · · · · · · · · · · · · · · · ·					
		Inventory change	Federal government defence	gover	leral nment ivil	Provincia governme			Hospital
Item No.		11	12		13	14	15	16	17
					the	ousands of o	ioliars		
1 2 3	Agricultural products Forestry products Primary fish	- 5,214 - 7,134	81 		186 3		95	68 –	1,277
4 5 6 7 8 9 10	Mining products Food, textiles Wood, paper products Steel, metal products Non-metallic, petroleum, chemical products Construction Transportation, communications Distribution	7,597 1,437 1,480 418 - 622	2,133 2,080 1,046 24,340 2,510 18,345 2,624 3,187		181 700 464 18,636 1,169 50,856 5,425 2,006	6 4,1 6,3 2,0 134,0 19,0 2,6	112 54 624 3, 114 1, 160 19, 161 7, 172	346 7,000 976 3,060	8 6,066 0 1,927 1 5,601 1 2,011 3 19,255 2 3,446
12 13	All other services	- 2.025	7,185		3,646	11,0		089 6,54	
13	Total intermediate inputs	- 2,035	63,533		83,275	180,2	42,4	65,60	51,442
14 15 16 17 18 19 20 21	Taxes Subsidies Non-competitive imports Wages and salaries Unincorporated business income Profit, rent, interest Depreciation Household income		2,006 141,641 — — 141,641		1,298 31,494 31,494	3,9 60,9 46,7 78,2	98 7,4	14,870	3 75,927 5 3,654
22	Education and hospitalization	\$2 B	-		-	70,2	24,0	- 125,85	70,363
23 24	Provincial revenue	-	-		-		-		2
25	Federal revenue	5	<u> </u>		3	100	=	-	_
26	Import leakage	- F	2,006	1	1,298	33,4	43 7,9	002 17,17	16,575
27	Total primary inputs	=	143,647	1	32,791	111,7	21 32,8	141,00	93,558
28 29 30	Factor incomes Gross Domestic Product Employment	2	141,641 141,641 23,600	1	31,494 31,494 25,200	107,7 107,7 12,1	78 29,7	792 134,059 792 134,059 780 29,400	79,581
31	Total output	- 2,035	207,180	2	16,067	291,9	69 75,2	206,610	145,000
		Total			Ex	ports		Total	T
		domestic demand	Foreig	gn	Ca	nada	Total	intermediate demand	Total demand
		18	19		:	20	21	22	23
					th	ousands of	dollars		
1 2 3 4 5 6 7 8 9 10 11 12	Agricultural products Forestry products Primary fish Mining products Food, textiles Wood, paper products Steel, metal products Non-metallic, petroleum, chemical products Construction Transportation, communications Distribution All other services	98,63 - 5,22 5,56 24,76 490,53 53,16 418,80 90,19 651,35 191,67 342,58 661,06	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	4,749 1,281 0,070 0,931 1,015 12,656 1,927 		23,170 4,712 60,407 98,570 49,285 91,680 3,802 - 35,405 9,000 8,235	37,919 25,994 230,477 219,502 270,301 114,336 5,730 58,938 15,000 8,241	59,420 81,242 92,311 49,970 67,271 150,649 249,687 164,935 85,776 304,309 101,183 343,653	195,973 102,014 97,880 305,208 777,310 474,113 782,829 260,863 737,135 554,925 458,767 1,012,955
13	Total intermediate inputs	3,023,12	2 60	2,170		384,270	986,441	1,750,410	5,759,972
14 15 16 17 18	Taxes Subsidies Non-competitive imports Wages and salaries Unincorporated business income	308,81 232,26 551,61	7 3	- - - -		15,500	- 15,500 -	184,998 - 37,201 336,928 1,354,996 289,471	493,810 - 52,701 569,195 1,906,609 289,471
19 20	Profit, rent, interest	72,73	2	-		-	-	542,996	615,729
21	Household income	577,12		_		_	_	312,570 1,870,405	312,570 2,447,533
22	Education and hospitalization	18,44	2	- 1		-	_		18,442
23 24	Provincial revenue	133,15 9,27	3	= 1		_	_	99,954 97,799	233,106 107,072
25	Federal revenue	147,94	4	- 1		- 15,500	- 15,500	65,415	197,859
26 27	Import leakage	279,48 1,165,42		_		- 15,500	- 15,500	538,612 2,984,758	818,097 4,134,682
		. ,				10,000	15,500	2,704,730	4,134,002
28 29 30	Factor incomes Gross Domestic Product Employment	624,34 933,15 124,03	8	<u>.</u>		- 15,500	- 15,500	2,187,460 2,647,825 431,949	2,811,805 3,565,482 555,979
31	Total output	4,188,54	7 60	2,170		368,770	970,941	4,735,169	9,894,656

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LIST 1. Classification of 180 Commodities and 97 Industries used to Compile the Original Atlantic Provinces Input-output Tables, 1960

_	Atlantic Provinces Input-output Tables, 1960						
No.	Commodities	Input-output commodity number	S.I.C. number of principal producer	Input-output industry number			
	Agricultural products (11):			3 - 25 - 1)			
1	Livestock	10001	010	1			
2	Poultry	10002					
3	Dairy Fresh milk Farm butter	10003					
4	Eggs	10004					
5	Potatoes	10005					
6	Vegetables Corn Other Atlantic vegetables	10006					
7	Atlantic fruit Apples Blueberries Strawberries Other Atlantic fruit	10007					
8	Feed and seed crops Oats Clover and grain seed Hay and clover	10008					
9	Wool and furs	10009					
10	Maple, honey and tobacco Honey Maple products Tobacco	10010					
11	Miscellaneous agricultural products (forest products – 030)	10011					
	Primary forest products (3):		1				
12	Logs and bolts	10101	030	2			
13	Pulpwood	10102					
14	Other forest products Fuelwood Poles and piling Round mine timber Fence posts Fence rails Wood for charcoal Miscellaneous roundwood Christmas Trees	10103					
	Primary fish (2):						
15	Primary molluscs and crustaceans Lobster Scallops Squid and other products	10201	040	3			
16	Primary groundfish, pelagic and estuarial Groundfish Herring All other fish, etc.	10301	041	4			

LIST 1. Classification of 180 Commodities and 97 Industries used to Compile the Original
Atlantic Provinces Input-output Tables, 1960 — Continued

No.	Commodities	Input-output commodity number	S.I.C. number of principal producer	Input-output industry number
	Mining products (11):			
17	Non-ferrous metals	10401	050	5
18	Iron ore	10402		
19	Coal	10403	060	6
20	Gypsum	10404	070	7
21	Salt	10405		
22	Peat moss	10406		
23	Quartz	10407 10408		
24	Other nonmetallic minerals	10408	062.065	
25	Petroleum and natural gas	10410	063,065 080	8
26	Stone, sand and gravel	10410	090	9
27	Contract drilling	10411	090	9
	Manufactured products (128):			
	Food processing (30):		· C	
28	Meat, fresh, frozen and cured	00101 00102	101	10
29 30	Meat, canned and processed Lard	00102		
31	Skins, hides and by-products (Poultry – 103)	00104		
32	Poultry	00201	103	11
33	Fluid milk and cream Milk Cream	00301	105	12
34	Butter and cheese	00303		
35 36	Milk, powdered and canned	00305 00306		
37	Lobster and other shellfish, in shell or shucked	00401	110	13
38 39	Canned shellfish products	00402 00403		
40	Groundfish, etc., fresh, frozen and salted	00501	111	14
41 42	Canned fish other than shellfish Fishery by-products Fish ore Fish meal Glue Seagrasses Seal skins Scales, etc.	00502 00503	20	
	Miscellaneous	00001		15
43	Processed vegetable Vegetables, frozen Vegetables, canned Pickles	00601	112	15
44	Apple products Vinegar (cider) Apple juice Other apple products	00603	112	15
45	Fruit products, including jam Fruit, frozen Fruit, canned Jams, jellies, etc.	00606		
46	Animal feeds Animal feed Custom milling	00701	123	16

LIST 1. Classification of 180 Commodities and 97 Industries used to Compile the Original Atlantic Provinces Input-output Tables, 1960 —Continued

		Input-output	S.I.C. number	Input-output
No.	Commodities	commodity number	of principal producer	industry number
	Manufactured products (128) - Continued:	1		
	Food processing (30) –Concluded:			
47	Bread	00801	128-129	17
48	Other bakery products Biscuits and sweet bakeries Other bakery products	00802	120 129	.,
49	Confectionery	00901	131	18
50	Sugar	01001	133	19
51	Tea and coffee	01101	139	20
52	Margarine	01108		
53	Spices, fruit, nuts, etc. Spices, seasoning Peanut butter Raisins, currants, peanuts Baking powder Miscellaneous products (Preserves and jams - 112) Potato products	01103		
54	Soft drinks	01201	141	21
55	Alcoholic spirits	01301	143	22
56	Beer	01401	145	23
57	Vinegar and wine	01501	147	15
	Footwear, clothing and textiles (13):			
58	Footwear	01701	174	24
59	Gloves, luggage and leather products	01801	175-179	25
60	Broad woven fabrics Broad woven cotton fabrics Broad woven fixed fabrics	01901	183	26
61	Cotton yarn	01906		
62	Felts and waste	01904		
63	Wool yarn Wool yarn Custom processing	02001	193	27
64	Wool fabrics	02101	197	
65	Cordage and twine Rope Cordage and twine Fishing nets Yarn and other products	02201	213	28
66	Narrow fabrics Cotton knit fabrics Ribbon and woven narrow fabrics	02301	214	
67	Canvas products	02401	221	
68	Cotton and jute bags	02501	223	29

LIST 1. Classification of 180 Commodities and 97 Industries used to Compile the Original Atlantic Provinces Input-output Tables, 1960 — Continued

No.	Commodities	Input-output commodity number	S.I.C. number of principal producer	Input-output industry number
	Manufactured products (128) — Continued			
			,	
69	Footwear, clothing and textiles (13) – Concluded	02701	231	30
70	Hosiery Clothing, including furs Knitted clothing Men's clothing Women's and children's clothing Fur apparel and custom work Hat and cap makers material Hats and caps	02702	239 243 244-245 246 247	31
	Wood and paper products (23):			
71	Lumber and ties	02801	251	32
72	Lath and shingle	02805	251	32
73	Other sawmill products Woodwaste, pulpchips, logs ends Lobster traps Spool wood and small squares Custom work (Fence pickets - 030) (Box shooks - 256) (Sash and door - 254 (Cooperage - 259) (Moulding - 254)	02806		
74	Veneer and plywood	02901	252	33
75	Sash and door	03001	254	34
76	Hardwood flooring	03007		
77	Other mill work Moulding Kitchen units, cabinets Prefabricated buildings Mill work, n.e.s. Custom work Other wood products (Furniture – 261-268) (Lumber – 251) (Wooden boxes – 256) (Slabs and edgings – 251) (Potato barrels – 259)	03002		
78	Wooden boxes Boxes and crates Custom work	03101	256	35
79	Coffins and caskets Coffins and caskets Custom work	03201	258	
80		03301	259	36
81	Handles and turnings, etc. Handles and turnings Excelsior and particle board Oars and paddles Other products	03302		
82		03304	259	

LIST 1. Classification of 180 Commodities and 97 Industries used to Compile the Original Atlantic Provinces Input-output Tables, 1960 — Continued

No.	Commodities	Input-output commodity number	S.I.C. number of principal producer	Input-output industry number
	Manufactured products (118) — Continued:			
	Wood and paper products (23) – Concluded:			
83	Furniture and repairs Upholstcred repairs Other household furniture Other furniture Institutional furniture Springs, beds, mattresses Other products Custom work (Sash and door - 254)	03401	261 - 268	37
0.4	(Mill work – 254)	02501	271	20
84 85	Newsprint Wood pulp	03501 03502	271	38
86	Paper board, container grade, and building paper and board	03504		
87	Tissue paper etc. Pulp and paper by-products Cores of paper Toilet and tissue paper	03505		
88	Pulp and paper by-products, e.g. steam	03506		
89	Asphalt shingles and cement Shingles Liquid roof coating Asphalt cements	03601	272	39
90	Folding and set-up boxes	03701	273	40
91	Paper bags	03704		
92	Paper containers and closures Paper plates Eggs case fillers Milk bottle caps (paper) etc.	03801	274	
93	Printing and publishing	03901	286 - 289	41
	Metal products (26):			Ĭ,
94	Semi-finished steel Steel ingots Hot rolled steel (blooms, billets, etc.)	04008	291	42
95	Electric steel castings	04009	291	42
96	Rails and tie plates	04011		
97	Wire rods and other products	04012		
98	Concrete reinforcing and other steel bars Concrete reinforcing Hot rolled bars – All grades	04013		
99	Coke and coke oven gas	04001		
100	Tar	04004		
101	Iron foundry products Grey iron castings Water pipes, municipal casting Zinc products Other products Repairs	04101	294-298	43
102	Boilers and tanks	04201	301	44

LIST 1. Classification of 180 Commodities and 97 Industries used to Compile the Original Atlantic Provinces Input-output Tables, 1960 — Continued

No.	Commodities	Input-output commodity number	S.I.C. number of principal producer	Input-output industry number
	Manufactured products (128) - Continued:			
	Metal products (26) — Concluded:			
103 104	Oil burner	04205 04207	302	45
105	Other steel products and repair Other steel products Custom and repair work (Machinery – 315) (Concrete reinforcing bars – 291) (Nails, nuts and screws – 305)	04208	301	44
106	Metal doors and windows, etc. Aluminum doors and windows Architectural iron and steel Repair work	04301	303	46
107	Metal containers, including fish cans	04401	304	47
108 109	Culvert pipe and sheet metal Other metal stampings	04402 04403	309 304	51 47
107	Pipe and elbow roofing corner beads Tin plate scrap Custom and repair work	04403	304	47
110	Wire and wire fencing Fencing mesh, steel strapping, etc. Wire, plain, coated, barbed	04501	305-306	48
111 112	Nails, staples, nuts, bolts	04502		
$11\overline{3}$	Hand tools and builders hardware Furnaces and ducts	04505 04601	307	49
114 115 116	Machine shops custom work and repairs Axles and other forgings Hydrants and valves Valves Hydrants	04701 04802 04804	308 309	50 51
117	Barrels, drums and repair Highways guardrail Other products Repair and custom work (Machinery — 315) (Tanks and boilers — 301-302)	04807		
118	Machinery parts and repair	04901	315	52
119	Frozen food cabinets	05001	316	53
	Transportation equipment and electrical products (11):			
120	Aircraft parts and repair Aircraft parts Aircraft repair	05101	321	54
121	Truck, body and trailers and parts Bus and truck bodies, trailer Motor vehicle parts Custom work	05201	324	55
122	Rolling stock, parts and repair	05301	326	56
123	Boats	05401	327-328	57

LIST 1. Classification of 180 Commodities and 97 Industries used to Compile the Original Atlantic Provinces Input-output Tables, 1960 — Continued

	Atlantic Provinces Input-output Tables, 19	– Continued		,
No.	Commodities	Input-output commodity number	S.I.C. number of principal producer	Input-output industry number
124	Transportation equipment and electrical products (11) – Concluded: Ships and vessels	05403		
125	Industrial jobs Naval and commercial vehicles Ship and boat repair, naval and commercial (Ships machinery - 315)	05409		
126	(Storage tanks - 301-302) Stoves and heaters	05501	332	58
127 128 129	Radar and electronic instruments Radio, record players and parts Electronic tubes and repair Tubes Repair	05601 05602 05603	335	59
130	(Telephone materials – 338) Electric wire and cable Electric wire and cable Telephone wire Other wire and cable	05701	338	60
131 132 133	Non-metallic mineral products (10): Cement Lime Gypsum products Wallboard, lath, sheeting Gypsum plaster	05801 05901 06001	341 343 345	61 62 63
134	Gypsum blocks Bricks and blocks Brick-clay Gravel, cinder and other aggregates Bricks and blocks	06101	347,348,351 351 347-348	64
135	Concrete pipe, tile, flue lining Concrete pipe Other concrete products Tile Concrete pipe Sewer pipe	06103	347-348 351	
136 137 138 139 140	Concrete ready mix Fire clay and other refractory products Stone products Mineral wool products Asbestos products	06104 06105 06201 06301 06401	347-348 351 353 354 355	65 66 67
141	Petroleum and chemical products (9): Gasoline	06501	365	68
142	Fuel oils Aviation fuel Fuel oils	06502		
143	Asphalt, liquid, gases, etc. Naphtha specialties Asphalt Liquid gases and other products	06503		
144 145 146	Mixed fertilizer Paints and varnishes Oxygen, acetylene and other gases Acetylene CO2	06601 06701 06801	372 375 376-378-379 378	69 70 71
147	Hydrogen, nitrogen, neon gas, etc. Oxygen Cleaning and wahings compounds	06807	376-379	
148	Boiler chemicals Washing compounds Sulphuric acid	06804	378	
0	a	E 30001		1

LIST 1. Classification of 180 Commodities and 97 Industries used to Compile the Original Atlantic Provinces Input-output Tables, 1960 — Concluded

	Commodities	Input-output commodity number	S.I.C. number of principal producer	Input-output industry number
149	Petroleum and chemical products (9) — Concluded: Coal tar products Pitch Creosote Tar Coal tar oil Coke, pitch Miscellaneous products Contract work Miscellaneous textile and leather specialties	06802	376-379	71
	Miscellaneous manufactures (6):			
150 151	Venetian blinds Fabricated plastic products Polyethylene Other plastic fabricated products Signs and displays	06901 07001	384 385-397	72 73
152 153	Brooms and brushes	07101 07109	383 399	74 75
154	Miscellaneous personal custom-made articles Ophthalmic and dental work	07102	153-381-374	75
	Custom work in dental labs Chewing tobacco Patent medicines Wooden toys Stamps and stencils		153 374 393,399 399	
155	Scrap iron	07201	E .	76
	Service (25):			
156 157 158 159	Electricity Wholesale trade Retail trade Construction – Non-residential	57201 60010 60011 40010	572 602-631 404,406	77 78 79 81,82
160	Construction – Residential	40011	409,421	80
161	Transportation and storage Air and rail Water Bus and taxi Trucking Moving and storage	50010	501-527	83 84 85 86 87
162 163	Radio and television services	54310 54311	543 544,545	88 89
164	Water and gas distribution	57410	574,576	90
165 166	Motor vehicle maintenance and operation Travel and entertainment	70010 71010		91 92
167	Financial charges (short-term)	73010	702-737	93
168 169	Gross land and building rent (commercial) Property insurance	73011 73012		
170	Equipment rental	73013		
71	Gross dwelling rents Hotel, restaurant and catering services	74010 75010	875,876	94 95
173	Cleaning and laundry services	76014	874,897	96
174 175	Domestic services	76013 76011	873 851,853,859, 871,872,877, 878,879,893, 899	
176	Medical services	76012	823,825,827	
77	Donations and charity services	76010	828,831	
178	Legal, audit, architectural and other professional services	77012	861,864,866, 869,894,896,	97
179 180	Advertising services	75010 75010	899 862 010	1

LIST 2. Classification of 71 Industries of the Completed (Confidential) 1960 Tables

	(Confidential) 1960 Tables	
Input-output industry number	Input-output industries	S.I.C. number
1	Agriculture	010
2	Forestry	031
3	Fishing (shellfish)	041
4	Fishing (all other)	041
5	Metal mining and contract drilling	053,056,058 096,098,099
6	Coal mining	061
7	Non-metallic mineral mining	071,073,077,079
8	Quarries and sandpits	083,087
9	Meat products	101
10	Poultry processors	103
11	Dairy products	105
12	Shellfish products	111
13	Other fish products	111
14	Fruits and vegetables	112,147
15	Feed manufacturers	123
16	Biscuits and bakeries	128,129
17	Confectionery manufacturers	131
18	Sugar refineries	133
19	Miscellaneous foods	139
20	Soft drink manufacturers	141
21	Distilleries	143
22	Breweries	145
23	Shoe factories	174
24	Miscellaneous leather products	175,179
25	Cotton yarn and cloth mills	183
26	Wool yarn mills and cloth mills	193,197
27	Cordage and canvas products	213,214,221, 223,229
28	Hosiery, knitting and clothing mills	231,239,243,244,
29	Sawmills and other wood products	246.247 251,252,254, 256,258
30	Miscellaneous wood industries	259
31	Furniture industries	261, 266, 268
32	Pulp and paper mills	271
33	Paper converters	272,273,274
34	Printing and publishing	286, 287, 288, 289
35	Iron and steel mills	291

LIST 2. Classification of 71 Industries of the Completed (Confidential) 1960 Tables — Concluded

Input-output industry number	Input-output industries	S.I.C. number
36	Iron foundries	294,298
37	Fabricated structural metal	301,302
38	Miscellaneous metal fabricating	303,304,309
39	Wire and wire products	305,306
40	Machinery and equipment	307,308,315,316
41	Aircraft parts	321
42	Truck bodies and trailers	324,325,329
43	Railway rolling stock	326
44	Shipbuilding and boat building	327,328
45	Major appliance manufacturers	332
46	Communications equipment	335
47	Electric wire and cable	337,338
48	Cement manufacturing	341
49	Clay and concrete manufacturers	347,348,351
50	Non-metallic mineral products	343,345,353,354,355
51	Petroleum refineries	365
62	Mixed fertilizers	372
53	Paints and varnishes	375
54	Industrial and miscellaneous chemicals	379
55	Miscellaneous manufacturing	153,374,381,383, 384,385,397,399
56	Scrap iron	*
57	Construction-Residential	404-421
58	Construction – Non-residential	404-421
59	Transportation	501-527
60	Radio, telephone, telegraph	543,544,545
61	Electric power	572
	Water and gas	574,576
62		
63	Wholesale trade	602-629
64	Retail trade	631-699
65	Auto operation	-
66	Travel and entertainment	
67	Finance, insurance and real estate	702 - 737
68	Dwelling services	슾
69	Hotels and restaurants	875-876
70	Personal services	823-859, 871-874
71	Business services	861-869, 894-898

LIST 3. Classification of Industries Non-confidential (Large) 1960 Newfoundland, 47 Industries

Input-output industry	Input-output industries	S.I.C. number
		010
1	Agriculture	
2	Forestry va na kanada na na kana	031
3	Primary fishing—Shellfish	041
4	Primary fishing—All other fish	041
5	Metal mining and contract drilling	053,056,058,098,099
6	Non-metal mining	079
7	Quarries and sandpits	083,087
8	Meat and poultry products	101,103
9	Dairy products and feeds, mix-foods	105,112,139
10	Shellfish products	111
11	Other fish products	111
12	Fruits and vegetables	112
13	Biscuits, bakeries, confectionery	105,129,131,
14	Soft drink manufacturing	141
15	Breweries	145
16	Shoes and leather products	174,179
17	Cordage and canvas products	213,221
18	Knitting mills and clothing	239,243,246
19	Sawmills, sash and door	251,252,254,256,25
20	Miscellaneous wood industries	259
21	Furniture industries	261,266
22	Pulp and paper mills	271
23	Printing and publishing	286,288,289
24	Iron foundries	294
25	Metal fabricating	304,305,309
26	Machinery and equipment	308,315
27	Transportation equipment	326,329,337
28	Shipbuilding and repair	327
29	Cement manufacturing	341
30	Concrete and clay products	347,348,351
31	Gyspsum and stone products	345,353
32	Chemical products and miscellaneous manufacturing	374,375,378,381 383,384,397
33	Scrap iron	
34	Residential construction	404-421
35	Non-residential construction	404-421
36	Transportation	501-527
37	Radio, telephone, telegraph	543,544,545
38	Electric paver	572
39	Water and gas	576
40	Distribution	602-629, 631-699
41	Automobile operation	i m
42	Travel and entertainment	5 =
43	Finance, insurance, real estate and equipment rental	702-737
44	Dwelling services	-
45	Hotels and restaurants	875,876
45 46	Personal services	823-859, 871-874
46 47	Business services	861-869, 894-899

LIST 3. Classification of Industries, Non-confidential (Large) 1960 - Continued Prince Edward Island, 41 Industries

Input-output industry number	Input-output industries	S.I.C. number
1	Agriculture	010
2	Forestry	031
3	Primary fishing – Shellfish	041
4	Primary fishing – All other fish	041
5	Quarries and sandpits	083,087
6	Meat and poultry products	101,103
7	Dairy products	105
8	Shellfish products	111
9	Other fish products	111
10	Fruits and vegetables	112
11	Feed manufacturers	123
12	Bakeries	129
13	Soft drinks	141
14	Leather products	179
15	Wool yarn mills	193
16	Cotton and jute bags	223
17	Sawmills, sash and door	251,254,256,258,25
18	Furniture industries	261,266
19	Miscellaneous paper converters	274
20	Printing and publishing	286,288,289
21	Iron foundries	294
22	Metal stamping and machine shops	304,308
23	Shipbuilding, and boat building	327,328
24	Concrete products manufacturing	347
25	Stone	353
26	Fertilizers	372
27	Miscellaneous manufacturing	381,399
28	Residential construction	404-421
29	Non-residential construction	404-421
30	Transportation	501-527
31	Radio, telephone, telegraph	543,544,545
32	Electric power	572
33	Water	576
34	Distribution	602-629;631-699
35	Automobile operation	- s
36	Travel and entertainment	_
37	Finance, insurance, real estate and equipment rental	702-737
38	Dwelling services	-
39	Hotels, restaurants	875,876
40	Personal services :	823-859, 871-874
41	Business services	861-869, 894-899

LIST 3. Classification of Industries, Non-confidential (Large) 1960 — Continued Nova Scotia, 58 Industries

Nova Scotia, 58 Industries			
Input-output industry number	Input-output industries	S.I.C. number	
1	Agriculture	010	
2	Forestry	030	
3	Primary fishing – Shellfish	041	
4	Primary fishing – All other fish	041	
5	Coal mining	061	
6	Non-metallic mineral mining	073,077,079	
7	Quarries and sandpits	083,087	
8	Meat products	101	
9	Poultry processors	103	
10	Dairy products	105	
11	Shellfish products	111	
12	Other fish products	111	
13	Fruits and vegetables	083,147	
14	Feed manufacturers	123	
15	Buiscuits, bakeries confectionery	128,129,131	
16	Miscellaneous foods	139	
17	Soft drinks	141	
18	Distilleries	143	
19	Breweries	145	
20	Shoes and leather products	174,179	
21	Cotton and wool yarn and cloth mills	183,193	
22	Canvas and miscellaneous textiles	214,221,229	
23	Clothing industries	231,239,243,244,247	
24	Sawmills, sash and door	251,254,256,258	
25	Miscellaneous wood industries	259	
26	Furniture industries	261,264,266	
27	Pulp and paper mills	271	
28	Paper box and miscellaneous paper products	273,274	
29	Printing and publishing	286,287,288,289	
30	Iron and steel mills	291	
31	Iron foundries	294	
32	Boiler and plate works	301,302	
33	Miscellaneous metal fabricated	303,304,305,306,309	
34	Machinery and equipment	307,308,315	
35	Transportation equipment	321,324,326	
36	Shipbuilding and boat building	327,328	
37	Communication equipment	335	
38	Electric wire and cable	338	
39	Concrete and clay products	347,348,351	
40	Gypsum and stone products	345,353,354,355	
41	Petroleum refineries	365	
42	Fertilizers and chemicals	372-374,375,376,378,379	
43	Miscellaneous manufacturing	381,385,393,397,379,	
44	Scrap iron	_	
45	Residential construction	404-421	
46	Non-residential construction	404-421	
47	Transportation	501-527	
48	Radio, telephone, telegraph	543,544,545	
49	Electric, power	572	
50	Water and gas	574,576	
51	Distribution	502-629, 631-699	
52	Automobile operation	ė.	
53	Travel and entertainments	= :	
54	Finance, insurance and real estate and equipment rental	702-737	
55	Dwelling services	==	
56	Hotels and restaurants	875,876	
	Personal services	823-859, 871-874 861-869, 894-898	
57	1 Claudian Scivices	823-859.871-874	

LIST 3. Classification of Industries, Non-confidential (Large) 1960 — Concluded New Brunswick, 56 Industries

Input-output industry number	Input-output industries	S.I.C. number
1	Agriculture	010
2	Forestry	031
3	Primary fishing – Shellfish	041
4	Primary fishing – All other fish	041
5	Metal mining	051,053,056
6	Coal mining	061
7	Non-metallic mineral mining	079
8	Quarries and sandpits	083,087
9	Meat products	101
10	Poultry processors	103
11	Dairy products	105
12	Shellfish products	111
13	Other fish products	111
14	Fruits and vegetables, wineries	112,147
15	Feed manufacturers	123
16	Biscuits, bakeries, confectionery	128,129,131
17	Sugar refineries	133
18	Miscellaneous foods	139
19	Soft drinks, breweries	141,145
20	Shoes, leather products	174,175,179
21	Cotton, wool yarn and cloth mills	183,193,197
22	Canvas products	221
23	Clothing industries	231,239,243,244,
		246,247
24	Sawmills, sash and door	251,252,254,256,258
25	Miscellaneous wood industries	261,266,268
27	Pulp and paper mills	271
28	Asphalt and paper box manufacturing	272,273
29	Printing and publishing	286,287,288,289
30	Iron foundries	294,298
31	Fabricated structural metal	302
32	Miscellaneous metal fabricating	303,304,305,309
33	Machinery and equipment	308,315,316
34	Railway rolling stock	325,326
35	Shipbuilding and boat building	327,328
36	Appliance and electric wire	332,338
37	Cement and concrete manufacturers	341,347,348,351
38	Lime, gypsum stone products	343,345,353
39	Petroleum refineries	365
40	Fertilizers and chemicals	372,374,375,378,379
41	Miscellaneous	381,383,384,385, 397,399
42	Scrap iron	2-2
43	Residental construction	404-421
44	Non-residential construction	404-421
45	Transportation	501-527
46	Radio, telephone, telegraph	543,544,545
47	Electric power	572
48	Water and gas	574,576
49	Distribution	602-629, 631-699
50	Aŭtomobile operation	(=)
51	Finance, insurance, real estate and equipment rental	702-737
52	Travel and entertainment	((ma))
53	Dwelling services	
54	Hotels and restaurants	875,876
		· · · · · · · · · · · · · · · · · · ·
55	Personal services	823-859, 871-874

LIST 4. Classification of Industries, Non-confidential (Small), 1960 Newfoundland, 31 Industries

Input-output industries number	Input-output industries	S.I.C. number
1	Agrigultura	010
	Agriculture	
2	Forestry	031
3	Primary fishing	041
4	Metal mining	051,054,058
5	Non-metals, quarries	079,083,087
6	Meat, poultry, dairy, fruit	101,103,105,112
7	Secondary fishing	110,111
8	Feeds, biscuits bakeries, miscellaneous	123,128,129,131,139
9	Soft drinks, breweries	141,145
10	Textile and clothing	174,179,213,221, 243,246
11	Sawmills and wood products	251,252,254,256, 258,259,261,266
12	Pulp and paper mills	271
13	Printing and publishing	286,288,289
14	Metal fabrication and scrap	294,304,305,309
15	Machinery and equipment	308,315
16	Transportation equipment	326,327,329
17	Battery manufacturing	337
18	Cement and non-metallic mineral products	341,345,347,348, 351,353
19	Chemicals and paints	374,375,378,
20	Miscellaneous manufacturing	381,383,384,394
21	Construction	404-421
22	Transportation, travel and entertainment	501-527
23	Radio, telephone, telegraph	543,544,545
24	Electric power, water	572,576
25	Distribution	602-629, 631-699
26	Automobile operation	3 - 25
27	Finance, insurance, real estate and equipment rental	702-737
28	Dwelling services	(=)
29	Hotels and restaurants	875, 876
30	Personal services	823-859, 871-874
31	Business services	861-869, 894-899

LIST 4. Classification of Industries, Non-confidential (Small), 1960 — Continued Prince Edward Island, 29 Industries

	Frince Edward Island, 29 industries	
Input-output industry number	Input-output industries	S.I.C. number
1	Agriculture	010
2	Forestry	031
3	Primary fishing	041
4	Quarries and sandpits	083,087
5	Meat, poultry, dairy, fruit	101,103,105,112
6	Secondary fishing	110,111
7	Feed manufacturers and bakeries	123,129
8	Soft drinks	141
9	Textiles	179,193,223
10	Sawmills, wood products	251,254,256,258, 259,261,266
11	Miscellaneous paper converters	274
12	Printing and publishing	286,288,289
13	Iron foundries and metal stamping	294,304
14	Machine shops	308
15	Shipbuilding and boatbuilding	327,328
16	Concrete and stone products	347,353
17	Fertilizers	372
18	Scientific and professional equipment	381
19	Construction	404-421
20	Transportation, travel and entertainment	501-527
21	Radio, telephone, telegraph	543,544,545
22	Electric power and water	572,576
23	Distribution	602-629, 631-699
24	Automobile operation	3
25	Finance, insurance, real estate and equipment rental	702-737
26	Dwelling services	S=
27	Hotels and restaurants	875,876
28	Personal services	823-859, 871-874
29	Business services	861-869, 894-899

LIST 4. Classification of Industries, Non-confidential (Small), 1965 — Continued Nova Scotia, 33 Industries

Input-output industry number	Input-output industries	S.I.C. number
1	Agriculture	010
2	Forestry	031
3	Primary fishing	041
4	Coal mining	061
5	Non-metals, quarries	073,077,079,083,087
6	Meat, dairy and fruit	101,103,105,112,147
7	Secondary fishing	110,111
8	Miscellaneous foods, n.e.s.	123,128,129,131,139
9	Soft drinks, breweries, distilleries	141,143,145
10	Textiles, clothing	174,179,183,193, 214,221,229,231, 239,243,244,247
11	Sawmills, wood products	251,254,256,258, 259,261,264,266
12	Pulp and paper products	271,273
13	Printing and publishing	286,287,288,289
14	Iron and steel mills	291
15	Metal fabrication and scrap	294,301,302,303, 304,305,306,309
16	Machinery and equipment	307,308,315
17	Transportation equipment	321,324,326,327,328
18	Electric equipment	335,338
19	Non-metallic mineral products	345,347,348,351, 353,354,355
20	Petroleum refineries	365
21	Fertilizer, chemicals, paint and soap	372,374,375,376, - 378,379
22	Miscellaneous manufacturing	381, 385, 393, 397, 399
23	Construction	404-421
24	Transportation, travel and entertainment	501-527
25	Radio, telephone, telegraph	543,544,545
26	Electric power, water and gas	572,574,576
27	Distribution	602-629, 631-699
28	Automobile operation	-
29	Finance, insurance, real estate, equipment rentals	702-737
30	Dwelling services	=>
31	Hotels and restaurants	875,876
32	Personal services	823-859, 871-874
33	Business services	861-869, 894-898

LIST 4. Classification of Industries, Non-confidential (Small), 1960 — Concluded New Brunswick, 33 Industries

	New Brunswick, 33 Industries	
Input-output industry number	Input-output industries	S.I.C. number
1	Agriculture	010
2	Forestry	031
3	Primary fishing	041
4	Metal mining	051,053,054,056
5	Coal mining	061
6	Non-metals, quarries	079,083,087
7	Meat, dairy, fruit	101,103,105,112,147
8	Secondary fishing	110,111
9	Miscellaneous	123,128,129,131, 133,139
10	Soft drinks, breweries	141,145
11	Textiles, clothing	174,175,179,183,193, 197,221,231,239, 243,244,246,247
12	Sawmills, wood products	251,252,254,256,258, 259,261,266,268
13	Pulp and paper products	271,272,273
14	Printing and publishing	286,287,288,289
15	Metal fabricating and scrap	294,298,302,303, 304,305,309
16	Machinery and equipment	308,315,316
17	Transportation equipment	325,326,327,328
18	Appliances and electric wire	332,338
19	Cement and non-metallic mineral products	341,343,345,347, 348,351,353
20	Petroleum refineries	365
21	Fertilizers and chemicals	372,374,375,378,379
22	Miscellaneous manufacturing	381,383,384,385, 397,399
23	Construction	404-421
24	Transportation, travel and entertainment	501-527
25	Radio, telephone, telegraph	543,544,545
26	Electric power water and gas	572,574,576
27	Distribution	602-629, 631-699
28	Automobile operation) = 0
29	Finance, insurance, real estate and equipment rental	702-737
30	Dwelling services	-
31	Hotels and restaurants	875, 876
32	Personal services	823-859, 871-874
33	Business services	861-869, 894-898

LIST 5. Classification of 169 Commodities used to Compile the (Confidential) 1965 Tables

100000000	(Confidential) 1703 Tables	
No.	Commodities	Input-output commodity number
		
1 2	Livestock	10001 10002
3	Poultry Dairy	10002
4	Eggs	10003
5	Potatoes	10005
6	Vegetables	10006
7	Atlantic fruit	10007
8	Feed and seed crops	10008
9	Wool, maple, syrup, honey, tobacco and miscellaneous agricultural products	10009-10011
10	House rent (imputed)	10012
11	Pelts	10013
12	Logs and bolts	10101
13	Pulpwood	10102
14	Other forest products Custom work	10103
15 16	Custom work Shellfish	10104 10201
17	All other fish	10201
18	Non-ferrous metals, iron ore and pellets	10401,10402
19	Coal	10403
20	Gypsum, salt, peat moss and other non-metallic minerals	10404-10408
21	Sand, gravel and stone	10410
22	Meat, fresh, frozen, cured, canned, processed	00101,00102
23	Lard	00103
24	Hides, meat by-products	00104
25 26	Work done Poultry	00105 00201
27	Work done	00201
28	Milk, fluid, powered, canned, cream	00301,00305
29	Butter and cheese	00303
30	Work done	00307
31	Ice cream and other products	00306
32	Shellfish, in shell, shucked, canned and by-products	00401-00403
33	Groundfish, fresh, frozen, salted, canned and by-products	00501-00503
34 35	Work done Fruit and vegetable products, including jams, juices, vinegar	00504 00601-00606
36	Animal feeds	00701
37	Work done	00702
38	Bread and other bakery products	00801,00802
39	Confectionery	00901
40	Sugar	01001
41	Tea, coffee	01101
42	Potato products, including starch, spices and miscellaneous food products Margarine	01103 01108
44	Soft drinks, syrups .	01201
45	Work done	01202
46	Alcoholic beverages	01301
47	Work done	01302
48	Beer	01401
49	Footwear	01701
50	Luggage, gloves and leather products	01801
51 52	Cotton yarn and cloth, cotton waste Synthetic fabrics	01901-01906 01907
53	Woollen yarn and cloth	02001-02101
54	Work done	02102
55	Cordage and twine, narrow fabrics, jute bags, canvas products and miscellaneous textiles	02001-02101
56	Work done	02502
57	Clothing including hosiery and furs	02701

LIST 5. Classification of 169 Commodities used to Compile the (Confidential) 1965 Tables — Continued

	(Confidential) 1703 Tables — Continued	
No .	Commodities	Input-output commodity number
58	Lumber and ties	02801
59	Laths, shingles, wood-waste and other sawmill products	02805,03806
60	Work done	02807
61	Pulp chips and other by-products	02808
62	Veneer and plywood	02901
63	Sash and door	03001
64	Hardwood flooring and miscellaneous millwork	03002,03007 03008
65	Work done Wooden boxes	03101
66 67	Wooden boxes Coffins and caskets	03201
68	Repairs	03201
69	Particle board, wood preservation and miscellaneous wood products	03301-03304
70	Work done	03305
71	Furniture	03401
72	Custom work	03402
73	Newsprint and waste paper	03501
74	Woodpulp	03502
75	Paper board and building paper	03503
76	Tissue paper, sanitary paper	03505
77	By-products including steam	03506
78	Work done	03507
79	Shingles, asphalt cement, roof coatings	03601
80	Folding boxes, paper bags, plastic bags, paper containers	03701-03801
81 82	Newspapers, magazines and printed matter Work done	03901 03902
83	Work done Coke, gas	04001
84	Tar	04004
85	Semi-finished steel including structural shapes	04008
86	Sulphuric acid	04009
87	Rails and tie plates	04011
88	Wire rods	04012
89	Concrete reinforcing and other steel bars	04013
90	Iron foundry products including mining machinery	04101
91	Work done	04102
92	Boilers, tanks, miscellaneous plate work and repairs	04201,04208
93 94	Oil burners Fabricated structural steel and products	04205 04207
95		04207
96	Ornamental and architectural iron	04301
97	Metal container	04401
98	Sheet metal culvert	04402
99	Other metal stamping	04403
100	Work done	04404
101	Wire and fencing	04501
102	Nails, bolts, tools, cutlery, hardware	04502
103	Work done	04503
104	Furnaces and ducts	04601
105	Steel forgings, other fabricated and structural products	04802-04807
106	Machinery parts	04901 04902
107	Repair work	04902 05001
108 109	Aircraft parts and repairs	05101
110	Passenger cars	05101
111	Trailers, truck bodies and repairs	05201
112	· · · · · · · · · · · · · · · · · · ·	05202
113	Rolling stock parts	05301
114		05302

LIST 5. Classification of 169 Commodities used to Compile the (Confidential) 1965 Tables — Concluded

No. Commodities		(Confidential) 1965 Tables — Concluded	
115 Boats, ships and vessels 05401,05403 116 Ships machinery and repairs 05409 117 Stows, heaters and home appliances 05501 118 Communications equipment 05601 119 Record players 05601 120 Steree chassis 05602 121 Work done 05604 122 Electric wire and cable 05701 123 Cement 05801 124 Lime 05901 125 Gypsum products 06010 126 Bricks, tiles, precast products 06010 127 Ready-mix concrete 06110 128 Clay and other refractory products 06104 129 Work done 06104 130 Stone products 06104 131 Work done 06104 132 Clay and other refractory products 06104 133 Work done 06202 134 Mirrors, glass products 06201 135 Work done 06202 136 Mirrors, glass products 06301 137 Asphalt, liquid gases 06501 138 Fuel colimation 06501 139 Fuel colimation 06501 130 Fuel oils 06501 131 Work done 06501 132 Fuel oils 06501 133 Work done 06501 134 Privamental mix 06601 135 Casoline 06501 136 Fuel oils 06501 137 Asphalt, liquid gases 06503 138 Petro-chemical feed stocks 06501 139 Petro-chemical feed stocks 06501 140 Paints and varnishes 06601 141 Paints and varnishes 06601 142 Paints and varnishes 07102 143 Paints and varnishes 07102 144 Paints and varnishes 07102 145 Paints and varnishes 07102 146 Paints and varnishes 07102 147 Paints and varnishes 07102 148 Power products 07101 149 Paints and varnishes 07102 150 Transportation and storage 07101 151 Fuel chies 07102 152 Fuel chies 07102 153 Puer chies 07102 154 Power products 07102 155 Puer chies 07102 156 Puer chies 07102 157 Puer chies 07102 158 Puer chies 07102 159 Puer chies 07102 150 Puer chies 07102 151 Puer chies 07102 152 Puer chies 07102 153 Puer chies 07102 154 Puer chies 07102 155 Puer chies 07102 156 Puer chies 07102 1	No	Commodities	commodity
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124 Lime 05991 125 Gypsum products 06001 126 Bricks, tiles, precast products 06101, 06103 127 Ready-mix concrete 06104 128 Clay and other refractory products 06105 129 Work done 06202 130 Stone products 06201 131 Work done 06202 132 Mirrors, glass products 06301 133 Work done 06302 134 Dry cement mix 06401 135 Gasoline 06501 136 Fuel oils 06501 137 Asphalt, liquid gases 06502 138 Petrochemical feed stocks 06503 139 Sulphur and all other products 06504 140 Mixed fertilizer 06601 141 Paints and varnishes 06601 142 Patent medicines, industrial chemicals, soaps and cleaning compounds, other chemicals 06801-06807 143 Patic products, venetian blinds 06901-07001 144 Paints and varnishes 07101 145 Verley and miscellaneous custom-made items 07102 146 Work done and repair 07101 147 Scrap iron		the time will be transferred that the time that their many and the time the time to the ti	
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162 Hotel, restaurant and catering services 75010 163 Donations and charity services 76010 164 Amusement and personal services 76011 165 Medical services 76012 166 Domestic services 76013 167 Advertising services 77010		- ^ - \$ TH \$ TH 1 TH 1 TH 1 TH 1 TH 1 TH 1 TH	74010
164 Amusement and personal services 76011 165 Medical services 76012 166 Domestic services © 76013 167 Advertising services 0 77010			
164 Amusement and personal services 76011 165 Medical services 76012 166 Domestic services © 76013 167 Advertising services 0 77010			76010
165 Medical services 76012 166 Domestic services 76013 167 Advertising services 77010		·	76011
166 Domestic services 76013 167 Advertising services 77010		The second secon	76012
### ##################################			76013
169 Legal audit architectural and other professional services	167	Advertising services	77010
	168	Legal, audit, architectural and other professional services	77012
Services to primary industries	169	Services to primary industries	77020

LIST 6. Classification of Industries, Confidential (Large), 1965 Atlantic Region, 71 Industries

Input-output industry number	Input-output industries	S.I.C. number
1	Agriculture	010
2	Agriculture Forestry	010 031
3	Primary fishing – Shellfish	031
4	Primary fishing – All other	041
5	Metal mining	053,056,058
6	Coal mining	061
7 8	Non-metal mining	071,073,077,079
9	Quarries and sandpits	$083,087 \\ 101$
10	Poultry processors	103
11	Dairy products	105
12	Shellfish products	111
13 14	Other fish products	111
15	Fruit and vegetables	112,147 123
16	Biscuits and bakeries	128,129
17	Confectionery manufacturers	131
18	Sugar refineries	133
19 20	Miscellaneous Foods	139
20	Soft drink manufacturers	141 143
22	Breweries	145
23	Shoe factories	174
24	Miscellaneous leather products	175,179
25	Cotton yarn and cloth mills	183,201,211
26 27	Wool yarn and cloth mills	193,197 213,214,216,221,
28	Hosiery, knitting mills and clothing mills	223,229 231,239,243,244,
29	Sawmills and other wood products	246, 247, 249 251, 252, 254, 256, 258
30	Miscellaneous wood industries	259
31 32	Furniture industries	261,266
33	Pulp and paper mills Paper products	271 272,273,274
34	Printing and publishing	286, 287, 288, 289
35	Iron and steel mills	291
36	Iron foundries	294,298
37 38	Fabricated structural steel	301,302
36 39	Miscellaneous metal fabricating	303,304,309 305,306
40	Machinery and equipment	307,308,315,316
41	Aircraft parts	321
42	Autos and truck bodies	323,324
43 44	Railway rolling stock	326 327,328
45	Shipbuilding and boat building Appliance manufacturers	332
46	Communications equipment	334,335
47	Electric wire and cable	337,338
48	Cement manufacturing	341
49 50	Clay and concrete products manufacturing	347,348,351 345,353,356,359
51	Petroleum refineries	365
52	Mixed fertilizers	372
53	Paints and varnishes	375
54 55	Industrial and miscellaneous chemicals Miscellaneous manufacturers	374,378,379 381,384,385,393, 397,399
56	Scrap iron	(=)
57 58	Construction – Residential Construction – Non-residential	404-421 404-421
59	Transportation	501-527
60	Radio, telephone, telegraph, post office	543,544,545
61	Electric power	572
62	Water and gas	574,576
63 64	Distribution Auto operation	602-629, 631-699
65	Travel, entertainment	_
66	Finance, insurance, real estate and equipment rental	702-737
67	Dwelling services	0.75
68	Hotels and restaurants	875,876
69 70	Personal services Business services	823-859, 871-874 861-869, 894-898
70 71	Services to primary industries	021,039,045,096,
	1	098,099

LIST 6. Classification of Industries, Confidential (Large), 1965 — Continued Newfoundland, 55 Industries

Input-output industry number	Input-output industries	S.I.C. number
1	Agriculture	010
2	Forestry	031
3	Primary fishing – Shellfish	041
4	Primary fishing – All other fish	041
5 6	Metal mining :	053,056,058 071,073,079
7	Non-metal mining	083,087
8	Meat products	101
9	Dairy products	103
10	Shellfish products	111
11	Other fish products	111
12	Fruit and vegetables	112
13 💮	Feed manufacturers	123
14	Biscuits and bakeries	128,129
15	Miscellaneous foods	139
16 17	Soft drink manufacturers	141 145
18	Breweries	174
19	Shoe factories Miscellaneous leather products	179
20	Cordage and canvas products	221
21	Clothing industries	239,243,246
22	Sawmills, sash	251,252,254,256, 25
23	Miscellaneous wood products	259
24	Furniture industries	261,266
25	Pulp and paper mills	271
26	Paper products	273
27	Printing and publishing	286,288,289
28	Iron foundries	294
29	Miscellaneous metal fabricating	303,304,309
30	Wire products	305
31	Machinery and equipment	308,315
32 33	Shipbuilding and boat building Cement manufactueres	327,328 341
34	Clay and concrete products	347,348,351
35	Non-metallic mineral products	345,353
36	Petroleum refineries	365
37	Paint, varnish manufacturing	375
38	Soap and chemical products	378
39	Miscellaneous manufacturing	381,383,397
40	Scrap iron	10.1 10.1
41	Construction – Residential	404-421
42	Construction – Non-residential	404-421 501-527
43 44	Transportation	543,544,545
45	Electric power	572
46	Water and gas	576
47	Distribution	602-629, 631-699
48	Automobile operation	
49	Travel and entertainment	Œ.
50	Finance, insurance, real estate and equipment rental	702-737
51	Dwelling services	110
52	Hotels and restaurants	875,876
53	Personal services	823-859, 871-874 861-869, 894-898
54	Business services	

LIST 6. Classification of Industries, Confidential (Large), 1965 — Continued Prince Edward Island, 47 Industries

2 Forestry 0 3 Primary fishing—Shellfish 0 4 Primary fishing—All other fish 0 5 Quarries and sandpits 088 6 Meat products 1 7 Poultry processors 1 8 Dairy products 1 9 Shellfish products 1 10 Other fish products 1 11 Fruit and vegetable 1 12 Feed manufacturers 1 13 Bakeries 1 14 Soft drink manufacturers 1 15 Miscellaneous leather products 1 16 Cotton mills 2 17 Woollen mills 1 18 Cordage and canvas 213 19 Sawmills, sash 251,2 20 Miscellaneous wood products 2 21 Furniture industries 2 22 Paper products 2 23 Printing and publishing<	number
2 Forestry 0 3 Primary fishing—Shellfish 0 4 Primary fishing—All other fish 0 5 Quarries and sandpits 083 6 Meat products 1 7 Poultry processors 1 8 Dairy products 1 9 Shellfish products 1 10 Other fish products 1 11 Fruit and vegetable 1 12 Feed manufacturers 123 13 Bakeries 1 14 Soft drink manufacturers 1 15 Miscellancous leather products 1 16 Cotton mills 2 17 Woollen mills 1 18 Cordage and canvas 213 19 Sawmills, sash 251,2 20 Miscellancous wood products 2 21 Furniture industries 2 22 Paper products 2 23 Printing and publishin	
3 Primary fishing – Shellfish 0 4 Primary fishing – All other fish 0 5 Quarries and sandpits 088 6 Meat products 1 7 Poultry processors 1 8 Dairy products 1 9 Shellfish products 1 10 Other fish products 1 11 Fruit and vegetable 1 12 Feed manufacturers 123 13 Bakeries 1 14 Soft drink manufacturers 1 15 Miscellaneous leather products 1 16 Cotton mills 2 17 Woollen mills 1 18 Cordage and canvas 213 20 Miscellaneous wood products 2 21 Furniture industries 2 22 Paper products 2 23 Printing and publishing 26 24 Iron foundries 2 25 Metal	10
4 Primary fishing — All other fish 0 5 Quarries and sandpits 083 6 Meat products 1 7 Poultry processors 1 8 Dairy products 1 9 Shellfish products 1 10 Other fish products 1 11 Fruit and vegetable 1 12 Feed manufacturers 123 13 Bakeries 1 14 Soft drink manufacturers 1 15 Miscellaneous leather products 1 16 Cotton mills 2 17 Woollen mills 1 18 Cordage and canvas 213 19 Sawmills, sash 251,2 20 Miscellaneous wood products 2 21 Furniture industries 2 22 Paper products 2 23 Printing and publishing 26 24 Iron foundries 2 25 Metal fabrica	31
5 Quarries and sandpits 083 6 Meat products 1 7 Poultry processors 1 8 Dairy products 1 9 Shellfish products 1 10 Other fish products 1 11 Fruit and vegetable 1 12 Feed manufacturers 123 13 Bakeries 1 14 Soft drink manufacturers 1 15 Miscellaneous leather products 1 16 Cotton mills 2 17 Woollen mills 1 18 Cordage and canvas 213 19 Sawmills, sash 251,2 20 Miscellaneous wood products 2 21 Furniture industries 2 22 Paper products 2 23 Printing and publishing 286 24 Iron foundries 2 25 Metal fabricating 3 26 Machinery and equipment <td>41</td>	41
6 Meat products 1 7 Poultry processors 1 8 Dairy products 1 9 Shellfish products 1 10 Other fish products 1 11 Fruit and vegetable 1 12 Feed manufacturers 123 13 Bakeries 1 14 Soft drik manufacturers 1 15 Miscellaneous leather products 1 16 Cotton mills 2 17 Woollen mills 1 18 Cordage and canvas 213 20 Miscellaneous wood products 2 20 Miscellaneous wood products 2 21 Furniture industries 2 22 Paper products 2 23 Printing and publishing 286 24 Iron foundries 2 25 Metal fabricating 3 26 Machinery and equipment 3 27 Shipbuilding and	41
7 Poultry processors 1 8 Dairy products 1 9 Shellfish products 1 10 Other fish products 1 11 Fruit and vegetable 1 12 Feed manufacturers 123 13 Bakeries 1 14 Soft drink manufacturers 1 15 Miscellaneous leather products 1 16 Cotton mills 2 17 Woollen mills 1 18 Cordage and canvas 213 19 Sawmills, sash 251,2 20 Miscellaneous wood products 2 21 Furniture industries 2 22 Paper products 2 23 Printing and publishing 286 24 Iron foundries 2 25 Metal fabricating 3 26 Machinery and equipment 3 27 Shipbuilding and boat building 327 28 Clay	,087
8 Dairy products 1 9 Shellfish products 1 10 Other fish products 1 11 Fruit and vegetable 1 12 Feed manufacturers 123 13 Bakeries 1 14 Soft drink manufacturers 1 15 Miscellaneous leather products 1 16 Cotton mills 2 17 Woollen mills 1 18 Cordage and canvas 213 19 Sawmills, sash 251,2 20 Miscellaneous wood products 2 21 Furniture industries 2 22 Paper products 2 23 Printing and publishing 286 24 Iron foundries 2 25 Metal fabricating 3 26 Machinery and equipment 3 27 Shipbuilding and boat building 327 28 Clay and concrete products 3 30 Fertilizer manufacturers 3 31 Soap and chemical prod	01
9 Shellfish products 1 10 Other fish products 1 11 Fruit and vegetable 1 12 Feed manufacturers 123 13 Bakeries 1 14 Soft drink manufacturers 1 15 Miscellaneous leather products 1 16 Cotton mills 2 17 Woollen mills 1 18 Cordage and canvas 213 19 Sawmills, sash 251,2 20 Miscellaneous wood products 2 21 Furniture industries 2 22 Paper products 2 23 Printing and publishing 286 24 Iron foundries 2 25 Metal fabricating 3 26 Machinery and equipment 3 27 Shipbuilding and boat building 327 28 Clay and concrete products 3 30 Fertilizer manufacturers 3 31 Soap and chemical products 3 32 Miscellan	03
10 Other fish products 1 11 Fruit and vegetable 1 12 Feed manufacturers 123 13 Bakeries 1 14 Soft drink manufacturers 1 15 Miscellaneous leather products 1 16 Cotton mills 2 17 Woollen mills 1 18 Cordage and canvas 213 19 Sawmills, sash 251,2 20 Miscellaneous wood products 2 21 Furniture industries 2 22 Paper products 2 23 Printing and publishing 286 24 Iron foundries 2 25 Metal fabricating 3 26 Machinery and equipment 3 27 Shipbuilding and boat building 327 28 Clay and concrete products 3 29 Non-metallic mineral products 3 30 Fertilizer manufacturers 3	05
11 Fruit and vegetable 1 12 Feed manufacturers 123 13 Bakeries 1 14 Soft drink manufacturers 1 15 Miscellaneous leather products 1 16 Cotton mills 2 17 Woollen mills 1 18 Cordage and canvas 213 19 Sawmills, sash 251,2 20 Miscellaneous wood products 2 21 Furniture industries 2 22 Paper products 2 23 Printing and publishing 286 24 Iron foundries 2 25 Metal fabricating 3 26 Machinery and equipment 3 27 Shipbuilding and boat building 327 28 Clay and concrete products 3 29 Non-metallic mineral products 3 30 Fertilizer manufacturers 3 31 Soap and chemical products 3 <tr< td=""><td>11</td></tr<>	11
12 Feed manufacturers 123 13 Bakeries 1 14 Soft drink manufacturers 1 15 Miscellaneous leather products 1 16 Cotton mills 2 17 Woollen mills 2 18 Cordage and canvas 213 19 Sawmills, sash 251,2 20 Miscellaneous wood products 2 21 Furniture industries 2 22 Paper products 2 23 Printing and publishing 286 24 Iron foundries 2 25 Metal fabricating 3 26 Machinery and equipment 3 27 Shipbuilding and boat building 327 28 Clay and concrete products 3 29 Non-metallic mineral products 3 30 Fertilizer manufacturers 3 31 Soap and chemical products 3 32 Miscellaneous manufacturing 381 <td>11</td>	11
13 Bakeries 1 14 Soft drink manufacturers 1 15 Miscellaneous leather products 1 16 Cotton mills 2 17 Woollen mills 1 18 Cordage and canvas 213 19 Sawmills, sash 251,2 20 Miscellaneous wood products 2 21 Furniture industries 2 22 Paper products 2 23 Printing and publishing 286 24 Iron foundries 2 25 Metal fabricating 3 26 Machinery and equipment 3 27 Shipbuilding and boat building 327 28 Clay and concrete products 3 29 Non-metallic mineral products 3 30 Fertilizer manufacturers 3 31 Soap and chemical products 3 32 Miscellaneous manufacturing 381 33 Construction – Residential 404 34 Construction – Non-residential 404	12
14 Soft drink manufacturers 1 15 Miscellaneous leather products 1 16 Cotton mills 2 17 Woollen mills 1 18 Cordage and canvas 213 19 Sawmills, sash 251,2 20 Miscellaneous wood products 2 21 Furniture industries 2 22 Paper products 2 23 Printing and publishing 286 24 Iron foundries 2 25 Metal fabricating 3 26 Machinery and equipment 3 27 Shipbuilding and boat building 327 28 Clay and concrete products 3 29 Non-metallic mineral products 3 30 Fertilizer manufacturers 3 31 Soap and chemical products 3 32 Miscellaneous manufacturing 381 33 Construction – Residential 404 34 Construction – Non-residential 404 35 Transportation 501 <	,124
15 Miscellaneous leather products 1 16 Cotton mills 2 17 Woollen mills 1 18 Cordage and canvas 213 19 Sawmills, sash 251,2 20 Miscellaneous wood products 2 21 Furniture industries 2 22 Paper products 2 23 Printing and publishing 286 24 Iron foundries 2 25 Metal fabricating 3 26 Machinery and equipment 3 27 Shipbuilding and boat building 327 28 Clay and concrete products 3 29 Non-metallic mineral products 3 30 Fertilizer manufacturers 3 31 Soap and chemical products 3 32 Miscellaneous manufacturing 381 33 Construction – Residential 404 34 Construction – Non-residential 404 35 Transportation 501 36 Post office 543,50	29
16 Cotton mills 2 17 Woollen mills 1 18 Cordage and canvas 213 19 Sawmills, sash 251,2 20 Miscellaneous wood products 2 21 Furniture industries 2 22 Paper products 2 23 Printing and publishing 286 24 Iron foundries 2 25 Metal fabricating 3 26 Machinery and equipment 3 27 Shipbuilding and boat building 327 28 Clay and concrete products 3 29 Non-metallic mineral products 3 30 Fertilizer manufacturers 3 31 Soap and chemical products 3 32 Miscellaneous manufacturing 381 33 Construction – Residential 404 34 Construction – Non-residential 404 35 Transportation 501 36 Post office 543,50 37 Electric power 5	41
17 Woollen mills 1 18 Cordage and canvas 213 19 Sawmills, sash 251,2 20 Miscellaneous wood products 2 21 Furniture industries 2 22 Paper products 2 23 Printing and publishing 286 24 Iron foundries 2 25 Metal fabricating 3 26 Machinery and equipment 3 27 Shipbuilding and boat building 327 28 Clay and concrete products 3 29 Non-metallic mineral products 3 30 Fertilizer manufacturers 3 31 Soap and chemical products 3 32 Miscellaneous manufacturing 381 33 Construction – Residential 404 34 Construction – Non-residential 404 35 Transportation 501 36 Post office 543,5 37 Electric power 5	79
18 Cordage and canvas 213 19 Sawmills, sash 251,2 20 Miscellaneous wood products 2 21 Furniture industries 2 22 Paper products 2 23 Printing and publishing 286 24 Iron foundries 2 25 Metal fabricating 3 26 Machinery and equipment 3 27 Shipbuilding and boat building 327 28 Clay and concrete products 3 29 Non-metallic mineral products 3 30 Fertilizer manufacturers 3 31 Soap and chemical products 3 32 Miscellaneous manufacturing 381 33 Construction – Residential 404 34 Construction – Non-residential 404 35 Transportation 501 36 Post office 543,5 37 Electric power 5	11
19 Sawmills, sash 251,2 20 Miscellaneous wood products 2 21 Furniture industries 2 22 Paper products 2 23 Printing and publishing 286 24 Iron foundries 2 25 Metal fabricating 3 26 Machinery and equipment 3 27 Shipbuilding and boat building 327 28 Clay and concrete products 3 29 Non-metallic mineral products 3 30 Fertilizer manufacturers 3 31 Soap and chemical products 3 32 Miscellaneous manufacturing 381 33 Construction – Residential 404 34 Construction – Non-residential 404 35 Transportation 501 36 Post office 543,5 37 Electric power 5	93
20 Miscellaneous wood products 2 21 Furniture industries 2 22 Paper products 2 23 Printing and publishing 286 24 Iron foundries 2 25 Metal fabricating 3 26 Machinery and equipment 3 27 Shipbuilding and boat building 327 28 Clay and concrete products 3 29 Non-metallic mineral products 3 30 Fertilizer manufacturers 3 31 Soap and chemical products 3 32 Miscellaneous manufacturing 381 33 Construction – Residential 404 34 Construction – Non-residential 404 35 Transportation 501 36 Post office 543,5 37 Electric power 5	,223
21 Furniture industries 2 22 Paper products 2 23 Printing and publishing 286 24 Iron foundries 2 25 Metal fabricating 3 26 Machinery and equipment 3 27 Shipbuilding and boat building 327 28 Clay and concrete products 3 29 Non-metallic mineral products 3 30 Fertilizer manufacturers 3 31 Soap and chemical products 3 32 Miscellaneous manufacturing 381 33 Construction – Residential 404 34 Construction – Non-residential 404 35 Transportation 501 36 Post office 543,5- 37 Electric power 5	54,258
22 Paper products 2 23 Printing and publishing 286 24 Iron foundries 2 25 Metal fabricating 3 26 Machinery and equipment 3 27 Shipbuilding and boat building 327 28 Clay and concrete products 3 29 Non-metallic mineral products 3 30 Fertilizer manufacturers 3 31 Soap and chemical products 3 32 Miscellaneous manufacturing 381 33 Construction – Residential 404 34 Construction – Non-residential 404 35 Transportation 501 36 Post office 543,50 37 Electric power 5	59
23 Printing and publishing 286 24 Iron foundries 2 25 Metal fabricating 3 26 Machinery and equipment 3 27 Shipbuilding and boat building 327 28 Clay and concrete products 3 29 Non-metallic mineral products 3 30 Fertilizer manufacturers 3 31 Soap and chemical products 3 32 Miscellaneous manufacturing 381 33 Construction – Residential 404 34 Construction – Non-residential 404 35 Transportation 501 36 Post office 543,56 37 Electric power 5	61
24 Iron foundries 2 25 Metal fabricating 3 26 Machinery and equipment 3 27 Shipbuilding and boat building 327 28 Clay and concrete products 3 29 Non-metallic mineral products 3 30 Fertilizer manufacturers 3 31 Soap and chemical products 3 32 Miscellaneous manufacturing 381 33 Construction – Residential 404 34 Construction – Non-residential 404 35 Transportation 501 36 Post office 543,50 37 Electric power 5	74
25 Metal fabricating 3 26 Machinery and equipment 3 27 Shipbuilding and boat building 327 28 Clay and concrete products 3 29 Non-metallic mineral products 3 30 Fertilizer manufacturers 3 31 Soap and chemical products 3 32 Miscellaneous manufacturing 381 33 Construction – Residential 404 34 Construction – Non-residential 404 35 Transportation 501 36 Post office 543,56 37 Electric power 5	,289
26 Machinery and equipment 3 27 Shipbuilding and boat building 327 28 Clay and concrete products 3 29 Non-metallic mineral products 3 30 Fertilizer manufacturers 3 31 Soap and chemical products 3 32 Miscellaneous manufacturing 381 33 Construction – Residential 404 34 Construction – Non-residential 404 35 Transportation 501 36 Post office 543,50 37 Electric power 5	94
27 Shipbuilding and boat building 327 28 Clay and concrete products 3 29 Non-metallic mineral products 3 30 Fertilizer manufacturers 3 31 Soap and chemical products 3 32 Miscellaneous manufacturing 381 33 Construction – Residential 404 34 Construction – Non-residential 404 35 Transportation 501 36 Post office 543,50 37 Electric power 5	04
28 Clay and concrete products 3 29 Non-metallic mineral products 3 30 Fertilizer manufacturers 3 31 Soap and chemical products 3 32 Miscellaneous manufacturing 381 33 Construction – Residential 404 34 Construction – Non-residential 404 35 Transportation 501 36 Post office 543,56 37 Electric power 5	08
29 Non-metallic mineral products 3 30 Fertilizer manufacturers 3 31 Soap and chemical products 3 32 Miscellaneous manufacturing 381 33 Construction – Residential 404 34 Construction – Non-residential 404 35 Transportation 501 36 Post office 543,50 37 Electric power 5	,328
30 Fertilizer manufacturers 3 31 Soap and chemical products 3 32 Miscellaneous manufacturing 381 33 Construction – Residential 404 34 Construction – Non-residential 404 35 Transportation 501 36 Post office 543,50 37 Electric power 5	47
31 Soap and chemical products 3 32 Miscellaneous manufacturing 381 33 Construction – Residential 404 34 Construction – Non-residential 404 35 Transportation 501 36 Post office 543,50 37 Electric power 5	53
32 Miscellaneous manufacturing 381 33 Construction – Residential 404 34 Construction – Non-residential 404 35 Transportation 501 36 Post office 543,50 37 Electric power 5	72
32 Miscellaneous manufacturing 381 33 Construction – Residential 404 34 Construction – Non-residential 404 35 Transportation 501 36 Post office 543,50 37 Electric power 5	79
34 Construction – Non-residential 404 35 Transportation 501 36 Post office 543,54 37 Electric power 5	,399
35 Transportation 501 36 Post office 543,50 37 Electric power 5	-421
36 Post office 543,5 37 Electric power 5	-421
37 Electric power	-527
AS THE SET OF THE PROPERTY OF	14,545
Water and gas 5	72
	76
	, 631-699
49 Automobile operation	_
Travel and entertainment	-
◆ 1 ◆ 0.0000000 100 100 100 100 100 100 100 1	-737
Dwelling services	<u></u>
The state of the s	,876
	, 871-874
46 Business services	, 894-898
Services to primary industries	,045,088

LIST 6. Classification of Industries, Confidential (Large), 1965- Continued Nova Scotia, 67 Industries

Input-output industry number	Input-output	S.I.C. number
1	Agricultura	010
2	Agriculture	034
3	Primary fishing – Shellfish	041
4	Primary fishing – All other	041
5 6	Coal mining	061 073,077,079
7	Quarries and sandpits	083,087
8	Meat products	101
9 10	Poultry processors	103 105
11	Shellfish products	111
12	Other fish products	111
13 14	Fruit and vegetables Feed manufacturers	112,147 123
15	Feed manufacturers Biscuits and bakeries	128,129
16	Confectionery	131
17	Miscellaneous foods	139
18 19	Soft drink manufacturers	141 143
20	Breweries	145
21	Shoe factories	174
22 23	Miscellaneous leather products	179
23	Cotton yarn and cloth mills	183, 201 213, 216, 221, 229
25	Clothing industries	239, 243, 244, 247, 24
26	Sawmills, sash	251, 254, 256, 258
27 28	Miscellaneous wood products	258, 259 261, 266
29	Furniture industries Pulp and paper mills	201,200
30	Paper products	273,274
31	Printing and publishing	286, 287, 288, 289
32 33	Iron and stell mills	291 294
34	Fabricated structural metals	301,302
35	Miscellaneous metal fabricating	303,304,309
36 37	Wire products	305,306 307,308,315
38	Machinery and equipment Aircraft parts	307,306,313
39	Autos and truck bodies	323,324
40	Railway rolling stock	326
41 42	Shipbuilding and boatbuilding Communications equipment	327,328 334,335
43	Electric wire and cable	337,338
44	Cement manufacturers	341
45	Clay and concrete products	347,348,351
46 47	Non-metallic mineral products Petroleum refineries	345,353,356 365
48	Fertilizer manufacturers	372
49 50	Paint, varnish manufacturing Soap products and miscellaneous chemicals	375 374,378,379
50 51	Miscellaneous manufacturing	381, 384, 385, 393
	With the Atlanta and the first the first terminal and the first term	397,399
52 53	Scrap iron	404-421
54	Construction – Non-residential	404-421
55	Transportation	501-527
56 57	Post office	543,544,545 572
58	Water and gas	576
59	Distribution	602-629, 631-699
60	Auto operation	# :
61 62	Travel and entertainment	702,737
63	Finance, insurance, real estate and equipment rental Dwelling services	- 102,131
64	Hotels and restaurants	875,876
65	Personal services	823-859, 871-874
66 67	Business services Services to primary industries	861-869, 894-898 021,039,045,096,
0 /	betries to primary industries	098,099

LIST 6. Classification of Industries, Confidential (Large), 1965 — Concluded New Brunswick, 68 Industries

Input-output industry number	Input-output industries	S.I.C. number
1	Agriculture	010
2	Forestry	031
3	Primary fishing – Shellfish	041
4 5	Primary Fishing – All other fish Metal mining	041
6	Metal mining Coal mining	051,053,054,056 061
7	Non-metal mining	079
8	Quarries and sandpits	083, 087
10	Meat products	101
11	Dairy products	103 105
12	Shellfish products	111
13	Other fish products	111
14 15	Fruit and vegetables Feed manufacturers	112
16	Biscuits and bakeries	123 128,129
17	Confectionery	131
18 19	Sugar and refineries	133
20	Miscellaneous foods Soft drink manufacturers	139
21	Distilleries	141 143
22	Breweries	145
23 24	Shoc factories	174
24 25	Miscellaneous leather products Cotton mills	179
26	Woollen mills	183 193,197
27	Cordage and canvas	214,221,229
28	Clothing industries	231,243,244,246,24
29 30	Sawmills, sash	251, 252, 254, 256, 25
31	Miscellaneous wood products	259 261,266
32	Pulp and paper mills	271
33	Paper products	272,273
34 35	Printing and publishing Iron foundries	286,287,288,289
36	Fabricated structural metal	294,298 302
37	Miscellaneous metal fabricating	303,304,309
38 39	Wire products	305
40	Machinery and equipment	307, 308, 315, 316
41	Truck and trailer bodies	321 324
42	Shipbuilding and boat building	327,328
43 44	Appliances manufacturers	332
45	Electric wire manufacturers	335 338
46	Cement manufacturers	341
47	Clay and concrete products	347, 348, 351
48 49	Non-metallic mineral products Petroleum refineries	343,345,353,356,35
50	Fertilizer manufacturers	365 372
51	Soap and chemical products	376, 378, 379
52	Miscellaneous manufacturing	381,382,383,385,
53	Scrap iron	393, 397, 399
54	Construction – Residential	404-421
55	Construction – Non-residential	404-421
56 57	Transportation	501,527
58	Post office Electric power	543,544,545
59	Water and gas	572 574,576
60	Distribution	602-629, 631-699
61 62	Automobile operation	;;
62	Travel and enfertainment	702 727
64	Dwelling services	702-737
65	Hotels and restaurants	875,876
66 67	Personal services	823-859, 871-874
67 68	Business services Services to primary industries	861-869, 894-898 021,039,045,096,
00	partition to paintary industries	021,039,045,096,

LIST 7. Classification of Industries, Non-confidential (Small), 1965 Atlantic Region, 34 Industries

	Atlantic Region, 34 Industries	
Input-output industry number	Input-output industries	S.I.C. number
1	Agriculture	010
2	Forestry	031
3	Primary fishing	041
4	Metal mining	053,056,058
5	Coal mining	061
6	Non-metals, quarries	071,073,077,079, 083,087
7	Meat, dairy, fruit	101,103,105,112,147
8	Secondary fishing	111
9	Miscellaneous foods, n.e.s.	123,124,128,129, 131,133,139
10	Soft drinks, distilleries, breweries	141,143,145
11	Textiles, clothing	174,179,183,193,197, 201,211,213,214,216, 221,223,229,231,239, 243,244,246,247,249
12	Sawmills, wood products	251,252,254,256,258, 259,261,266
13	Pulp and paper products	271,272,273,274
14	Printing and publishing	286, 287, 288, 289
15	Iron and steel mills	291
16	Metal fabricating	294, 298, 301, 302, 303 304, 305, 306, 309
17	Machinery and equipment	307, 308, 315, 316
18	Transportation equipment	321,232,324,326, 327,328
19	Electrical equipment	332,334,335,337,338
20	Non-metallic mineral products.	341,343,345,347,348, 351,353,356,359
21	Petroleum refineries	365
22	Fertilizer, paint, soap products	372,374,375,376, 378,379
23	Miscellaneous manufacturing	381,382,383,384,385, 393,397,399
24	Construction	404-421
25	Transportation, travel and entertainment	501-527
26	Radio, telephone, telegraph, post office	543,544,545,548
27	Electric power, water, gas	572,574,576
28	Distribution	602-629, 631 699
29	Automobile operation	₩ 1
30	Finance, insurance, real estate, and equipment rental	702-737
31	Dwelling services	-
32	Hotels and restaurants	875,876
33	Personal services	823-859, 871-874
34	Business services and services to primary industries	861-869, 894-898,021 039,045,096,098,099

LIST 7. Classification of Industries, Non-confidential (Small), 1965 — Continued Newfoundland, 31 Industries

Input-output industry number	Input-output industries	S.I.C. number
1	Agriculture	010
2	Forestry	031
3	Primary fishing	041
4	Metal mining	053,056,058
5	Non-metals, quarries	071,073,079,083,087
6	Meat, dairy, fruit	101,105,112
7	Secondary fishing	111
8	Miscellaneous foods, n.e.s.	123,128,129,139
9	Soft drinks, distilleries, breweries	141,145
10	Textiles, clothing	174,179,221,239, 243,246
11	Sawmills, wood products	251,252,254,256, 258,259,261,266
12	Pulp and paper products	271,273
13	Printing and publishing	286,288,289
14	Metal fabricating	294,303,304,305,309
15	Machinery and equipment	308,315
16	Transportation equipment	327,328
17	Non-metallic mineral products	341,345,347,348, 351,353
181	Petroleum refineries	365
191	Fertilizer, paint, soap	375,378
20	Miscellaneous manufacturing	381,383,397
21	Construction	404-421
22	Transportation, travel and entertainment	501-527
23	Radio, telephone, telegraph, post office	543,544,545,548
24	Electric power, water and gas	572,576
25	Distribution	602-629, 631-699
26	Automobile operation	=
27	Finance, insurance, real estate and equipment rental	702-737
28	Dwelling services	
29	Hotels and restaurants	875,876
30	Personal services	823-859, 871-874
31	Business services and service to primary industries	861-869,894898,098

¹ These industries cannot be shown separately. In the 1965 flow accounts in Appendix I industries 18 and 19 are aggregated.

LIST 7. Classification of Industries, Non-confidential (Small), 1965 — Continued Prince Edward Island, 29 Industries

	Time 20 may 20 may 20 may 10 m	
Input-output industry number	Input-output industries	S.I.C. number
1	Agriculture	010
2	Forestry	031
3	Primary fishing	041
4	Non-metals, quarries	083,087
5	Meat, dairy, fruit	101,103,105,112
6	Secondary fishing	111
7	Miscellaneous foods, n.e.s.	123,124,129
8	Soft drinks, distilleries, breweries	141
9	Textiles, clothing	179,193,211,213,223
10	Sawmills, wood products	251,254,258,259
111	Pulp and paper products	274
121	Printing and publishing	286, 289
131	Metal fabricating	294,304
141	Machinery and equipment	308
151	Transportation equipment	327,328
161	Non-metallic mineral products	347,353
17	Fertilizer manufacturers	372
181	Miscellaneous manufacturing	381,399
19	Construction	404-421
20	Transportation, travel and entertainment	501-527
21	Radio, telephone, telegraph, post office	-
22	Electric power, water and gas	572,576
23	Distribution	602-629, 631-699
24	Automobile operation	-
25	Finance, insurance, real estate and equipment rental	702-737
26	Dwelling services	220
27	Hotels and restaurants :	875,876
28	Personal services	823-859, 871-874
29	Business services and services to primary industries	861-869, 894-898,098

¹ These industries cannot be shown separately. Therefore, in the transaction flow tables and the input coefficient tables the following aggregations were made:

Industries Nos. 11 and 12, 13, 14, 15, 16, and 18.

In Industry No. 10 S.I.C. 261 was omitted and in Industry No. 17 S.I.C. 379 was omitted in order to allow publication. Both S.I.C. 261 and 379 were negligible in size in 1965.

LIST 7. Classification of Industries, Non-confidential (Small), 1965 — Continued Nova Scotia, 33 Industries

Input-output industry number	Input-output industries	S.I.C. number
1	A : : 14	010
1	Agriculture	010
2	Forestry	031
3	Primary fishing	041
4	Coal mining	061
5	Non-metals, quarries	073,077,079,083,087
6	Meat, dairy and fruit	101,103,105,112,147
7	Secondary fishing	111
8	Miscellaneous foods, n.e.s.	123,128,129,131,139
9	Soft drinks, distilleries, breweries	141,143,145
10	Textiles, clothing	174,179,183,201,213, 216,221,229,239,243, 244,247,249
11	Sawmills, wood products	251,254,256,258,259, 261,266
12	Pulp and paper products	271, 273, 274
13	Printing and publishing	286, 287, 288, 289
14	Iron and steel mills	291
15	Metal fabrication	294,301,302,303,304, 305,306,309
16	Machinery and equipment	307, 308, 315
17	Transportation equipment	321,323,324,326, 327,328
18	Electrical equipment	334,335,337,338
19	Non-metallic mineral products	341,347,345,348,351, 353,356
20	Petroleum refineries	365
21	Fertilizer, paint, soap	372,374,374,378,379
22	Miscellaneous manufacturing	381,384,385,393, 397,399
23	Construction	404-421
24	Transportation, travel and entertainment	501-527
25	Radio, telephone, telegraph, post office	543,544,545,548
26	Electric power, water and gas	572,576
27	Distribution	603 - 629, 631 - 699
28	Automobile operation	-7
29	Finance, insurance, real estate and equipment rental	702-737
30	Dwelling services	Ξ:
31	Hotels and restaurants	875,876
32	Personal services	823-859, 871-874
33	Business services and services to primary industries	861-869, 894-898, 096,098

LIST 7. Classification of Industries, Non-confidential (Small), 1965 — Concluded New Brunswick, 33 Industries

Input-output industry number	Input-output industries	S.I.C. number
1	Agriculture	010
2	Forestry	031
3	Primary fishing	041
4	Metal mining	053,056
5	Coal mining	061
6	Non-metals, quarries	079,083,087
7	Meat, dairy and fruit	101, 103, 105, 112
8	Secondary fishing	111
9	Miscellaneous foods, n.e.s.	123,128,129,131, 133,139
10	Soft drinks, distilleries, breweries	141,143,145
11	Textiles, clothing	174,179;183,193,197 214,221,229,231,243 244,246,247
12	Sawmills, wood products	251, 252, 254, 256, 258 259, 261, 266
13	Pulp and paper products	271,272,273
14	Printing and publishing	286, 287, 288, 289
15	Metal fabricating	294,298,302,303,304 305,309
16	Machinery and equipment	307, 308, 315, 316
17	Transportation equipment	321, 324, 327, 328
18	Electrical equipment	332,335,338
19	Non-metallic mineral products	341,343,345,347,348 351,353,356,359
20	Petroleum refineries	365
21	Fertilizer, paint, soap	372,376,378,379
22	Miscellaneous manufacturing	381,382,383,385,393 397,399
23	Construction	404-421
24	Transportation, travel and entertainment	501-527
25	Radio, telephone, telegraph, post office	543,544,545,548
26	Electric power, water and gas	572,574,576
27	Distribution	602-629, 631-699
28	Automobile operation	s - z
29	Finance, insurance, real estate and equipment rental	702-737
30	Dwelling service	
31	Hotels and restaurants	875,876
32	Personal services	823-859, 871-874
33	Business services and services to primary industries	861-869, 894-898, 096,089

¹ Data cannot be published for Industry No. 20 (Petroleum refineries). It is aggregated with Industry No. 17 (Transportation equipment) in the flow accounts for 1965 presented in Appendix I.

LIST 8. List of Non-competitive Imports
(Commodities which were purchased, but not produced in any of the Atlantic Provinces in 1960)

lo.	Commodities	Input-output commodity number 1
	A. Foodstuffs	
	I. Grains:	
	Barley Rye Wheat Buckwheat Mixed grains and other grains Corn Screenings Bran, shorts and middlings Cornmeal grits, etc. Baby cereals Oatmeals, breakfast cereals Rice meal and feed	01001 01002 01003 01004 01005 01006 12401 12402 12403 12301 12404 13901
I	I. Flour and starch:	
1 2 3 4 5 6 7 8	Rye flour Flour and meal Malt flour Soya flour Wheat Flour (hard, soft) Corn starch Moulding starch Cake mixes, doughnut mix, pastry	12405 12406 12407 12408 12409 13902 13903 13904
ır	I. Vegetable oils:	
	Linseed oil, cake and meal Soybean oil, cake and meal Other oil cake meals Cooking oil (coconut, etc.) Rolling oils (palm oil, etc.) Other vegetable oil China wood oil Oils—Cotton seed, cake and meal Corn oil Essential oils	13501 13502 13503 13504 13505 13506 13507 13508 37902
rv	. Food stabilizers:	
1 2 3	Rennet Stabilizers in making ice cream Agar-agar	13905 13906 13907
v	. Sugar, molasses, etc.:	
1 2 3 4 5 6 7	Caramel Molasses (crude, refined) Syrups – Corn syrup, etc. Glucose Sugar (corn) dextrose Sugar (invert) Raw cane sugar	13908 13301 13909 13910 13911 13912 01006
v	I. Coffee, cocoa, tea, and products:	
1 2 3 4 5 6	Coffee beans (green) Tea (loose) Cocoa beans Cocoa powder Chocolate powder Cocoa butter Chocolate syrup	01007 01008 01009 13101 13102 13103

See footnote(s) at end of list.

LIST 8. List of Non-competitive Imports — Continued

	Input-output		
	Commodities	commodity number 1	
	A. Foodstuffs – Concluded		
	VII. Fruit, nuts, spices:		
1 2 3 4 5 6 7	Raisins, currants, dates for packaging Spices for grinding Vanilla beans Nuts (Almond, brazil, walnuts, pecans) Coconut, shredded Peanuts Peanuts Peanuts (green)	01010 01011 01012 01013 13913 13914 01014	
	VIII. Malt and hops:		
1 2 3 4 5 6 7	Hops (imported) Hops (Canadian) Malt, (imported) i.e. non-Canadian Malt, (Canadian) Malt, (Canadian) Malt, extract and syrup Malt sprout Barley malt	01015 01016 13915 13916 13917 13918 13919	
	IX. Rice and juices:		
1 2 3	Rice, etc	13920 11201 11202	
	B. Leather, textiles, hosiery and clothing		
	I. Leather, skins and hides:		
1 2 3 4 5 6 7	Cowhide (a) top grain (b) split Leather — Upper Leather — Sole Leather — Glove Leather Findings Other findings	17201 17202 17203 17204 17205 17901 17902	
	II. Rubber products:		
1 2 3 4	Sponge rubber cushioning Rubber Rubberized curled hair Tires and tubes	16901 01017 16902 16301	
	III. Natural fibres:		
1 2 3 4 5	Merino – 60.s and finer Vegetable textile fibres (all kinds) Sisal Manilla fibre Cotton (raw)	21101 21102 21103 21104 01018	
	IV. Wool and wool products:		
1 2 3	Worsted yarns Wool tops Coatings	19301 21105 19701	
	V. Synthetic filament and fabrics:		
1 2 3 4 5 6 7 8 9 10	Rayon waste Synthetics Nylon filament Rayon filament Nylon and rayon yarns Other yarn Rayon staple fibre Nylon fibre Nylon Other fibre Degras	20101 20102 20103 20104 20105 20106 20107 20108 20109 20110 20111	

LIST 8. List of Non-competitive Imports — Continued

	Commodities	Input-output commodity number 1
	B. Leather, textiles, hosiery and clothing – Concluded	
1	VI. Canvas, jute, duck, etc.:	10201
2	Drill	18301 18302
3	All other fabrics for making of canvas products	18303 22901
1	Jute cloth Canvas and duck	18304
ğ	THE P Is	
1	VII. Felts:	21.501
2	Felts Paper-maker's and pulp-maker's felts, wool	21501 19702
3	Felt, sole stock	21502
1	Fur felts	21503
1	VIII. Miscellaneous fabrics and sewing thread:	
ı	Fabrics knitted, not of cotton	23901
2	Cambric tape	21401
3	Coated fabrics except vinyl Linings for fur clothing	21901 21801
5	Other saturating material	
5	Vinyl coated fabrics	21902 21201
7	Sewing twine Sewing thread	21201
9	Household goods, draperies, etc.	22902
1		
ì	C. Wood industries	
I	I. Fine papers:	
1	Groundwood printing and specialty papers	27101
5	Book paper – Coated and uncoated	27102 27103
4	Waxed paper	27401
5	Glassine paper	27104 27105
6	Cover and fancy paper	27402
	II. Other paper converters:	
1	Gummed tape, mailing tubes, fibre drums	27404
2	Mats	27405
1	III. Hardboard:	
1		
1	Hardboard (birch, maple, oak)	
	IV. Specialty hardwoods:	
1 2	Lumber (birch, maple, oak) Logs and bolts — Mahogany	25101 03101
2	Logs and boits – Manogany	03101
	D. Primary metal industries, metal fabricating and machinery	
	I. Pig iron and ferrous alloys:	
1	Ferrochrome (including Chrome-X - high carbon)	29101
2 3	Ferro-manganese (high carbon) Ferro-manganese (medium carbon)	29102 29103
	Ferro-molybdenum	29104
4 5 6	Ferrosilicon (medium, silicon grade) Ferrosilicon (high silicon grade)	29105 29106
7 8	Ferro Titanium	29107
8	Ferro varradium	29108 29109
0	Ferro phosphorus	29110
1 2	Ferro-alloys — Unspecified	29111 29112
	Culvinii illuliguicos dilecti and an anticidade de la factoria del la factoria de la factoria del la factoria de la factoria della factoria della factoria della factoria d	29113

LIST 8. List of Non-competitive Imports — Continued

lo.	Commodities	Input-output commodity number 1
D. Primary m	etal industries, metal fabricating and machinery – Concluded	
II. Copper and alloys		******
	cakes, sheet, etc. (brass, copper, alloys, bronze)	29701
III. Nickel ingots and		
Nickel ingots, c	athodes, etc	29501
IV. Aluminum ingots	and sheet:	
1 Aluminum ingo Aluminum extr	tsusions:	29502 29601
	scluding cartridge and sheets	2,001
	g wire products ts and slats	29602
4 Other aluminum	n including castings	29603
V. Lead, zinc and silv	er:	
1 Lead		29801
Zinc dust		29802 29803
4 Silver		29503 29503
5 Babbit metal an Other non-ferro	d solders	29804 29805
		27003
VI. Tin and tin plates:		20006
		29806 29807
VII. Steel and sheet pl	ate:	
Steel slats		29115
2 Silicon sheet an	d plates	29116
4 Steel sheets pla	alvanized in, strips	29117 29118
5 Steel plates		29119
VIII. Metal stamping pr	oducts:	
1 Crown – Bottle 2 Metal heads	caps	30401
Metal heads Brass eyelets		30402 30403
4 Household uter	isils	30404
IV D 'I		
IX. Railway springs: Springs - Railw		20001
	/ay	30901
X. Machine parts:		
1 Bearings and oil	seals	31501
XI . Machinery		
1 Printing industr	ies - Machinery and equipment	31502
XII. Transportation eq	uipment:	
1 Motor vehicles		32302
	E. Non-metallic minerals	
I. Non-metallic mine	erals (crude):	
Fuller's Earth		07901
3 Plumbago and g	graphite	07902 07903
4 Phosphate rock		07904
	ine	07905 07101
	ted forms)	07906

See footnote(s) at end of list.

LIST 8. List of Non-competitive Imports - Continued

No.	Commodities	Input-output commodity number 1
	E. Non-metallic minerals – Concluded	
1	II. Porcelain: Porcelain	25101
2	Porcelain Insulators porcelain	35101 35102
	III. Refractory material:	
1 2	Magnesite	35901
3	Dolomite, calcined	35902 35903
4	Celite	35904
5	China clay (kaolin) Dolomite, raw, crushed	35905 07907
1	IV. Glass and products:	
1	Glass	35601
2	Rough blanks (cylinders, etc. for making lenses)	35602 35603
4	Mirrors	35603 35604
5	Other products of glass	35606
	V. Abrasives, etc:	
1 2	Granules – Rock and slate	35701
2	Abrasives – Grinding and polishing – Materials, carborundum, rouge, etc.	35702
ĺ	F. Petroleum and coal products	
	I. Lubricating oils, etc.:	
1	Oil – Lubricating	36501
2	Absorbing and wash oil	37902
3 4	Paraffin and chlorowax — Wax	36502 36503
	II. Crude oil:	
1	Crude oil and naphtha	06301
	III. Core oil:	
1	Core oil	37903
	G. Electrical products industries	
	I. Electrical industrial equipment:	
1	Electric motors, under one h.p.	33601
2	Condensing units	33602
	II. Miscellaneous electrical products:	
1 2	Electrodes	33901 33902
	III. Communications equipment:	
1	Radios, television sets	33501
	H. Miscellaneous manufacturing	
1	I. Scientific and professional equipment: Frames for spectacles	38101
2	Ophthalmic and surgical materials	38102
3	Miscellaneous dental supplies	38103

LIST 8. List of Non-competitive Imports — Continued

	LIST 8. List of Non-competitive Imports — Continued	
No.	Commodities	Input-output commodity number 1
	H. Miscellaneous manufacturing – Concluded	
	II. Plastic shapes and forms:	
1	Plastic	37301
2	Plastic board Foamed plastic cushioning	37302 37303
4	Foam retainers	37801
5	Transparent film - Cellulose, plastic polystyrene, etc.	37304
	III. Resins – Not shaped:	
1	Synthetic resins including vinyl, plastic, etc.	37305
	IV. Miscellaneous manufactures:	
1	Toilet preparations	37701
2	Jewellery, silverware, clocks	38201 39301
4	Sporting goods and toys Button, miscellaneous fasteners, dry goods and notions	39901
5	Tobacco products	15301
	I. Chemical and chemical products	
	I. Inorganic chemicals:	
1	Sodium aluminum sulphate (alum)	37802
2	Sulphur	06501
3	Sulphate of soda (salt cake)	37803
4 5	Iron oxide	37804 37805
6	Ammonium bicarbonate	37806
7	Sodium sulphite	37807
8	Sodium hydroxide Chlorine — Liquid	37808 37809
10	Ammonia	37810
11	Calcium carbide	37811
12 13	Borax	37812 37813
14	Silicate of soda White lead (a) basic carbonate (b) basic sulphate	37813
15	Baking soda (sodium bicarbonate)	37815
16	Sodium carbonate (soda ash)	37816
17 18	Carbonate of ammonia Calcium acid phosphate (mono)	37817 37818
19	Alum	40381
20	Antimony oxide	37819
21 22	Titanium dioxide	37820 37821
23	Magnesium oxide	37822
24	Caustic soda	37823
25 26	Aqua ammonia and anhydrous White arsenic	37824 37825
27	Phosphoric acid	37826
28	Sulphur dioxide	37827
29 30	Muriatic acid (hydrochloric) Black (mostly carbon black)	37828 37829
31	Alkylate	37830
32	Lactates - Butyl	37831

LIST 8. List of Non-competitive Imports — Continued

V.,	Commodities	Input-output commodity number 1
	I. Chemical and chemical products – Continued	
	I. Inorganic chemicals – Concluded:	
: : : :	Other extender pigments	37832 37833 37834
	II. Organic chemicals:	
1 2 3 4 5 6 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 25 26 26 27 27 27 27 27 27 27 27 27 27 27 27 27	Animal charcoal Phenol Benzol Industrial alcohols (ethyl, methyl, etc.) Lactic acid Formaldehyde Ethyl cellulose Ethylene glycol Propylene glycol Other glycols Benzoate of soda Carboxyl (a) Anti-skinning agents (b) fatty acids Tetra ethyl fluid Mono sodium glutamate Monoethynolamene Citric acid Tartaric acid Acctates — amyl, butyl, ethyl Ketones (a) methyl ethyl (b) methyl isobutyl Acetone Vanillin Methylene chloride Tannic acid Cream of tartar (crude) Camphor	37904 37836 -37837 37838 37839 37840 37841 37842 37843 37844 37845 37846 37847 37848 37849 37850 37851 37852 37853 37854 37905 37906 37855 37856 37857 37858
1 2 3 4 5 6 7 8	III. Fertilizers, insecticides, etc: Potassium sulphate Pyrophosphate Potassium magnesium sulphate Potassium chloride Ammonium phosphate Ammonium nitrate Sodium nitrate Crude fertilizers	37859 37860 37861 37862 37863 37864 37865 37907
	IV. Glue:	
1 2	Size Vegetable adhesives	37908 37909
	V. Rubber resins:	
1 2 3 4	Gums	37910 37306 16903 16904

See footnote(s) at end of list.

LIST 8. List of Non-competitive Imports — Concluded

	Commodities	Input-output commodity number 1		
No.		of the state of th		
	I. Chemical and chemical products — Concluded			
	V. Rubber resins – Concluded:			
5	Lecithin	16905		
6	Natural resins	16906		
7 8	Nitro-cellulose	37307		
8				
	VI. Dyes and pigments:			
1	Titanium oxides	37866		
2 3	Black pigments White pigments	37867 37868		
4	White pigments Dyestuffs	37868 37869		
5	Dyes and colours	37870		
6	Filtering agents	37871		
7 8	Extended titanium dioxide	37872		
	Coloured prime pigments	37873		
	VII. Chemical specialties and unclassified chemicals:			
1	Agar	37874		
2	Additives	37911		
3	Glycerine	37601		
4 5	Sodium alumnate	37875		
6	Filtering materials Fluid for catalytic cracking unit	27406 37876		
7	Lithargl	37877		
8	Solvents	37878		
9	Reforming and polymerizing catalyst	37879		
10 11	Glycerol mono oleate	37880		
12	Foam and slime killers Mono glyceride emulsifier	37881 37882		
13	Refrigeration materials	37883		
14	Preservatives	37884		
15	Ink	37912		
16	Printing ink	37913		
17 18	Chillproofing and clarifying materials	37880 01014		
19	Turpentine	37914		
20	Miscellaneous brewing ingredients including salts	37886		
21	Miscellaneous chemicals and agents	37887		
22	Other salts	37888		
23	Lead oxide	27011		
25	Disinfectants	37914 37915		
1	VIII. Medicines and vitamins:	2-12-		
$\begin{bmatrix} 1 \\ 2 \end{bmatrix}$	Veterinary medicines – Coccidiosis Ascorbic acid	37402 37880		
3	Coccidio slats, etc.	37889 37890		
4	Antibiotics	37403		
5	Other antibiotics, food supplements	37404		
6	Vitamins	37405		
7	Drugs and medicines (general)	37406		

¹The first three digits of the code correspond to the S.I.C. of the principal producer of the commodity.

CHAPTER 4

INPUT-OUTPUT MODELS

	1

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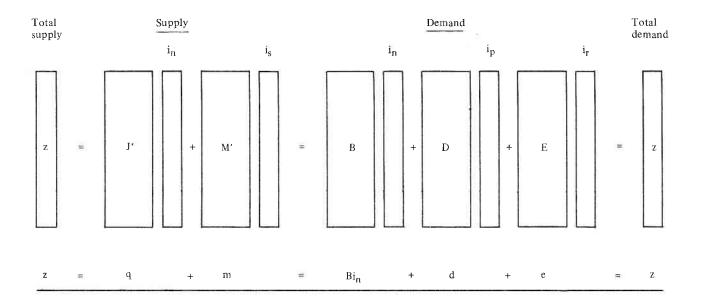
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INPUT-OUTPUT MODELS

I. The Basic Model

We may usefully recapitulate the building blocks of the basic model used in this study. Below we depict a

set of base year accounting identities; one for each of the commodities in the system:



Three assumptions form our basic model:

- (a) The requirements of commodities and primary inputs are proportional to industry output levels. This corresponds to the Leontief technology assumption. In a commodity by industry system this assumption is referred to as the "industry technology" assumption.
- (b) Commodity demand is directed toward industries in proportion to the ratios in which the commodities were supplied by the industries in the base year. This is the "constant domestic market share" assumption. The share of each industry in the domestic market is assumed to be constant.
- (c) The demand for competitively imported commodities is proportional to their total domestic use. The latter is defined as intermediate use plus final demand for domestic uses, and equals domestic output less exports plus imports. This is a modification of the "fixed supply coefficient" assumption first developed by Chenery and Moses (11). (It is implicit in our model that exports are supplied exclusively from domestic output.)

In accordance with these assumptions we define the following sets of coefficients:

1. Market Share Coefficients $\ddot{J} = J\hat{q}^{-1}$ and Import Coefficients $\dot{M} = M(\hat{q} + \hat{m} - \hat{e})^{-1}$

The matrix J in the base year flow accounts records the output of commodities by industries. It is assumed that the industries of the system keep their share of the market for commodities. We thus divide the flows in every row of J by the appropriate commodity output levels q to obtain J. The idea was first suggested by Stone who offered it as an alternative to the older transfer technique for dealing with secondary products and by-products and as an alternative also to the assumption that the product mix of industries remains fixed. It is used both in the Quebec System of Economic Accounts and in the Canadian input-output tables for 1961 (13). The publication describing the latter contains a splendid exposition of the fixed market share — fixed industry coefficient model.

The matrix M in the base year flow accounts records competitive imports by source. It is assumed that each source of imports maintains its share of domestic requirements. The latter are defined as total commodity requirements exclusive of export requirements.

Stone, Input-output Relationships, 1954-1966. (45)
 Bureau de la statistique de Québec, Le système de comptabilité économique de Québec. Volume 1 (36).

By dividing each column in the import matrix M by the appropriate total domestic supply (q + m - e) we obtain a matrix M = M $(\hat{q} + \hat{m} - \hat{e})^{-1}$ of competitive import coefficients. (Note that M can equally be derived from M = M $(B\hat{i} + \hat{d})^{-1}$.) The vector $m' = i'_s M$ yields total competitive imports of each type of commodity and the corresponding vector $\mu' = i'_s M$ yields ratios of competitive imports (from all sources) to domestic requirements, i.e., the column sums of the coefficient of M yield the row vector $\hat{\mu}'$.

Thus the market share matrix provides the transformation g = J q and the import coefficient matrix the relationship $m = \hat{\mu} (q + m - e) = \hat{\mu} (Bi + d)$.

Table 4.1 shows the market share matrix $\overset{*}{J}$, the import coefficient matrix $\overset{*}{M}$ and the vector μ' for Nova Scotia and the Atlantic Region for 1965.

2. Industry Input Coefficient: $\mathbf{\mathring{B}} = \mathbf{B}\hat{\mathbf{g}} - 1$

The matrix B in the base year accounts records the inputs of commodities into industries. It is assumed that requirements of inputs of commodities are proportional to industry output levels. We thus divide the flows in every column of B by the corresponding industry output level g to obtain B. The assumption is similar to the classical Leontief one. It should be noted that the matrix B and the derived matrix B relate to commodity inputs to industries, regardless of the industrial origin of the commodity, and regardless of whether the commodity is provincially produced or imported. If each commodity in the system were produced by only one industry, then B would be Leontief's inter-industry input coefficient matrix A. In our system, however, commodities are not constrained to be produced by a single industry. The matrix B is invariant to changes in the industrial origin of commodities, i.e., it does not change in accordance with changes in the share of the industries in the market for a commodity.

Table 4.2 shows the input coefficient matrix \vec{B} , for Nova Scotia, 1965. It is important to note that the $12 \times 12 \ \vec{B}$ matrix is not an inter-industry input coefficient matrix.

3. Industrial Primary Input Coefficients
$$\mathring{V}_B = V_B \hat{g}^{-1}; \mathring{Q}_B = Q_B \hat{g}^{-1}$$

These are similar to the input matrix $\overset{*}{B}$. $\overset{*}{V}_{B}$ and $\overset{*}{Q}_{B}$ are derived from the base year flow matrices V_{B} and Q_{B} by dividing primary inputs by the appropriate industry output levels. In practice industrial input coefficients are usually normalized in one operation:

$$\begin{bmatrix} * \\ B \\ ... \\ V_B \\ ... \\ \mathring{Q}_B \end{bmatrix} = \begin{bmatrix} B \\ ... \\ V_B \\ ... \\ Q_B \end{bmatrix} \hat{g} - 1$$

It is useful to include in the primary input matrices V_B and Q_B some non-additive figures, such as employment and total factor income.

In Table 4.2 we show the industrial primary input coefficients $\overset{*}{V}_B$ and $\overset{*}{Q}_B$ for Nova Scotia 1965. Direct primary input coefficients of industries are of interest in themselves. When combined with total (i.e., direct plus indirect) requirements for primary inputs, they yield useful "multiplier" measures of backward linkage.

4. Final Demand Expenditure Coefficients

$$\begin{bmatrix} \overset{*}{D} \\ \overset{*}{V_D} \\ \vdots \\ \overset{*}{Q_D} \end{bmatrix} = \begin{bmatrix} D \\ \vdots \\ V_D \\ \vdots \\ Q_D \end{bmatrix} \hat{y}^{-1} \begin{bmatrix} \overset{*}{E} \\ \vdots \\ \overset{*}{V_E} \\ \vdots \\ \overset{*}{Q_E} \end{bmatrix} = \begin{bmatrix} E \\ \vdots \\ V_E \\ \vdots \\ Q_E \end{bmatrix} \hat{x}^{-1}$$

Final expenditure categories are normalized by dividing the final demand expenditure flows in the matrices D and E by the appropriate totals [y',x']. There are p domestic expenditure categories and r types of exports. The primary inputs to final demand categories V_D and Q_D ; V_E and Q_E are divided by the same column total to yield a set of direct input coefficients to final expenditure categories analogous to industry input coefficients.

Table 4.2 shows the full set of final demand expenditure coefficients for Nova Scotia, 1965. These spending patterns are particularly useful if we wish to estimate the total impact on the economy of various proposed public expenditures.

Tables 4.1 and 4.2 contain the total data input of structural parameters into the system. All other analytical tables derive from B, J, M; V_B and Q_B , D, E, V_D , V_E , Q_D and Q_E .

5. Derived Input Coefficients and Flows, BJ, $(I - \hat{\mu})$ BJ, JB, J $(I - \hat{\mu})$ B, and JB

Where a commodity is produced by one industry only, the relevant column of the matrix B tells us the commodity input requirements of obtaining a unit of this commodity.

Where a commodity is produced in several industries, the commodity input requirements per unit output of commodity is a weighted average of the commodity input coefficients of the industries producing this commodity. The weights are obtained from the market share matrix J. The set of weighted average input structures is given by the matrix BJ. A simple illustration may be helpful. Suppose we have J commodities and 2 industries and the following J and J matrices:

		* B				*	
	Industries				Cor	nmodi	ties
		1 2			1	2	3
	1	.2 .3		1	1.0	.2	-
Commodities	2	.1 .2	Industries	2	-	.8	1.0
	3	.5 =	Total output		1.0	1.0	1.0
Total intermediate inputs		.8 .5					

The first commodity is produced by the first industry only and its commodity input structure is thus given by

$$\mathbf{\mathring{B}J_{1}} = \begin{bmatrix} .2 \\ .1 \\ .5 \end{bmatrix}$$

In the case of the second commodity, 20% is supplied by the first industry and 80% by the second. Thus we have

while

thus

The matrix $\overset{**}{BJ}$ shows requirements of commodities per unit commodity output. It should be noted that it rests on the assumption of fixed industry technology, i.e., an industry has a fixed commodity input mix which is invariant to its product mix.

To obtain input coefficients for domestically supplied commodities we multiply each row of the matrix \hat{BJ} by the appropriate domestic coefficient $(I - \hat{\mu})$. The expression $(I - \hat{\mu})$ \hat{BJ} thus yields a matrix of domestically supplied commodity inputs per unit of total commodity output.

Suppose values of μ are .5, .3 and 0 in our illustrative example. Then domestically supplied inputs required to produce one unit of the first, second and third commodity respectively would be:

$$(I - \hat{\mu}) \stackrel{**}{BJ}_{1} = \begin{bmatrix} .1 \\ .07 \\ .5 \end{bmatrix}$$

$$(I - \hat{\mu}) \stackrel{**}{BJ}_{2} = \begin{bmatrix} .14 \\ .126 \\ .10 \end{bmatrix}$$

$$(I - \hat{\mu}) \stackrel{**}{BJ}_{3} = \begin{bmatrix} .15 \\ .14 \\ .0 \end{bmatrix}$$

$$(I - \hat{\mu}) \stackrel{**}{BJ}_{3} = \begin{bmatrix} .5 & 0 & 0 \\ 0 & .7 & 0 \\ 0 & 0 & 1.0 \end{bmatrix} \begin{bmatrix} .20 & .28 & .30 \\ .10 & .18 & .20 \\ .50 & .10 & .00 \end{bmatrix} \begin{bmatrix} .10 & .14 & .15 \\ .07 & .13 & .14 \\ .50 & .10 & .00 \end{bmatrix}$$

Inter-industry Coefficient Matrix

There is another transformation which can usefully be derived from $\overset{*}{B}$ and $\overset{*}{J}$. By premultiplying $\overset{*}{B}$ by $\overset{*}{J}$ we transform commodity requirements into industry output requirements. To use the same example, we obtain

$$\begin{bmatrix} 1.0 & .2 & 0 \\ 0 & .8 & 1.0 \end{bmatrix} \quad \begin{bmatrix} .2 & .3 \\ .1 & .2 \\ .5 & 0 \end{bmatrix} = \begin{bmatrix} .22 & .34 \\ .58 & .16 \end{bmatrix}$$

The first industry uses .2 units of the first commodity which is supplied entirely by the first industry and .1 unit of the second commodity of which 20% is supplied by the first industry. Total use by the first industry of the output of the first industry thus $1.0 \times .2 + .2 \times .1 = .22$. Similarly uses by the first industry of the output of the second industry equals $.8 \times .2 + 1.0 \times .5 = .58$

To obtain domestically supplied industry inputs we again multiply each row of the matrix \hat{B} by the appropriate domestic coefficient $(I - \mu)$ to yield a matrix of domestically supplied industry inputs per unit total industry output. To use the same illustrative example:

$$\overset{*}{J}(I - \hat{\mu}) \overset{*}{B} = \begin{bmatrix} 1.0 & .2 & 0 \\ 0 & .8 & 1.0 \end{bmatrix} \begin{bmatrix} .5 & 0 & 0 \\ 0 & .7 & 0 \\ 0 & 0 & 1 \end{bmatrix} \begin{bmatrix} .2 & .3 \\ .1 & .2 \\ .5 & 0 \end{bmatrix} = \begin{bmatrix} .17 & .178 \\ .556 & .112 \end{bmatrix}$$

Clearly, the coefficients $\overset{*}{JB}$ and $\overset{*}{J}(I - \hat{\mu})\overset{*}{B}$ are inter-industry coefficients. By post multiplying $\overset{*}{JB}$ by base year industry output levels \hat{g} we can generate a flow matrix $\overset{*}{JB}$ which represents inter-industry flows of the traditional variety.

Table 4.3 shows the coefficient matrices $\stackrel{**}{BJ}$, $(I - \hat{\mu}) \stackrel{**}{BJ}$, $\stackrel{*}{J}(I - \hat{\mu}) \stackrel{*}{B}$, for Nova Scotia, 1965 and the adjusted flow matrix $\stackrel{*}{JB}$.

6. The Basic Model

On the basis of the three assumptions listed above, and using the corresponding coefficient sets \hat{B} , \hat{J} and $\hat{\mu}$ we have three relationships.

Commodity Supply Equals Commodity Use

$$q + m = Bg + d + e$$
 (1)

Industry Outputs Equal the Sum of Commodities Produced

$$g = \overset{*}{J}q \tag{2}$$

Competitive Imports are a Fixed Ratio of Domestic Requirements

$$m = \hat{\mu} (q + m - e) \tag{3}$$

The system has three sets of unknowns i.e., domestic commodity outputs q, industry output levels g, and (competitively) imported commodity requirements m.

Solving for Commodity Outputs q

Substituting from (2) and (3) into (1) we have:

$$q + (I - \hat{\mu})^{-1} \hat{\mu} (q - e) = B^* J^* q + d + e$$

which can be expressed as:

$$q = [I - (I - \hat{\mu}) \mathring{B} \mathring{J}]^{-1} [(I - \hat{\mu}) d + e]$$
 (4)

Solving for Industry Output Levels g

$$g = \mathring{J} [I - (I - \hat{\mu}) \mathring{B} \mathring{J}]^{-1} [(I - \hat{\mu}) d + e]$$
 (5a)

Alternately from (1) and (3) we have:

$$(I - \hat{\mu})^{-1} q = Bg + d + (I - \hat{\mu})^{-1}e$$

and

$$q = (I - \hat{\mu}) \mathring{B}g + (I - \hat{\mu}) d + e$$

combined with (2) this equation yields the following expression:

$$g = [I - \mathring{J}(I - \hat{\mu})\mathring{B}]^{-1}\mathring{J}[(I - \hat{\mu}) d + e]$$
 (5b)

(5a) and (5b) suggest that

$$\mathring{J}[I - (I - \hat{\mu})\mathring{B}\mathring{J}]^{-1}$$
 might be equal to $[I - \mathring{J}(I - \hat{\mu})\mathring{B}]^{-1}\mathring{J}$

This is the case as can be demonstrated by expanding the first expression:

$$\overset{*}{J} [I - (I - \hat{\mu}) \overset{*}{B} \overset{*}{J}]^{-1} = [\overset{*}{J} + \overset{*}{J} (I - \hat{\mu}) \overset{*}{B} \overset{*}{J} + \overset{*}{J} (I - \hat{\mu}) \overset{*}{B} \overset{*}{J} (I - \hat{\mu}) \overset{*}{B} \overset{*}{J} + \dots]$$

$$= [I - \overset{*}{J} (I - \hat{\mu}) \overset{*}{B} + \overset{*}{J} (I - \hat{\mu}) \overset{*}{B} \overset{*}{J} (I - \hat{\mu}) \overset{*}{B} + \dots] \overset{*}{J}$$

$$= [I - \overset{*}{J} (I - \hat{\mu}) \overset{*}{B}]^{-1} \overset{*}{J}$$

Solving for Competitive Imports m

Substituting from (1) and (3) we have:

$$m = \hat{\mu} (\mathring{B}g + d)$$

Substituting from (2) and (4) we have:

$$m = \hat{\mu} B J [I - (I - \hat{\mu}) B J]^{-1} [(I - \hat{\mu}) d + e] + \hat{\mu} d$$
(6)

Clearly the first part of this expression yields indirect competitive imports while the second part $\hat{\mu}$ d represents direct competitive imports.

The Commodity Inverse Rc

Direct and indirect requirements for commodities per unit commodity output delivered for final use is obtained from (4).

The commodity inverse

$$R_c = [I - (I - \hat{\mu}) \mathring{B} \mathring{J}]^{-1}$$

has as many rows and columns as there are commodities in the system. Any column yields a list of direct and indirect domestic commodity requirements per unit of commodity delivered for final use. Each element of the matrix R_c can usefully be compared with the corresponding element in the matrix $(I - \hat{\mu})$ BJ. Evidently the matrix

$$(I - \hat{\mu}) \stackrel{**}{BJ} - [I - (I - \hat{\mu}) \stackrel{**}{BJ}]^{-1}$$

is a matrix of indirect domestic commodity requirements per unit of commodity delivered for final use.

Table 4.4 presents the commodity inverse R_c for Nova Scotia, 1965.

The Industry Inverse RI

Direct and indirect requirements for industry output per unit industry output delivered for final use is obtained from (5b).

The industry inverse

$$R_{\rm I} = [\mathrm{I} - \overset{*}{\mathrm{J}} (\mathrm{I} - \hat{\mu}) \overset{*}{\mathrm{B}}]^{-1}$$

has as many rows and columns as there are industries in the system. Any column yields direct and indirect requirements for industry output levels per unit of industry output delivered for final use. Each element in the matrix R_I can usefully be compared with the corresponding elements in the matrix $\hat{J}(I-\hat{\mu})$ \hat{B} . Evidently the matrix

$$[\mathring{J}(I - \hat{\mu}) \mathring{B}] - [I - [\mathring{J}(I - \hat{\mu}) \mathring{B}]^{-1}$$

is a matrix of indirect industry requirements per unit industry output delivered for final use.

Table 4.7 presents the industry inverse $R_{\rm I}$ for Nova Scotia, 1965.

Primary Input Requirements

By premultiplying direct and indirect requirements for industry output $R_{\rm I}$ by primary input coefficients $\stackrel{*}{V}_B$ we obtain direct and indirect primary input re-

 $\overset{*}{Q}_{B}$

quirements per unit industry output delivered for final use:

$$\begin{matrix} \overset{*}{\mathbf{V}_{\mathbf{B}}} \\ & \ddots & \\ & \ddots & \\ & \overset{*}{\mathbf{Q}_{\mathbf{B}}} \end{matrix} \begin{bmatrix} \mathbf{I} - \overset{*}{\mathbf{J}} \left(\mathbf{I} - \hat{\boldsymbol{\mu}} \right) \overset{*}{\mathbf{B}} \end{bmatrix}^{-1}$$

Table 4.8A shows the results for Nova Scotia, 1965.

By premultiplying direct and indirect requirements for industry outputs per unit commodity output demanded for final use by primary input coefficients

$$\overset{*}{\operatorname{V}_{B}}$$
 $\overset{*}{\operatorname{Q}_{B}}$

we obtain direct and indirect primary input requirements per unit commodity output delivered for final use

either

$$\overset{*}{\overset{V}{V}_{B}} \underbrace{\overset{!}{\overset{!}{V}_{B}}}_{[I - J(I - \hat{\mu}) \overset{*}{B}]^{-1} \overset{*}{J}$$

or

$$\begin{matrix} \overset{*}{\mathbf{V}}_{\mathbf{B}} & \overset{*}{\mathbf{I}} \begin{bmatrix} \mathbf{I} - (\mathbf{I} - \hat{\mu}) & \overset{*}{\mathbf{B}} \overset{*}{\mathbf{J}} \end{bmatrix}^{-1} \\ \overset{*}{\mathbf{Q}}_{\mathbf{B}} & \end{matrix}$$

Table 4.9 shows these primary input requirements for Nova Scotia, 1965.

Competitive Import Requirements per unit Commodity Delivered for Final Use (Table 4.6)

From (6) we obtain the indirect competitive import (input) requirements per unit commodity output delivered for final use as:

$$\hat{\mu} \stackrel{**}{BJ} [I (I - \hat{\mu}) \stackrel{**}{BJ}]^{-1}$$

The matrix has as many rows and columns as there are commodities in the system. Table 4.6 presents indirect competitive imports for Nova Scotia, 1965.

If there were no competitive import leakages in the system, the sum of all primary inputs required directly and indirectly to produce one unit of commodity output delivered for final use would evidently equal unity. With the introduction of import leakages it is the sum of direct and indirect primary input requirements plus indirect competitive import requirements per unit commodity output delivered for final use which is equal to one. The proof is offered below.³

Direct and Indirect Requirements for Industry Output Per Unit Commodity Output Delivered for Final Use

Matrices $[I - \mathring{I} (I - \hat{\mu}) \mathring{B}]^{-1} \mathring{J}$ and $\mathring{J}[I - (I - \hat{\mu}) \mathring{B}]^{-1}$ of (5a) and (5b), which were shown above to be equal, can be expressed respectively as $R_I \mathring{J}$ and $\mathring{J} \mathring{R}_C$. It is evident from (5a) or (5b) that these matrices represent the direct and indirect requirements for industry outputs per unit commodity output delivered for final use.

Table 4.8B shows direct and indirect industry output requirements per unit commodity delivered for final use in Nova Scotia, 1965.

Direct and Indirect Commodity Requirements Per Unit of Final Expenditure Category

The definition of $\overset{*}{D}$ and $\overset{*}{E}$ implies that:

$$d = \mathring{D}y$$

and

$$e = Ex$$

$$3 \quad i'_{k} \overset{*}{V}_{B} \overset{*}{J} [I - (I - \hat{\mu}) \overset{**}{B} \overset{*}{J}]^{-1} + i'_{m} \hat{\mu} \overset{**}{B} J [I - (I - \hat{\mu}) \overset{**}{B} J]^{-1}$$

$$= [i'_{k} \overset{*}{V}_{B} + i'_{m} \hat{\mu} \overset{*}{B} + i'_{m} (I - \hat{\mu}) \overset{**}{B} - i'_{m} (I - \hat{\mu}) \overset{**}{B}] \overset{*}{J} \overset{*}{R}_{c}$$

$$\text{where } R_{c} = [I - (I - \hat{\mu}) \overset{**}{B} J]^{-1}$$

$$= [i'_{n} \overset{*}{J} - i'_{m} (I - \hat{\mu}) \overset{**}{B} J] R_{c}$$

$$= [i'_{m} - i'_{m} (I - \hat{\mu}) \overset{**}{B} J] R_{c}$$

$$= [i'_{m} [I - (I - \hat{\mu}) \overset{**}{B} J] R_{c}$$

$$= i'_{m} [I - (I - \hat{\mu}) \overset{**}{B} J] R_{c}$$

$$= i'_{m}$$

Thus from

$$q = [I - (I - \hat{\mu}) BJ]^{-1} [(I - \hat{\mu}) d + e]$$
 (4)

we obtain

q =
$$[I - (I - \hat{\mu})BJ^*]^{-1}[(I - \hat{\mu})D^*:E^*]$$
 y

thus

$$[I - (I - \hat{\mu}) \mathring{B} \mathring{J}]^{-1} [(I - \hat{\mu}) \mathring{D} \mathring{E}]$$

represent the direct and indirect domestic commodity requirements for each category of final expenditure. Evidently, there are as many rows as there are commodities and as many columns as there are final expenditure categories.

In calculating domestic commodity requirements, the portion of final expenditure requirements initially supplied by competitive imports is not, of course, directed towards the domestic economy. In effect each of the columns in the matrix D is split into two parts: the domestically-supplied portion of final demand $(I - \hat{\mu})D$ and the imported portion μD . In the case of export categories the entire initial demand is directed towards the domestic economy.

Table 4.10A shows the direct and indirect commodity requirements for various types of final expenditures for Nova Scotia, 1965.

The transformation $g = \overline{J}q$ enables us to convert direct and indirect domestic commodity requirements per category of final expenditure into the corresponding industry output requirements:

$$\mathring{J} [I - (I - \hat{\mu}) \mathring{B} \mathring{J}]^{-1} [(I - \hat{\mu}) \mathring{D} : \mathring{E}]$$

or

$$[I - \mathring{J} (I - \hat{\mu}) \mathring{B}]^{-1} \mathring{J} [(I - \hat{\mu}) \mathring{D} : \mathring{E}]$$

Table 4.10B shows the direct and indirect industry output requirements for various types of final expenditures, Nova Scotia, 1965.

Indirect Requirements for Primary Inputs Per Unit Expenditure on Each Final Category

From the above, we obtain the expression for indirect⁴ primary input requirements:

or

$$\overset{\boldsymbol{*}}{\overset{\boldsymbol{V}}{\overset{\boldsymbol{V}}{\overset{\boldsymbol{V}}{\overset{\boldsymbol{U}}{\overset{\boldsymbol{V}}{\overset{\boldsymbol{U}}}{\overset{\boldsymbol{U}}{\overset{\boldsymbol{U}}}{\overset{\boldsymbol{U}}{\overset{\boldsymbol{U}}{\overset{\boldsymbol{U}}}{\overset{\boldsymbol{U}}{\overset{\boldsymbol{U}}}{\overset{\boldsymbol{U}}{\overset{\boldsymbol{U}}}{\overset{\boldsymbol{U}}{\overset{\boldsymbol{U}}}{\overset{\boldsymbol{U}}{\overset{\boldsymbol{U}}}{\overset{\boldsymbol{U}}}{\overset{\boldsymbol{U}}{\overset{\boldsymbol{U}}}{\overset{\boldsymbol{U}}}{\overset{\boldsymbol{U}}}{\overset{\boldsymbol{U}}{\overset{\boldsymbol{U}}}{\overset{\boldsymbol{U}}}{\overset{\boldsymbol{U}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}{\overset{\boldsymbol{U}}}{\overset{\boldsymbol{U}}}{\overset{\boldsymbol{U}}}{\overset{\boldsymbol{U}}}{\overset{\boldsymbol{U}}}{\overset{\boldsymbol{U}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}{\overset{\boldsymbol{U}}}{\overset{\boldsymbol{U}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}{\overset{\boldsymbol{U}}}{\overset{\boldsymbol{U}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}{\overset{\boldsymbol{U}}}{\overset{\boldsymbol{U}}}{\overset{\boldsymbol{U}}}{\overset{\boldsymbol{U}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}{\overset{\boldsymbol{U}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}{\overset{\boldsymbol{U}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}}{\overset{\boldsymbol{U}}}{\overset{\boldsymbol{U}$$

Table 4.10C shows indirect requirements for primary inputs per unit final expenditure category.

Transformation of Final Expenditure Flows into Primary Input Flows

From

$$\overset{*}{\overset{V_{B}}{\dots}} R_{I} \overset{*}{\overset{I}{J}} [(I - \hat{\mu}) \overset{*}{\overset{D}{\text{y}}} : \overset{*}{\overset{E}{\text{Ex}}}]$$

we can obtain the flow matrix of the indirect primary input requirements of all final expenditure categories in the base year.

Evidently,

This constitutes a total check on the model.5

Table 4.11 illustrates these identities for Nova Scotia, 1965.

Multipliers

By comparing direct requirements with total requirements we obtain a measure of the backward linkage of each of the commodities and final expenditure categories in the system.

We may define three distinct kinds of multipliers. The first we call **output multipliers**. They measure the gross sum of total outputs required to produce one unit for final delivery. The second we call **input multipliers**. They measure the ratio of the sum of total intermediate input requirements supplied from domestic production to the sum of direct intermediate inputs supplied for domestic production. The third category we call **primary input multipliers**. These relate total requirements of various types of primary inputs to direct requirements.

Output Multipliers

The row vector composed of the n column sums of the matrix $\boldsymbol{R}_{\boldsymbol{I}}$

$$i'_{n} [I - \mathring{J} (I - \hat{\mu}) \mathring{B}]^{-1}$$

yields a measure of total industry output requirements per unit of industry output delivered for final use.

The row vector composed of the m column sums of the matrix $\boldsymbol{R}_{\boldsymbol{c}}$

$$i'_{m} [I - (I - \hat{\mu}) BJ]^{-1}$$

yields a similar measure of total commodity output requirements per unit commodity delivered for final use.

In both cases we obtain domestic requirements only. Competitively imported requirements are "leaked out" of the system.

These multipliers tend to vary with the ratio of domestically supplied intermediate input per unit of industry (or commodity) output.

Input Multipliers

Intermediate input multipliers with respect to the industries in the system are given by the ratios of the elements in the row vector:

$$i'_{n} [I - \mathring{J} (I - \hat{\mu}) \mathring{B}]^{-1} - i'_{n}$$

(which is equal to the row vector: $i'_n R_I \stackrel{*}{J} (I - \hat{\mu}) \stackrel{*}{B})$

to the corresponding elements in the row vector

$$i'_n \mathring{J} (I - \hat{\mu}) \mathring{B}$$

⁴ In this case, the direct primary input requirements involve the primary inputs associated with each category of expenditure.

⁵ It is advisable to include this check in all programs. The model cannot reproduce the original base year primary inputs unless all coefficient matrices and all programming is correct.

Each of these multipliers measures the ratio of total intermediate domestic requirements to direct intermediate domestic requirements for an industry's output. It is interesting to note that these ratios show a remarkable stability compared to the corresponding output multipliers. The reason is that the output multipliers are affected by differences among industries in the ratios of intermediate inputs to output, whereas input multipliers are not. Intermediate input multipliers may also be defined with respect to the commodities in the system as the ratios of the elements of the row vector

$$i'_{m} [I - (I - \hat{\mu}) \mathring{B} \mathring{J}]^{-1} - i'_{m}$$

(which is equal to the row vector: $i'_m R_c (I - \hat{\mu}) \stackrel{**}{BJ}$)

to the corresponding elements in the row vector

$$i'_{m} (I - \hat{\mu}) \overset{**}{BJ}$$

Input multipliers for commodities (or industries) have counterparts in terms of final public sector expenditure categories, which measure the ratios of total domestic requirements to direct domestic requirements for each category of final expenditure.

For final expenditure categories these ratios are formed by dividing the elements in the row vector.

$$i'_{m} [I - (I - \hat{\mu}) BJ]^{-1} (I - \hat{\mu}) D$$

by the corresponding elements in the row vector

$$i'_{m} (I - \hat{\mu}) \overset{*}{D}$$

Primary Multipliers

Among the most useful multipliers derived from system are those which compare total requirements for each type of primary input with direct requirements. Obviously these can be obtained on the basis of a unit of industry output, or a unit of commodity output.

The primary input multipliers for each industry are given by dividing each element in the matrix

$$\overset{*}{\overset{V_{B}}{\overset{}_{\dots}}}_{\dots} [I - \overset{*}{\overset{}_{J}} (I - \hat{\mu}) \overset{*}{\overset{}_{B}}]^{-1}$$

by the corresponding element in the matrix

$$\overset{*}{\overset{}{\overset{}{V}_{B}}}_{\overset{}{\overset{}{\overset{}{\overset{}{Q}}{\overset{}{\overset{}{\overset{}{\overset{}}{\overset{}}{\overset{}}{\overset{}}{\overset{}}{\overset{}}{\overset{}}{\overset{}}{\overset{}}{\overset{}}{\overset{}}{\overset{}}{\overset{}}{\overset{}{\overset{}}{\overset{}}{\overset{}}{\overset{}}{\overset{}}{\overset{}}{\overset{}}{\overset{}}{\overset{}}{\overset{}}{\overset{}}{\overset{}}{\overset{}{\overset{}}{\overset{}}{\overset{}}{\overset{}}{\overset{}}{\overset{}}{\overset{}}{\overset{}}{\overset{}}{\overset{}}{\overset{}}{\overset{}}{\overset{}{\overset{}}{\overset{$$

Primary input multipliers on a commodity basis are obtained by dividing each element in the matrix

by the corresponding element in the matrix

$$\overset{*}{\overset{V}{\overset{}_{D}}}_{\overset{*}{\overset{}_{D}}}\overset{*}{\overset{*}{\overset{}_{D}}}.$$

Output, input and primary multipliers for Nova Scotia are presented in Table 4.16.

Summary of the Basic Model

The expressions used in the basic model are summarized in the list of tables and in Charts 4.1 and 4.2.

The bottom right hand corner of each box in the two charts contains table numbers relating to the illustrative example for Nova Scotia.

The model is basic in the sense that the closed versions (Models II and III) and the inter-regional version share the same formal characteristics.

II. Illustrative Example of the Basic Model

Throughout the exposition of the previous section we have left a trail of references to the input-output accounts of Nova Scotia, 1965 which are described earlier in this chapter. To assist the reader in comprehending our basic input-output model, these tables will here be reviewed again. Our illustrations using the Nova Scotia (12×12) tables can be easily extended to the Atlantic Region (12×8) tables.

We now limit our exposition to what the figures mean; the chapter on the economic structure of the Atlantic Provinces will, by contrast, be focussed on what these figures can tell us. It is hoped that these explanations will enable the reader to use to full effect, the larger system of tables contained in the Appendix.

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		Commodities	Industries	Final expenditure categories
	- 1	1	1 n	l
	1	$(\mathbf{I} - \hat{\boldsymbol{\mu}}) \overset{*}{\mathbf{B}} \overset{*}{\mathbf{J}}$	$(I - \mathring{\mu}) \stackrel{*}{B}$	$[(I - \hat{\mu}) \stackrel{*}{D} \stackrel{\cdot}{E}]$
Commodities				
Сош	· · m	Table 4.3(B)	not shown	not shown
	I	$J(I-\hat{\mu})\stackrel{*}{B}\stackrel{*}{J}$	$J(I-\hat{\mu})\stackrel{*}{B}$	$\overset{*}{\mathtt{J}}\left[\left(\mathbf{I}-\hat{\boldsymbol{\mu}}\right)\overset{*}{\mathtt{D}}\overset{*}{:}\overset{*}{\mathtt{E}}\right]$
Industry	18 2* 58			
II 10	n	not shown	Table 4,3D	not shown
Primary inputs	1 • • • k	v V X Q	$egin{array}{c} * & V_B & & & & \\ & \ddots & & & & \\ & & & & & \\ & & & &$	$egin{array}{cccc} egin{array}{ccccc} egin{array}{cccccccccccccccccccccccccccccccccccc$
Prin Inp	1	not shown	Table 4.2	Table 4.2

CHART 4.2

Direct and Indirect Input Requirements Relating Commodities, Industries, Primary Inputs and Final Demand Patterns

		Commodities	Industries	Final expenditure categories
W95-110-120-120-1		1 m	1	1
Commodities		Direct and indirect requirements for commodities per unit of commodity delivered for final use, R_c . $R_c = [I - (I - \hat{\mu}) \overset{**}{B} \overset{*}{J}]^{-1}$ Table 4.4 Indirect competitive import requirements per unit of commodity delivered for final use. $\hat{\mu} \overset{**}{B} \overset{*}{J} [I - (I - \hat{\mu}) \overset{**}{B} \overset{*}{J}]^{-1}$ Table 4.6		Direct and indirect requirements for commodities per unit of final expenditure. [I - (I-\hat{\mu}) \begin{array}{c} a
Industry	1 • •	Direct and indirect requirements for industry output per unit of commodities delivered for final use. Either:	Direct and indirect requirements for industry output per unit of industry output delivered for final use. $R_I = [I - \hat{J} (I - \hat{\mu})]^* - 1$ Table 4.7	Direct and indirect requirements for industry output per unit of final expenditure. Either: \mathring{J} [I-(I- $\hat{\mu}$) $\mathring{B}\mathring{J}$] ⁻¹ [(I- $\hat{\mu}$) \mathring{D} : \mathring{E}] or: [I- \mathring{J} (I- $\hat{\mu}$) \mathring{B}] ⁻¹ \mathring{J} [(I- $\hat{\mu}$) \mathring{D} : \mathring{E}] Table 4.10B
imary puts	1	Direct and indirect requirements for primary inputs per unit of commodity delivered for final use.	Direct and indirect requirements for primary inputs per unit of industry output delivered for final use.	Indirect requirements for primary inputs per unit of final expenditure $ \overset{*}{V}_{B} [I - \overset{*}{J} (I - \hat{\mu}) \overset{*}{B}]^{-1} \overset{*}{J} [(I - \hat{\mu}) \overset{*}{D} : \overset{*}{E}] $ $ \overset{*}{Q}_{B} $ or $ \overset{*}{V}_{B} \overset{*}{J} [I - (I - \hat{\mu}) \overset{*}{B} \overset{*}{J}]^{-1} [(I - \hat{\mu}) \overset{*}{D} : \overset{*}{E}] $ $ \overset{*}{Q}_{B} $ Table 4.10C
	1	Table 4.9	er .	1 able 4.10C

Market Share Coefficients \mathring{J} and Import Coefficients \mathring{M} (Table 4.1)

In cases where a commodity is produced only in the industry which normally produces it, such as is here the case with agricultural products, primary fish products or construction activity, we find an entry of unity at the intersection of the industry and its principal products. Where a commodity is produced by two or more industries, the market share coefficients tell us the proportion of deliveries originating in each of the producing industries. Thus 15.3% of primary forest products are produced on farm wood lots (i.e., in the agricultural industry), 83.3% in the logging industry proper, and the remaining 1.4% are a secondary product of sawmills (i.e., produced by secondary wood processing industries).

The table also shows us the proportion of total supply available for domestic use originating in each of the four sources of competitive imports. Thus 34.5% of agricultural products available for domestic demand, whether for intermediate or final uses, derives from imports: 2.3% from New Brunswick, 8.4% from Prince Edward Island, and the remaining 23.8% from the rest of Canada or from foreign countries. We may note that the proportion of imported supply is large in case of commodities such as machinery (steel, metal products) (73.7%) and zero for services such as distribution.

Input Coefficients of Industries and Final Expenditure Categories (Table 4.2)

Under the first 12 columns of Table 4.2 we have the matrices $\overset{*}{B}$, $\overset{*}{V}_B$ and $\overset{*}{Q}_B$. These describe the direct input coefficients of the 12 industries in the economy. The first 12 rows represent inputs of commodities $\overset{*}{B}$; the subsequent rows 14 to 20 are primary inputs classified as indirect taxes and subsidies (rows 14 and 15); noncompetitive imports (row 16); factor incomes (rows 17 to 19) and capital consumption allowances (row 20). This is the matrix $\overset{*}{V}_B$. Rows 20 to 26 represent the reclassification or transposition of matrix $\overset{*}{V}_B$ to income-outlay basis $\overset{*}{Q}_B$. The rows of $\overset{*}{Q}_B$ represent capital consumption allowances (row 20); household income (row 21) etc. Total primary inputs (row 27) is thus

equally the sum of rows 14 to 20 or the sum of rows 20 to 26. Factor incomes (row 28) is the sum of rows 17, 18 and 19. The employment coefficient (row 29) represents the number of employees per \$1,000 of gross value of industry output.

It is of some interest to compare the direct input coefficients of an extractive industry such as coal mining with the input coefficients of a secondary manufacturing activity such as food processing. In the mining industry only 27% of the value of output represents intermediate purchases, as compared with the food and textiles industries where 58.4% of the value of output are intermediate costs. The coal mining industry is highly labour intensive. Thus the wage bill in all mining accounts for 51.8% of the value of output, compared with only 19.6% in the case of the food industries. The mining industry employs 107 persons per million dollars of sales compared with 61 in the food and textiles industries.

Under columns 13 to 21 of Table 4.2 we have the matrices $\overset{*}{D}$, $\overset{*}{V}_{D}$ and $\overset{*}{Q}_{D}$ representing the spending patterns of various types of domestic final users. Thus a typical dollar spent on personal consumption would provide 79.2 cents of gross revenue to the industries supplying consumer goods. The remaining 20.8 cents are payments of indirect taxes (12.1%) and purchases of non-competitive imports (8.7%).

The spending patterns of various levels of government are shown in columns 16 to 21. We note that about 65% of the average federal dollar spent on goods and services in Nova Scotia represents payment of wages, salaries or military pay while some 35% represents purchase of various commodities, including services supplied by industries. The spending patterns of provincial public sectors are heavily weighted with construction activity. This reflects the fact that our accounts do not distinguish current from capital purchases for public sectors.

Finally, under columns 23 to 28 we have spending patterns of typical sets of exports, according to destination. Thus we may observe that 37% of export sales to foreign countries consisted of food and textile products, principally fish, while steel and metal products accounted for a further 14.4%. Exports to central Canada, by contrast, contain a high proportion of steel and metal goods.

⁶ The principal product of an industry is the product which is normally produced by this industry. Although the terminology was devised by Richard Stone when he classified products with respect to each of the industries to which they are principal, there is no particular reason to constrain the number of products in such a classification to the number of industries in the system.

Competitive imports can be removed from domestic final purchases of commodities. We may note that one typical dollar of personal consumption has a direct competitive import content of 17.8 cents and only 61.4 cents represents commodities supplied by domestic industries.

Inter-industry Input Coefficients $\overset{**}{JB}$, $\overset{*}{J}$ (I - μ) $\overset{*}{B}$ and the Inter-industry Flow Table $\overset{*}{JB}$ (Tables 4.3C, D and E)

To convert commodity to industry coefficients, \ddot{B} , into inter-industry coefficients, $\ddot{J}\ddot{B}$, we take into account the industrial origin of the commodity input. Thus for example, the column pertaining to the sawmills, pulp and paper industry in the matrix $\ddot{J}\ddot{B}$, shown in Table 4.3C is found as follows:

Inputs from the agricultural industry:

```
(1.0000 \times 0) + (.152722 \times .144423) + (.011484 \times .062509)
= 0 + .022056+.000718
= .022774
```

Inputs from the forestry industry:

Inputs from the sawmills, pulp and paper industry:

```
= (.014281 x .144423) + (.991676 x .096219)
= .0020625 + .0954181
= .097481
```

From B we see that a dollar of output of the sawmills, pulp and paper industry (secondary wood processing) requires an input of .144423 of forestry products. If these inputs are allocated to the industries which produce and supply them in the base year we see that the input of forestry products supplied by the forestry industry is only .120304, the remaining requirements of forest products being supplied by the agricultural industry (.022056) and secondary wood processing industries (.002063). We note that the forestry industry supplies, in addition to forest products, some secondary wood products (.000801) while the agricultural industry supplied some services (.000718).

From the coefficient matrix $\overset{**}{JB}$ we can generate an inter-industry flow matrix $\overset{*}{JBg} = \overset{*}{JB}$ shown in Table 4.3E. If we compare the column in the matrix $\overset{*}{JB}$ for the

secondary wood industries with the corresponding column B, (Table 3.2), we note that total intermediate input of commodities is, of course, the same (\$41.3 million). In the case of the commodity flow matrix B, these inputs are classified by the type of product; in the inter-industry flow matrix JB, they are classified by industry of origin. Entries are identical only for inputs which are produced exclusively by one industry and which, furthermore, produces no other commodities (e.g. construction, transportation, distribution).

If we are concerned with requirements supplied only by domestic industries, i.e., if we wish to "leak-out" requirements supplied by competitive imports, we evidently must reduce the commodity requirements of the input matrix B by multiplying each commodity input by the appropriate domestic coefficient $(I - \hat{\mu})$. We then obtain $(I - \hat{\mu})$ B, a matrix of domestically supplied commodity inputs to each of the n industries in the system. In the example used above, Table 4.3D, we would have:

Inputs from the agricultural industry:

```
(.152722 x .992716 x .144423) +
(.011484 x .999402 x .062509)
= .0218953 + .00071737
= .0226127
```

Inputs from the forestry industry:

```
(.832997 x .992716 x .144423) +
(.008324 x .484065 x .096219)
= .1194276 + .0003877
= .119815
```

Inputs from the secondary wood processing industry

```
= (.014281 x .992716 x .144423) +
(.991676 x .484065 x .096219) = .00204748 + .0461885
= .048236
```

The requirements matrix J ($I - \hat{\mu}$) B, Table 4.3D, i.e., requirements of industrial output supplied by the domestic economy to each of the industries in that economy is basic to the system. Comparison of these so called direct requirements with total requirements, i.e., direct plus indirect requirements, yields one of the most useful results of input-output analysis.

Commodity Input Coefficients $\stackrel{**}{BJ}$ and $(I - \hat{\mu}) \stackrel{**}{BJ}$ (Tables 4.3A, B)

The basic assumptions of the BJ arrangement do not differ from those of the JB matrix described above. Whereas the B matrix tells us the input of forest products to the wood processing industries, the matrix BJ tells us the input of forest products required to produce secondary wood products. (See Table 4.3A.) Thus, if for example, the wood processing industries produce a secondary product, such as pulpwood chips, the inputs required for these chips are not included in the input requirements of secondary wood products.

Conversely, if some other industry, such as forestry, for example, produces secondary wood products, the requirements of forestry products, if any, would have to be added.

Using the same numerical example, we have

Inputs of agricultural products:

 $(.001186 \times .008324)$

= .0000098

= .000010

Inputs of forest products:

 $= (.144423 \times .991676)$

= .143221

Inputs of wood products:

 $= (.000305 \times .008324 + (.096129 \times .991676))$

= .0000025 + .095418

= .095421

As would be expected, the input coefficient for forest products in the matrix BJ (.143221) is slightly lower than the input of forest products to the wood processing industry in B (.144423) because we assume that .008324 of the output of the wood processing industry consists of products (i.e., primarily wood chips) which are produced with inputs typical of the forestry industry. In our example, these latter require no forest products as intermediates.

Clearly, if we are concerned with requirements of products supplied from domestic sources, i.e. if we wish to "leak out" competitive imports, we must multiply each commodity input by the appropriate domestic coefficient $(I - \hat{\mu})$. We thus obtain $(I - \hat{\mu})$ BJ, (Table 4.3B) a matrix of domestically supplied commodity inputs required for the production of each of the n products in the system. In our example relating to the secondary wood processing industry we would have

Inputs of domestically produced agricultural products:

 $.654650 \times .001186 \times .008324 = .000006$

Inputs of domestically produced forest products

.992716 x .144423 x 991676 = .142178

Inputs of domestically produced secondary wood products

(.484065 x .000305 x .008324) + (.484065 x .096219 x .991676) = .046189

Table 4.3B shows the coefficient matrix $(I - \hat{\mu}) \hat{B}\hat{J}$. These are the direct requirements of domestically produced products per unit of output of product.

Direct and Indirect Requirements of Domestically Produced Commodities per unit Final Delivery $[I - (I - \hat{\mu}) BJ]^{-1}$ (Table 4.4)

Table 4.4 shows direct and indirect requirements of domestically produced commodities per unit final delivery of each of the 12 products. The difference between the coefficients $[I-\mu]$ BJ and those of $[I-(I-\hat{\mu})$ BJ]⁻¹ represent indirect domestic requirements. Thus, for example, there are direct requirements for transportation services of .051677 per dollar final deliveries of food and textile products. Total transportation requirements, however, are considerably larger (.083106). The difference of .031429 per dollar of final deliveries represents transportation inputs required to produce the agricultural inputs, the fish inputs, etc. into the industry making food and textile products.

⁷ We must bear in mind that the basic assumptions are locked into the definition of $\overset{*}{J}$ and $\overset{*}{B}$.

We have explained the commodity inverse shown in Table 4.4 for Nova Scotia, of dimensions (12×12) , but the reader can, of course, examine for himself the corresponding commodity inverse for the Atlantic Region, which has dimensions of (12×8) . (Table 4.4 in the Appendix to this chapter.)

The so-called "backward linkages" can be expressed in the form of a multiplier. Table 4.5 shows these multipliers. To aid interpretation let us compare direct with total requirements for the case of the food and clothing products. Because "backward linkage" is not very meaningful with respect to inputs of raw materials, we have calculated the linkage multipliers only for manufactures and services.

It is self evident that the indirect requirements associated with the delivery of one million dollars of food and clothing products for final use are determined by two separate sets of factors: (a) those which determine the direct input requirements and (b) the total structure of the economy (including its competitive import leakages). The backward linkage multipliers relating to the inputs of products or industries provide a useful rule of thumb which can tell us, for example, that the total requirements of steel and metal products for the domestic economy will exceed the direct domestic requirements associated with the production of food and clothing by a factor of 2.5.

Indirect Requirements of Competitively Imported Inputs to Commodities per unit final delivery $\hat{\mu}$ B J [I - (I - $\hat{\mu}$) BJ] -1 (Table 4.6)

Table 4.6 complements Table 4.4. The latter shows domestically produced commodity inputs. The former shows competitively imported inputs. Thus, while the production of one million dollars of food products and clothing in Nova Scotia required \$70,247 agricultural products produced in Nova Scotia, it also required \$37,059 imported agricultural products. Total competitive import requirements associated with one million dollars of final delivery of food products and clothing was \$197,253. Table 4.6 illustrates the fact that indirect competitive import content was largest for food and textile products (.197253) followed by construction (.191021) and steel and metal products (.185362) and was smallest for distribution (.024114). It thus appears that some commodities which have a high direct import

content such as food and textile products (.558934 (Table 4.1) and steel and metal products (.737303) also have a high indirect competitive import content. Others, such as transportation, distribution and services have a very low import content, whether calculated as a ratio of imported to total supplies or by taking into account also indirect competitive imports. We may note that final demand for \$1,000 of food and clothing products results in competitive imports of \$197 and primary inputs of \$803 (see row 14 Table 4.9). By combining the information yielded by Table 4.6 with the import coefficients μ of Table 4.1 and the total use of noncompetitive imports (Table 4.9), we can calculate the total import content of a dollar of product delivered for final use. This is done in Table 4.12.

In Table 4.12, column (1) is derived from row (3) and column (5) from row 13 of Table 4.9. The non-competitive import leakage refers to imported commodities only; the total import leakage adds to these commodities estimated remitted and remittable profits and interest. Column (2) is obtained from row 13 of Table 4.6. The domestic content is a residual, i.e., that part of the dollar of final expenditure which did not leak away in the form of imported inputs. Thus domestic content can be calculated in column (4) as unity less column (3) or in column (7) as unity less column (6). In the former case we have contributions to GDP, in the latter case GDP minus that part of profits, interest and rent which does not accrue to the domestic economy. (Domestic content (GDP), in column (4) obtained as unity less column (3), should be equal to the entry in row 16 of Table 4.9.) Column (8) is obtained from row 19 of Table 4.1.

Up to this point in these calculations it has been assumed that one whole dollar of product is delivered by domestic industries to final users. This would be the case for exports. Purchases made in the domestic market may however have a direct import content. Thus, for example, 73.7% of steel and metal products are competitively imported (column (8)). A typical dollar spent on these products in the domestic market, normally directs only 26.3 cents toward domestic industries; this 26.3 cents, furthermore has an import content of .399 (column (6)). The total import content of a typical dollar spent on this product is therefore .737 plus .399 x .263, i.e. .842 (column (10)). The domestic content is correspondingly .158.

TABLE 4.1. Market Share Coefficients and Import Coefficients Nova Scotia 1965, Model I

 $\mathring{J}, \mathring{M}, \mu$

		Agricultural products	Forestry products	Primary fish	Mining products
No.		1	2	3	4
1 2 3 4 5 6 7 8 9 10 11 12	Agriculture Forestry Primary fishing Mining products Food, textiles Sawmills, pulp and paper Iron, steel, metals, machinery Non-metals, petroleum, chemicals Construction Transportation, communications Distribution All other services Total output	1.000000	0.152722 0.832997 	1.000000 	1.000000
14 15 16 17 18	Imports: Nova Scotia New Brunswick Prince Edward Island Newfoundland Residual Total imports	0.023086 0.083533 0.000989 0.237742 0.345350	0.002410 	0.001678 0.004384 0.118476 	0.004180 - - 0.162192 0.166371

TABLE 4.2. Input Coefficients of Industries and Final Expenditures Nova Scotia 1965, Model I

 $\overset{*}{B},\overset{*}{D},\overset{*}{E},$ $\overset{*}{V_B}\overset{*}{V_D}\overset{*}{V_E}$

		Agriculture	Forestry	Primary fishing	Mining
No.		1	2	3	4
1 2	Agricultural products Forestry products	0.004900 0.010617	0.001186	=	0.012150
3 4 5 6 7	Primary fish Mining products Food, textiles Wood, paper products Steel, metal products	0.007487 0.184100 0.002956 0.016324	0.000743 0.000305 0.029517	0.002953 0.052678 0.024387 0.091773	0.001288 0.026006 0.103428
8 9 10	Non-metals, petroleum, chemicals Construction Transportation, communications Distribution	0.066245 0.028760 0.026366 0.023458	0.018089 0.012747 0.029971 0.009976	0.064730 0.004616 0.043296 0.020467	0.009969 0.014762 0.029199 0.008412
12 13	All other services	0.111506 0.482720	0.023215 0.125748	0.049577 0.354476	0.064505 0.26971 9
14 15 16 17 18 19 20 21	Taxes Subsidies Non-competitive imports Wages and salaries Unincorporated business income Profit, rent, interest Depreciation Household income Education and hospitalization	0.037051 - 0.038191 0.004820 0.101207 0.317952 0.014059 0.080384 0.432631	0.049928 0.001241 0.310436 0.285125 0.130331 0.097190 0.711904	0.027546 - 0.004115 0.006021 0.225804 0.278839 0.047361 0.064068 0.548380	0.022366 0.014385 0.518187 0.043418 0.076741 0.055185 0.570245
23 24 25 26	Education and nospitalization Provincial revenue Municipal revenue Federal revenue Import leakage	- 0.000603 0.036151 - 0.036103 0.004820	0.051640 0.000637 0.011638 0.001241	0.027737 0.000401 - 0.001084 0.006021	0.016553 0.008532 0.020841 0.058928
27	Total primary inputs	0.517280	0.874252	0.645524	0.730282
18 19 10	Factor incomes Gross Domestic Product Employment	0.433217 0.512460 0.172721	0.725892 0.873010 0.121924	0.552003 0.639503 0.190679	0.63834 0.71589 0.10749
31	Total output	1,000000	1.000000	1.000000	1.00000

TABLE 4.1. Market Share Coefficients and Import Coefficients Nova Scotia 1965, Model I

 $\mathring{J}, \mathring{M}, \mu$

Food, textiles	Wood, paper products	Steel, metal products	Non-metals, petroleum, chemicals	Con- struction	Transportation, communications	Distri- bution	All other services	
5	6	7	8	9	10	11	12	No,
	=	:=: I	_	-	_	_	0.011484	1
3	0.008324	2		=		_	洒	2 3
:-:	300	-	D-	_	- 1	-		4
1,000000	0.001676			~	- 1	-		5 6
_	0.991676	1.000000	0.005389	_	_ 1	_ (-	7
-	-	1.000000	0.994611	_	- 1	_	-	8
=		-	_	1,000000	I	-	(<u>2</u>	9
	-	- 1	_	-	1.000000	1.000000	100	10 11
	-	5	-		-	1.000000	0.988516	12
1,000000	1.000000	1,000000	1.000000	1.000000	1.000000	1,000000	1.000000	13
-	(-	-	-	=		=	25	14
0.067807 0.026378	0.029251	0.019877 0.000359	0.033808 0.001519	55	0.016729		0.000598	15 16
0.026378	0.001637	0,000339	0.001319	_	-	-	_	17
0.463465	0.485047	0.717067	0.221375	-	3		165	18
0.558939	0.515935	0.737303	0.266500		0.016729	54	0.000598	19

TABLE 4.2. Input Coefficients of Industries and Final Expenditures Nova Scotia 1965, Model I

 $\overset{*}{B},\overset{*}{D},\overset{*}{E},$ $\overset{*}{V_{B}}\overset{*}{V_{D}}\overset{*}{V_{E}}$

Food, textiles	Sawmills, pulp and paper, printing	Iron, steel, metals, machinery	Non-metals, petroleum, chemicals	Con- struction	Transportation, communications	Distri- bution	All other services	
5	6	7	8	9	10	11	12	1
0.102611 0.000038 0.227693 0.001062 0.068415 0.039838 0.021024 0.006186 0.052556 0.021445	0.144423 0.000059 0.003581 0.096219 0.034421 0.022283 0.004514 0.075064 0.028423 0.062509	0.000023 0.035560 0.00011 0.009035 0.190243 0.030444 0.021908 0.094046 0.035938 0.025436	0.000003 0.010183 0.000214 0.004222 0.015638 0.017914 0.011702 0.028276 0.011183 0.038339	0.000324 	0.000130 0.000320 0.002587 0.025991 0.046927 0.022141 0.079743 0.019398 0.149060	0.000018 		
0.584406	0.471495	0.442731	0.137673	0.536776	0.349296	0.216206	0.213387	
0.010997 0.093657 0.195880 0.013710 0.080057 0.021307 0.254097	0.011957 0.049293 0.282550 0.047671 0.110340 0.026698 0.359295	0.012607 - 0.005552 0.132398 0.326737 0.002954 0.059455 0.028682 0.339670	0.004771 0.603047 0.079690 0.001020 0.134405 0.039403 0.098871	0.009225 0.041330 0.330880 0.031207 0.035369 0.015213 0.380172	0.048247 - 0.031291 0.006946 0.404848 0.039033 0:045615 0.137307 0.448238	0.013843 0.013660 0.408154 0.085877 0.202791 0.059468 0.612655	0.122905 - 0.009860 0.060633 0.221453 0.092411 0.199091 0.099981 0.442076	- 1
0.007216 0.006617 0.017145 0.109226	0.006455 0.010152 0.023935 0.101973	0.003672 0.010822 0.007535 0.166899	0.007469 0.001807 0.028946 0.685839	0.001222 0.004408 0.010006 0.052204	0.045111 0.007034 - 0.014084 0.027098	0.012255 0.009447 0.033448 0.056522	0.035874 0.089323 0.015852 0.103509	
0.415604	0.528509	0.557276	0.862332	0.463224	0.650705	0.783794	0.786614	
0.289647 0.321950 0.060783	0.440561 0.479216 0.071034	0.389144 0.424880 0.064835	0.215114 0.259288 0.014819	0.397455 0.421894 0.081917	0.489495 0.643759 0.096227	0.696823 0.770133 0.152697	0.512955 0.725981 0.087330	
1.000000	1.000000	1,000000	1,000000	1.000000	1.000000	1.000000	1.000000	

TABLE 4.2. Input Coefficients of Industries and Final Expenditures — Concluded Nova Scotia 1965, Model I

 $\overset{*}{B},\overset{*}{D},\overset{*}{E},\quad \overset{*}{V_{B}}\overset{*}{V_{D}}\overset{*}{V_{E}}$

		Personal consumption	Capital formation	Inventory change	Federal government defence	Federal government civil	Provincial government
No.		13	14	15	16	17	18
1 2 3 4 5 6 7 8 9 10 11 12	Agricultural products Forestry products Primary fish Mining products Food, textiles Wood, paper products Steel, metal products Non-metals, petroleum, chemicals Construction Transportation, communications Distribution All other services	0.046732 0.000183 0.001665 0.006334 0.191454 0.014350 0.048586 0.036052 0.052250 0.127201 0.267667	0,423881	- 0.105033 0.030767 0.623940 0.062299 0.045323 0.114073 0.228633	0.015101 0.007687 0.004943 0.152898 0.012236 0.075388 0.013856 0.020825 0.033635	0.000943 0.000029 0.000983 0.003545 0.002939 0.040079 0.004763 0.248438 0.024291 0.011057 0.013405	0.000180
13	Total intermediate input	0.792472	1.000000	1.000000	0.336568	0.350474	0.580027
14 15 16 17 18 19 20 21 22 23 24 25 26	Taxes Subsidies Non-competitive imports Wages and salaries Unincorporated business income Profit, rent, interest Depreciation Household income Education and hospitalization Provincial revenue Municipal revenue Federal revenue Import leakage	0.120581 			0.010852 0.652580 	0.005808 0.643718 - 0.643718 - 0.005808	0.014812 0.211999 0.193162 0.288613
27	Total primary inputs	0.207528	-	-	0.663432	0.649526	0.419973
28 29 30	Factor incomes	0.120581	- - -	-	0.652580 0.652580 0.107846	0.643718 0.643718 0.122518	0.405161 0.405161 0.047679
31	Total output	1,000000	1.000000	1.000000	1.000000	1.000000	1,000000

TABLE 4.3A. Coefficient Matrix of Commodity Requirements for Commodities without Import Leakage Nova Scotia 1965, Model I

*

_		БЭ			
		Agricultural products	Forestry products	Primary fish	Mining products
No.		1	2	3	4
1	Agricultural products	0.004900	0.001736		=
2	Forestry products	0.010617	0.003684		0.012150
3	Primary fish	-	(=	-	
4	Mining products	0.007487	0.001144	0.002953	0.001288
5	Food, textiles	0.184100	0.028786	0.052678	80
6	Wood, paper products	0.002956	0.002080	0.024387	0.026006
7	Steel, metal products	0.016324	0.027572	0.091773	0.103428
8	Non-metals, petroleum, chemicals	0.066245	0.025503	0.064730	0.009969
9	Construction	0.028760	0.015075	0.004616	0.014762
10	Transportation, communications	0.026366	0.030065	0.043296	0.029199
11	Distribution	0.023458	0.012298	0.020467	0.008412
12	All other services	0.111506	0.037261	0.049577	0.064505
13	Total	0.482720	0.185203	0.354476	0.269719

TABLE 4.2. Input Coefficients of Industries and Final Expenditures -- Concluded Nova Scotia 1965, Model I

 $\overset{*}{B},\overset{*}{D},\overset{*}{E},\quad \overset{*}{V}_{B}\overset{*}{V}_{D}\overset{*}{V}_{E}$

			Total			Exp	orts			Total		
Municipal government	Education	Hospitals	domestic demand	Foreign	Canada	New Brunswick	Prince Edward Island	New- foundland	Total	intermediate demand	Total demand	
19	20	21	22	23	24	25	26	27	28	29	30	No.
0.000804 0.001190 - 0.002589 0.005630 0.008204 0.021812 0.013833 0.251287 0.109381 0.016085 0.097896	0.000413 0.031363 0.020051 0.009553 0.156599 0.044564 0.018564	0.004386 	0.027326 0.000212 0.000975 0.00114603 0.012705 0.096071 0.024286 0.125758 0.043127 0.080614 0.168395	0.025177 0.041059 0.079369 0.372893 0.264941 0.143734 0.007122 0.022110 0.043597	0.010573 0.004052 0.137143 0.270440 0.052156 0.423951 0.001546 - 0.113679 0.051155 0.014882	0.033588 0.181901 0.103033 0.179736 0.038463 0.361538 0.062018	0.000977 	0.064377 - 0.066437 0.269202 0.092535 0.109223 0.398226	0.020535 0.016806 0.014488 0.106051 0.296397 0.131174 0.287500 0.053474 - 0.060855 0.039614 0.010078	0.012000 0.007561 0.026138 0.011774 0.016060 0.030244 0.052869 0.03668071 0.065071 0.020541 0.029550	0.019548 0.005198 0.013968 0.018632 0.085836 0.032037 0.093988 0.029981 0.063797 0.055018 0.048771 0.107485	1 2 3 4 5 6 7 8 9 10 11 12
0.546712	0.310322	0.387561	0.701240	1.000000	1.079575	1.000000	1.000000	1.000000	1.036973	0.360680	0.574256	13
0.032171 0.324443 0.096673 0.370930 0.082357	0.033654 0.584634 0.071390 0.617593	0.088955 0.491205 0.032278 0.498582	0.070627 		- 0.079575 	-	-	-	- 0.036973 	0.042891 - 0.007802 0.078423 0.288242 0.065363 0.109358 0.062850 0.409626 - 0.018661 0.026675 0.011755 0.109858	0.051054 -0.007118 0.062191 0.201550 0.030443 0.058354 0.029273 0.261114 0.002157 0.013244 0.017538 0.081223	14 15 16 17 18 19 20 21 22 23 24 25
0.453288	0.689678	0.612439	0.298762	-	- 0.079575	-	-	-	- 0.036973	0.639323	0.425746	27
0.421117 0.421117 0.073350	0.656024 0.656024 0.119417	0.523484 0.523484 0.187243	0.169807 0.240435 0.032171		- 0.079575	=	=	- - -	- 0.036973 -	0.462962 0.560901 0.091552	0.290347 0.363555 0.056797	28 29 30
1,000000	1.000000	1.000000	1.000000	1.000000	1.000000	1,000000	1.000000	1.000000	1.000000	1.000000	1.000000	3

TABLE 4.3A. Coefficient Matrix of Commodity Requirements for Commodities without Import Leakage Nova Scotia 1965, Model I

* * BJ

				D 3				4
Food, textiles	Wood, paper products	Steel, metal products	Non-metals, petroleum, chemicals	Con- struction	Transpor- tation, communi- cations	Distri- bution	All other services	
5	6	7	8	9	10	11	12	No.
0.102611	0.000010	_	_	0.000324	E-l	0.000018	0.000056	1
0.000038	0.143221	0.000023	0.000003	_	=	#1	0.000122	2
0.227693	_	_	-	-	=	=3.	OT5	3
0.001062	0.000059	0.035560	0,010319	0.022638	0.000130	40	0.018434	4
0.068415	0.003558	0.000111	0.000214	0.001279	0.000320	0.001408	0.002660	5
0.039838	0.095421	0.009035	0.004248	0.091644	0.002587	0.003401	0.022463	6
0.021024	0.034380	0.190243	0.016578	0.122596	0.028991	0.011128	0.006053	7
0.008494	0.022248	0.030444	0.017982	0.087672	0.046927	0.004415	0.011040	8
0.006186	0.004582	0.021908	0.011757	0.000823	0.022141	0.003035	0.042845	9
0.052556	0.074689	0.094046	0.028630	0.088590	0.079743	0.093680	0.045641	10
0.021445	0.028269	0.035938	0.011317	0.053340	0.019398	0.004691	0.004395	11
0.035085	0.062182	0.025436	0.038270	0.067871	0.149060	0.094428	0.062772	12
0.584447	0,468618	0.442744	0.139318	0.536777	0.349296	0.216206	0.216481	13

TABLE 4.3B. Coefficient Matrix of Commodity Requirements for Commodities with Import Leakage Nova Scotia 1965, Model I

 $(I - \hat{\mu}) \stackrel{**}{BJ}$

		Agricultural products	Forestry products	Primary fish	Mining products
No.		1	2	3	4
2 H 3 H 4 M 5 H 6 V 7 S 8 M 9 C 10 T 11 H	Agricultural products Forestry products Primary fish Mining products Food, textiles Wood, paper products Steel, metal products Non-metals, petroleum, chemicals Construction Transportation, communications Distribution All other services	0.003208 0.010540 - 0.006242 0.081200 0.001431 0.004288 0.048590 0.028760 0.025925 0.023458 0.111439	0.001137 0.003657 0.000954 0.012696 0.001007 0.007243 0.018707 0.015075 0.029562 0.012298 0.037238	- 0,002461 0.023234 0.011805 0.024109 0.047480 0.004616 0,042572 0.020467 0.049547	0.012061 0.001074 0.012589 0.027170 0.007312 0.014762 0.028710 0.008412 0.064467
13	Total output	0.345081	0.139573	0.226290	0,17655

TABLE 4.3C. Coefficient Matrix of Industry Requirements for Industry Outputs without Import Leakage Nova Scotia 1965, Model I

** JB

0.001453 0.000003	3 0.000569 9.000203	0.002596 0.01033
0.000743 0.000302 0.029614 0.017992 0.012747 0.029971 0.009976 0.022949	0.002953 0.052678 0.024184 0.092121 0.064382 0.004616 0.043296 0.020467 0.049007	0.00128 0.025963 0.103482 0.009913 0.014762 0.029199 0.008412 0.063764
	0.012747 0.029971 0.009976	0.012747 0.004616 0.029971 0.043296 0.009976 0.020467 0.022949 0.049007

TABLE 4.3 D. Coefficient Matrix of Industry Requirements for Industry Outputs with Import Leakage Nova Scotia 1965, Model I

 $\overset{*}{\mathbf{J}}(\mathbf{I} - \hat{\mu})\overset{*}{\mathbf{B}}$

1	Agri- culture	Forestry products	Primary fishing	Mining products	
No.	1	2	3	4	
1 Agriculture 2 Forestry 3 Primary fishing 4 Mining 5 Food, textiles 6 Sawmills, pulp and paper 7 Iron, steel, metals, machinery 8 Non-metals, petroleum, chemicals 9 Construction 10 Transportation, communications 11 Distribution 12 All other services	0.008792 0.006242 0.081200 0.001570 0.004550 0.048328 0.028760 0.025925 0.023458	0.001043 0.000001 	0.000569 0.000098 	0.00258; 0.01015; 0.00107; 	
3 Total output	0.345081	0.097667	0.226290	0.17655	

TABLE 4.3B. Coefficient Matrix of Commodity Requirements for Commodities with Import Leakage Nova Scotia 1965, Model I

 $(\mathbf{I} - \hat{\mu}) \overset{**}{\mathbf{BJ}}$

extiles	Wood, paper products	Steel, metal products	Non-metals, petroleum, chemicals	Con- struction	Transportation, communications	Distri- bution	All other services	
5	6	7	8	9	10	11	12	No.
0.067174 0.000038 0.199337 0.000885 0.030175 0.019284 0.005523 0.006230 0.006186 0.051677 0.021445	0.000006 0,142178 0.000049 0.001569 0.046189 0.009032 0.016319 0.004582 0.073439 0.028269 0.062144	0.000023 0.029643 0.000049 0.004373 0.049977 0.022331 0.021908 0.092473 0.035938 0.025421	0.000003 0.008603 0.000094 0.002056 0.004355 0.013189 0.011757 0.028151 0.011317 0.038247	0.000212 - 0.018872 0.000564 0.044361 0.032206 0.064307 0.000823 0.087108 0.053340 0.067830	0.000108 0.000141 0.001252 0.007616 0.034421 0.022141 0.078409 0.019398 0.148970	0.000012 	0.000037 0.000121 	1 2 3 4 5 6 7 8 9 10 11 12

TABLE 4.3 C. Coefficient Matrix of Industry Requirements for Industry Outputs without Import Leakage Nova Scotia 1965, Model I

** JB

5	6	7						
			8	9	10	11	12	No
0.103020 0.000363 0.227693 0.001062 0.068415 0.039507 0.021070 0.008148 0.006186 0.021445 0.034682	0.022774 0.121105 0.000059 0.003581 0.097481 0.024541 0.022163 0.004514 0.075064 0.028423 0.061791	0.000296 0.000094 	0.000441 0.000038 0.010183 0.000214 0.004187 0.015734 0.017818 0.011702 0.028276 0.011183 0.037899	0.001104 0.000763 	0.001712 0.000022 0.000130 0.000320 0.002565 0.029244 0.046674 0.022141 0.079743 0.019398 0.147348	0.001103 0.000028 	0.000714 0.000189 0.018561 0.000552 0.022501 0.005989 0.010343 0.043009 0.045865 0.004174 0.061491	2 3 4 5 6 7 8 9

TABLE 4.3D. Coefficient Matrix of Industry Requirements for Industry Outputs with Import Leakage Nova Scotia 1965, Model I

 $\mathring{\mathbf{J}}(\mathbf{I} - \hat{\mu}) \mathring{\mathbf{B}}$

Food, textiles	Sawmills, pulp and paper, printing	Iron,steel, metals, machinery	Non-metals, petroleum, chemicals	Con- struction	Transportation, communications	Distri- bution	All other services	
5	6	7	8	9	10	11	12	No
0.067583 0.000192 0.199337 0.000885 0.030175 0.006197 0.006186 0.051677 0.021445	0.022613 0.119815 0.000055 0.001580 0.048236 0.009130 0.016256 0.004514 0.073808 0.028423 0.061754	0.000295 0.000055 0.000055 0.000049 0.004337 0.050097 0.022210 0.021908 0.092473 0.035938 0.025129	0.000441 0.000020 - 0.008489 0.000095 0.002027 0.004179 0.013069 0.011702 0.027803 0.011183 0.037876	0.000991 0.000369 0.018872 0.000564 0.043992 0.032552 0.063961 0.000823 0.087108 0.053340 0.067051	0.001711 0.000010 0.000108 0.000141 0.001242 0.007801 0.034235 0.022141 0.078409 0.019398 0.147260	0.001096 0.000014 	0.000714 0.000091 	5 6 7 8 9 10

TABLE 4.3 E. Inter-industry Flow Matrix Nova Scotia 1965, Model I

jв

		Agri- culture	Forestry	Primary fishing	Mining			
No.		1	2	3	4			
		thousands of dollars						
1	Agriculture	485.6	26.2	28.4	179.4			
2	Forestry	552.0	=	10.1	714.3			
3	Primary fishing	= 1	-	(m.				
4	Mining	466.0	- 1	147.1	89.0			
5	Food, textiles	11,458.2	13.4	2,624.5	-			
6	Sawmills, pulp and paper	191,9	5.5	1,204.9	1,793.9			
7	Iron, steel, metals, machinery	1,038.2	534.4	4,589,7	7,150.1			
8	Non-metals, petroleum, chemicals	4,100.8	324.6	3,207.6	685.1			
9	Construction	1,790.0	230.0	230.0	1,020.0			
10	Transportation, communications	1,641.0	540.8	2,157.1	2,017.5			
11	Distribution	1,460.0	180.0	1,019.7	581.2			
12	All other services	6,860.3	414.1	2,441.6	4,405.8			
13	Total	30,044.0	2,269.0	17,660.7	18,636.3			

TABLE 4.4. Direct and Indirect Requirements for Commodities Per Unit of Commodity Output for Final Use
Nova Scotia 1965, Model I

 $R_c = INV (I - (I - \hat{\mu}) \mathring{B} \mathring{J})$

-	IAC .	Πτν (Ι (Ι μ) Β	,			
		Agricultural products	Forestry products	Primary fish	Mining products	
No.		1	2	3	4	
1	Agricultural products	1.008992	0.002060	0.001651	0.000047	
2	Forestry products	0.011855	1.004166	0.002184	0.014359	
3	Primary fish	0.017000	0.002687	1.004861	0.000069	
4	Mining products	0.010087	0.002618	0.005085	1.003739	
5	Food, textiles	0.085281	0.013480	0.024388	0.000346	
6	Wood, paper products	0.007275	0.003049	0.014678	0.015396	
7	Steel, metal products	0.008233	0.009127	0.027241	0.030240	
8	Non-metallic, petroleum, chemicals	0.057199	0.022771	0.053005	0.012219	
9	Construction	0.038201	0.019002	0.010724	0.020432	
10	Transportation, communications	0.051442	0.040956	0.060615	0.043559	
11	Distribution	0.031032	0.015544	0.025373	0.012643	
12	All other services	0.142326	0.051796	0.071505	0.081646	
13	Total output	1.468917	1.187249	1.301305	1.234692	

TABLE 4.3E, Inter-industry Flow Matrix Nova Scotia 1965, Model I

žВ

Food, textiles	Sawmills, pulp and paper, printing	Iron, steel, metals, machinery	Non-metals, petroleum, chemicals	Con- struction	Transpor- tation, communi- cations	Distri- bution	All other services	Total	
5	6	7	8	9	10	11	12	13	No.
			thou	sands of dollars			W		
22,133.5	1,992.9	53.2	41.1	282.9	372.8	216.1	304.8	26,116.9	1
78.1	10,597.6	17.0	3.5	195.5	4.7	5.5	80.6	12,258.9	2
48,919.0	(a)	==		- 1		<u>12</u> 2	-	48,919.0	3
228.1	5.2	6,400.0	949.6	5,803.4	28.3	-	7,920.0	22,036.7	4
14,698.7	313.4	20.0	20.0	328.0	69.7	276.0	235.5	30,057.4	5
8,487.8	8,530,3	1,612.6	390.4	23,297.9	558.6	661.1	9,600.9	56,335.8	6
4,526.8	3,022.6	34,269.1	1,467.3	31,549.2	6,368.3	2,185.6	2,555.6	99,256.7	7
1,815.1	1,939.4	5,449.8	1,661.6	22,354.2	10,164.0	860.6	4,413.1	56,975.8	8
1,329.0	395.0	3,943,0	1,091.3	211.0	4,821.5	594.7	18,351.6	34,007.1	9
11,291.4	6,568.7	16,926.2	2,636.9	22,710.5	17,365.2	18,359.2	19,570.1	121,784.4	10
4,607.4	2,487.2	6,468.1	1,042.9	13,674.0	4,224.3	919.4	1,780.8	38,445.0	11
7,451.4	5,407.2	4,525.4	3,534.3	17,199.2	32,087.2	18,293.2	26,237.9	128,857.4	12
125,566.0	41,259.4	79,684.3	12,839.0	137,605.4	76,064.5	42,371.4	91,050.8	675,050.5	13

TABLE 4.4. Direct and Indirect Requirements for Commodities Per Unit of Commodity Output for Final Use Nova Scotia 1965, Model I

 $R_c = INV (I - (I - \hat{\mu}) BJ)$

Food, textiles	Wood, paper products	Steel, metal products	Non-metals, petroleum, chemicals	Con- struction	Transportation, communications	Distri- bution	All other services	
5	6	7	8	9	10	11	12	No.
0.070247	0.000447	0.000026	0.000020	0.000295	0.000045	0.000076	0.000150	1
0.004512	0.149997	0.001517	0.000663	0.007301	0.000835	0.000594	0.002496	2
0.207752	0.000775	0.000045	0.000040	0.000197	0.000089	0.000167	0.000286	3
0.004031	0.002601	0.033064	0.010010	0.022494	0.004248	0.002293	0.017878	4
1.042214	0.003888	0.000224	0.000201	0.000987	0.000447	0.000839	0.001433	5
0.025723	1.050799	0.007607	0.003724	0.049136	0.005328	0.003858	0.015040	6
0.013590	0.012937	1.055953	0.005938	0.037081	0.010727	0.004706	0.004738	7
0.025561	0.025982	0.030962	1.016427	0.073026	0.042595	0.009025	0.014793	8
0.015630	0.014297	0.029313	0.015333	1.010565	0.033194	0.010926	0.048543	9
0.083106	0.100688	0.118510	0.037599	0.117686	1.102631	0.108897	0.061205	10
0.032794	0,035755	0.043137	0.013755	0.060802	0.025158	1.008386	0.009571	11
0.079541	0.098100	0.058057	0.051083	0.107125	0.182924	0.120614	1.084283	12
1.604697	1.496264	1.378411	1.154791	1.486693	1.408220	1.270380	1.260416	13

These import content coefficients are obviously useful in indicating the magnitude of the feedback of expenditures made in the Atlantic Provinces to other parts of Canada, or indeed the leakage in the form of foreign import content. The most useful single result here is probably the import coefficient of roughly one-third relating to construction activity. Needless to say, it is possible using the same method to calculate the import content of various types of construction activity, given data on the direct inputs to such activities.

Direct and Indirect Requirements for Output of Domestic Industries per Unit Final Delivery of Industry Output $[I - \hat{J} (I - \hat{\mu}) \hat{B}]^{-1}$ (Table 4.7)

Table 4.7 shows direct and indirect requirements for the output of domestic industries per unit final delivery of each type of industry output. The table may be called the inter-industry inverse.

The figures do not differ greatly from those of Table 4.4 and their interpretation is similar. Comparisons with direct coefficients $\mathring{J}(I-\hat{\mu})\mathring{B}$ (Table 4.3D) yield a set of backward linkage multipliers whose interpretation is similar to that already discussed above.

Table 4.8B shows the transformation from final delivery of products to direct and indirect requirements from industries. The table may be defined from the "commodity inverse" as $\hat{J} [I - (I - \hat{\mu}) \hat{B}]^{-1}$ or from the "industry inverse" as $[I - \hat{J} (I - \hat{\mu}) \hat{B}]^{-1} \hat{J}$.

The transformation is important because final demand is normally available in terms of demand for

TABLE 4.5. Requirements of Domestically Produced Commodity Inputs for Final Delivery of One Million Dollars of Food and Clothing

	Direct require- ments Table 4.3 B	Indirect require- ments (3) - (1)	Total require- ments Table 4.4	Backward linkage multipliers (3) ÷ (1)
	1	2	3	4
		do	llars	
Agricultural products	67,174	3,073	70,247	=
Forestry products	38	4,474	4,512	<u></u>
Primary fish	199,337	8,415	207,752	≅
Mining products	885	3,146	4,031	=
Food, textile products	30,175	12,039	42,214	-
Wood and paper products	19,284	6,439	25,723	1.383894
Steel and metal products	5,523	8,067	13,590	2.460541
Non-metal and petroleum products	6,230	19,331	25,561	4.102674
Construction activity	6,186	9,444	15,630	2.526809
Transportation, communications	51,677	31,429	83,106	1.608195
Distribution services	21,445	11,349	32,794	1.529197
All other services	35,064	44,477	79,541	2.268433
Totals	443,018	161,679	604,697	1.364949

TABLE 4.6. Competitive Imported Input Requirements Per Unit Commodity delivered for Final Use Nova Scotia 1965, Model I

 $\hat{\mu}_{BJ}^{**}[I - (I - \hat{\mu})_{BJ}^{**}]^{-1}$

		Agricultural products	Forestry products	Primary fish	Mining products	Food, textiles	Wood, paper products
No.		î	2	3	4	5	6
1	Agricultural products	0.004745	0.001087	0.000871	0.000025	0.037059	0.000236
2	Forestry products	0.000087	0.000030	0.000016	0.000105	0.000033	0.001101
3	Primary fish	0.002418	0.000382	0.000692	0.000010	0.029554	0.000110
4	Mining products	0.002013	0.000522	0.001015	0.000746	0.000805	0.000519
5	Food, textiles	0.108072	0.017083	0.030906	0.000439	0.053497	0.004927
6	Wood, paper products	0.007755	0.003250	0.015645	0.016410	0.027417	0.054146
7	Steel, metal products	0.023107	0.025616	0.076456	0.084873	0.038142	0.036310
8	Non-metals, petroleum, chemicals	0.020782	0.008273	0.019258	0.004439	0.009287	0.009440
9	Construction	0.000000	- 0.000000	- 0.000000	0.000000	- 0.000000	- 0.000000
10	Transportation, communications	0.000875	0.000697	0.001031	0.000741	0.001414	0.001713
11	Distribution	0.000000	0.000000	- 0.000000	0.000000	0.000000	- 0.000000
12	All other services	0.000085	0.000031	0.000043	0,000049	0.000048	0.000059
13	Total output	0.169939	0.056971	0.145933	0.107837	0.197253	0.108560
		Steel, metal products	Non-metals, petroleum, chemicals	Con- struction	Transportation, communications	Distri- bution	All other services
		7	8	9	10	11	12
1	Agricultural products	0.000014	0.000010	0.000156	0.000024	0.000040	0.000079
2	Forestry products	0.000011	0.000005	0.000054	0.000006	0.000004	0.000018
3	Primary fish	0.000006	0.000006	0.000028	0.000013	0.000024	0.000041
4	Mining products	0.006599	0.001998	0.004489	0.000848	0.000458	0.003568
5	Food, textiles	0.000284	0.000255	0.001251	0.000567	0.001064	0.001816
6	Wood, paper products	0.008108	0.003970	0.052372	0.005679	0.004112	0.016031
7	Steel, metal products	0.157040	0.016665	0.104072	0.030107	0.013208	0.013297
8	Non-metals, petroleum, chemicals	0.011249	0.005969	0.026532	0.015476	0.003279	0.005375
9	Construction	0.000000	- 0.000000	0.000001	- 0.000000	0.000000	0.000000
10	Transportation, communications	0.002016	0.000640	0.002002	0.001746	0.001853	0.001041
11	Distribution	0.000000	- 0.000000	- 0.000000	0.000000	0.000000	0.000000
12	All other services	0.000035	0.000031	0.000064	0.000109	0.000072	0.000050
13	Total output	0.185362	0.029548	0.191021	0.054575	0.024114	0.041317

TABLE 4.7. Direct and Indirect Requirements for Industry Output Per Unit Industry Output delivered for Final Use Nova Scotia 1965, Model I

$$\mathbf{R}_{\mathbf{I}} = \left[\mathbf{I} - \overset{*}{\mathbf{J}} \left(\mathbf{I} - \hat{\boldsymbol{\mu}}\right) \overset{*}{\mathbf{B}}\right]^{-1}$$

		Agri- culture	Forestry	Primary fishing	Mining
No.		1	2	3	4
1	Agriculture	1.012437	0.001247	0.002806	0.003178
2	Forestry	0.009936	1.000207	0.001941	0.012089
3	Primary fishing	0.017000	0.000096	1.004861	0.000069
4	Mining	0.010087	0.001248	0.005085	1.003739
5	Food, textiles	0.085281	0.000480	0.024388	0.000346
6	Sawmills, pulp and paper	0.007384	0.001440	0.014587	0.015473
7	Iron, steel, metals, machinery	0.008541	0.009313	0.027527	0.030306
8	Non-metals, petroleum, chemicals	0.056890	0.016314	0.052719	0.012153
9	Construction	0.038201	0.015562	0.010724	0.020432
10	Transportation, communications	0.051442	0.038001	0.060615	0.043559
11	Distribution	0.031032	0.012355	0.025373	0.012643
12	All other services	0.140692	0.034000	0.070684	0.080708
13	Total output	1.468917	1.130259	1.301307	1.234692

TABLE 4.8A. Direct and Indirect Primary Input Requirements Per Unit Industry Output delivered for Final Use Nova Scotia 1965, Model I

$$\overset{*}{\mathbf{V}}_{\mathbf{B}} \left[\mathbf{I} - \overset{*}{\mathbf{J}} \left(\mathbf{I} - \hat{\boldsymbol{\mu}} \right) \overset{*}{\mathbf{B}} \right]^{-1} \\
\overset{*}{\mathbf{Q}}_{\mathbf{B}}$$

-	QI				
		Agri- culture	Forestry	Primary fishing	Mining
No.		1	2	3	4
1	Taxes	0.060662	0.056560	0.041'098	0.036187
2	Subsidies	- 0.041781	- 0.001624	- 0.006988	- 0.002449
3	Non-competitive imports	0.059820	0.015591	0.050076	0.032819
4	Wages and salaries	0.218019	0.349244	0.306614	0.586954
5	Unincorporated business income	0.350388	0.291953	0.294437	0.059784
6	Profit, rent, interest	0.070905	0.144978	0.082920	0.105163
7	Depreciation	0.112052	0.107932	0.085912	0.073707
8	Household income	0.611796	0.764321	0.660581	0.670256
9	Education and hospitalization	-	. 	***)	=
10	Provincial revenue	0.009456	0.054947	0.034413	0.022583
11	Municipal revenue	0.050925	0.004331	0.008279	0,016920
12	Federal revenue	0.029968	0.012779	0.002662	0.023194
13	Import leakage	0.075805	0.020324	0.062222	0.085503
14	Total primary inputs	0.830065	0.964634	0.854069	0.892164
15	Factor incomes	0.639312	0.786175	0.683971	0.751900
16	Gross Domestic Product	0.770245	0.949044	0.803993	0.859346
17	Employment	0.212616	0.133081	0.214716	0.128036

TABLE 4.7. Direct and Indirect Requirements for Industry Output Per Unit Industry Output delivered for Final Use Nova Scotia 1965, Model I

$$\mathbf{R}_{\mathbf{I}} = [\mathbf{I} - \overset{*}{\mathbf{J}} (\mathbf{I} - \hat{\boldsymbol{\mu}}) \overset{*}{\mathbf{B}}] - 1$$

Food, textiles	Sawmills, pulp and paper, printing	Iron, steel, metals, machinery	Non-metals, petroleum, chemicals	Con- struction	Transportation, communications	Distri- bution	All other services	
5	6	7	8	9	10	11	12	No
0.071850	0.024676	0.000924	0.000706	0.002640	0.002273	0.001552	0.001372]
0.003973	0.126421	0.001327	0.000579	0.006491	0.000740	0.000527	0.002115	2
0.207752	0.000781	0.000045	0,000040	0.000197	0.000089	0.000167	0.000091	3
0.004031	0.002612	0.033064	0.009885	0.022494	0.004248	0.002293	0.017969	2
1.042214	0.003916	0.000224	0.000201	0.000987	0.000447	0.000839	0.000459	
0.025573	1.052948	0.007565	0.003682	0.048832	0.005296	0.003834	0.015039	6
0.013727	0.013109	1.056120	0.005755	0.037474	0.010956	0.004754	0.004774	
0.025423	0.025922	0.030795	1.016260	0.072632	0.042366	0.008977	0,014224	8
0.015630	0.014286	0.029313	0.015257	1.010565	0.033194	0.010926	0.048664	9
0.083106	0.101214	0.118510	0.037161	0.117686	1.102631	0.108897	0.061318	10
0.032794	0.035952	0.043137	0.013596	0.060802	0.025158	1.008386	0.009322	11
0.078628	0.097502	0.057390	0.050459	0.105895	0.180823	0.119229	1.082648	12
1.604698	1.499335	1.378411	1.153579	1.486693	1.408220	1.270381	1,257994	13

TABLE 4.8A. Direct and Indirect Primary Input Requirements Per Unit Industry Output delivered for Final Use Nova Scotia 1965, Model I

$$\overset{*}{\overset{V}{\overset{}_{B}}} [I - \overset{*}{\overset{}_{J}} (I - \hat{\mu}) \overset{*}{\overset{}{\overset{}_{B}}}]^{-1}$$

$$\overset{*}{\overset{}{\overset{}_{Q}}}_{\overset{}{\overset{}_{B}}}$$

Food, textiles	Sawmills, pulp and paper, printing	Iron, steel, metals, machinery	Non-metals, petroleum, chemicals	Con- struction	Transportation, communications	Distri- bution	All other services	
5	6	7	8	9	10	11	12	No.
0.035006	0.037724	0.028035	0.013568	0.031202	0.076705	0.034266	0.137473	1
- 0.007051	- 0.005147	- 0.010174	- 0.001719	- 0.005036	- 0.036433	- 0.004669	- 0.012673	2
0.124118	0,077652	0.165378	0.618095	0.101443	0.047714	0.028565	0.078471	3
0.345004	0.429868	0.455351	0.126144	0.476294	0.518914	0.490745	0,301646	4
0.111470	0.111031	0.020183	0.009819	0.057385	0.064422	0.103215	0.107358	5
0.128816	0.169645	0.097125	0.153238	0.094599	0.099997	0.235837	0.227524	6
0.065440	0.070058	0.058764	0.052161	0.053095	0.174108	0.087929	0.120381	7
0.529370	0,604851	0.500840	0.163278	0.577408	0.616119	0.730005	0,551253	8
72	=	20	-	E.	= =	E.0	-	9
0.020908	0.022167	0.012745	0.011502	0.012801	0.057081	0.021745	0.042411	10
0.018054	0.021723	0.018376	0.007012	0.016646	0.024662	0.021178	0.097876	11
0.017961	0.028218	0.010682	0.030623	0.016186	0.010031	0.034594	0.018262	12
0.151071	0.143813	0.213256	0.706731	0.132846	0.083487	0.080436	0.129997	1.5
0.802800	0.890832	0.814658	0.971302	0.808981	0.945426	0.975886	0.960179	44
0.585291	0.710544	0.572658	0.289201	0.628278	0.683333	0.829797	0.636528	1.5
0.678685	0.813180	0.649282	0.353210	0.707538	0.897712	0.947321	0.881708	4:
0.140525	0.121287	0.098769	0.028278	0.123377	0.131153	0.177139	0.109918	4

TABLE 4.8B. Direct and Indirect Requirements for Industry Output Per Unit Commodity Output delivered for Final Use Nova Scotia 1965, Model I

$R_I \stackrel{*}{J} or \stackrel{*}{J} R_C$

		Agricultural products	Forestry products	Primary fishing	Mining products
No.		1	2	3	4
1	Agriculture	1.012437	0.156013	0.002806	0.003178
2	Forestry	0.009936	0.836492	0.001941	0.012089
3	Primary fishing	0.017000	0.002687	1.004861	0.000069
4	Mining	0.010087	0.002618	0.005085	1.003739
5	Food, textiles	0.085281	0.013480	0.024388	0.000346
6	Sawmills, pulp and paper	0.007384	0.017364	0.014587	0.015473
7	Iron, steel, metals, machinery	0.008541	0.009250	0.027527	0.030306
8	Non-metals, petroleum, chemicals	0.056890	0.022648	0.052719	0.012153
9	Construction	0.038201	0.019002	0.010724	0.020432
10	Transportation, communications	0.051442	0.040956	0.060615	0.043559
11	Distribution	0.031032	0.015544	0.025373	0.012643
12	All other services	0.140692	0.051201	0.070684	0.080708

TABLE 4.9. Direct and Indirect Primary Input Requirements Per Unit Commodity Output delivered for Final Use Nova Scotia 1965, Model I

$$\overset{*}{\mathbf{V}}_{\mathbf{B}} \left[\mathbf{I} - \overset{*}{\mathbf{J}} \left(\mathbf{I} - \hat{\boldsymbol{\mu}} \right) \overset{*}{\mathbf{B}} \right] - 1 \overset{*}{\mathbf{J}}$$

$$\overset{*}{\mathbf{Q}}_{\mathbf{B}}$$

	VB				
		Agricultural products	Forestry products	Primary fish	Mining products
No.		1	2	3	4
1	Taxes	0.060662	0.056917	0.041098	0.036187
2	Subsidies	- 0.041781	- 0.007807	- 0.006988	- 0.002449
3	Non-competitive imports	0.059820	0.023232	0.050076	0.032819
4	Wages and salaries	0.218019	0.330354	0.306614	0.586954
5	Unincorporated business income	0.350388	0.298293	0.294437	0.059784
6	Profit, rent, interest	0.070905	0.134018	0.082920	0.105163
7	Depreciation	0.112052	0.108021	0.085912	0.073707
8	Household income	0.611796	0.738749	0.660581	0.670256
9	Education and hospitalization	- [-	-	-
10	Provincial revenue	0.009456	0.047531	0.034413	0.022583
11	Municipal revenue	0.050925	0.011695	0.008279	0.016920
12	Federal revenue	0.029968	0.006471	0.002662	0.023194
13	Import leakage	0.075805	0.030561	0.062222	0.085503
14	Total primary inputs	0.830065	0.943028	0.854069	0.892164
15	Factor incomes	0.639312	0.762666	0.683971	0.751900
16	Gross Domestic Product	0.770245	0.919797	0.803993	0.859346
17	Employment	0.212616	0.145059	0.214716	0.128036

TABLE 4.8B. Direct and Indirect Requirements for Industry Output Per Unit Commodity Output delivered for Final Use Nova Scotia 1965, Model I

	- 10		*
R_1	J	or	JR_C

Food, textiles	Wood, paper products	Steel, metal products	Non-metals, petroleum, chemicals	Con- struction	Transportation, communications	Distri- bution	All other services	
5	6	7	8	9	10	11	12	No
0.071850	0.024481	0.000924	0.000707	0.002640	0.002273	0.001552	0.012983]
0.003973	0.133694	0.001327	0.000583	0.006491	0.000740	0.000527	0.002205	2
0.207752	0.000775	0.000045	0.000040	0.000197	0.000089	0.000167	0.000286	3
0.004031	0.002601	0.033064	0.010010	0.022494	0.004248	0.002293	0.017878	4
1.042214	0.003888	0.000224	0.000201	0.000987	0.000447	0.000839	0.001433	5
0.025573	1.044195	0.007565	0.003703	0.048832	0.005296	0.003834	0.014951	6
0.013727	0.013077	1.056120	0.011415	0.037474	0.010956	0.004754	0.004818	7
0.025423	0.025842	0.030795	1.010949	0.072632	0.042366	0.008977	0.014714	8
0.015630	0.014297	0.029313	0.015333	1.010565	0.033194	0,010926	0,048543	9
0.083106	0.100688	0.118510	0.037599	0.117686	1.102631	0.108897	0.061205	10
0.032794	0.035755	0.043137	0.013755	0.060802	0.025158	1.008386	0.009571	11
0.078628	0.096973	0.057390	0.050496	0.105895	0.180823	0.119229	1.071831	12

TABLE 4.9. Direct and Indirect Primary Input Requirements Per Unit Commodity Output delivered for Final Use Nova Scotia 1965, Model I

$$\overset{*}{\overset{V}{V}_{B}} \left[I - \overset{*}{\overset{J}{J}} \left(I - \hat{\mu} \right) \overset{*}{\overset{B}{B}} \right] - 1 \overset{*}{\overset{J}{\overset{J}{J}}}$$

			AB.					
Food, textiles	Wood, paper products	Steel, metal products	Non-metals, petroleum, chemicals	Con- struction	Transportation, communications	Distri- bution	All other services	
5	6	7	8	9	10	11	12	No.
0.035006	0.037881	0.028035	0.013646	0.031202	0.076705	0.034266	0.136591	1
- 0.007051	- 0.005118	- 0.010174	- 0.001765	- 0.005036	- 0.036433	- 0.004669	- 0.013007	2
0.124118	0.077135	0.165378	0.615655	0.101443	0.047714	0.028565	0.078257	3
0.345004	0.429197	0.455351	0.127918	0.476294	0.518914	0.490745	0,300685	4
0.111470	0.112537	0.020183	0.009875	0.057385	0.064422	0.103215	0,110149	5
0.128816	0.169440	0.097125	0.152936	0,094599	0.099997	0.235837	0.225726	6
0.065440	0.070374	0.058764	0.052196	0.053095	0.174108	0.087929	0.120285	7
0.529370	0.606178	0.500840	0.165097	0.577408	0.616119	0.730005	0.551948	8
	36	-	-	-	4.5	=	#0	9
0.020908	0.022440	0.012745	0.011509	0.012801	0.057081	0.021745	0.042033	10
0.018054	0.021579	0.018376	0.007073	0.016646	0.024662	0.021178	0.097337	11
0.017961	0.028090	0.010682	0.030515	0.016186	0.010031	0.034594	0.017708	12
0.151071	0.142786	0.213256	0.704071	0.132846	0.083487	0.080436	0.129374	13
0.802800	0.891446	0.814658	0.970458	0.808981	0.945426	0.975886	0.958685	14
0.585291	0.711173	0.572658	0,290729	0.628278	0.683333	0.829797	0.636560	15
0.678685	0.814310	0.649282	0.354806	0.707538	0.897712	0.947321	0.880428	16
0.140525	0.121385	0.098769	0.028658	0.123377	0.131153	0.177139	0.111097	17

TABLE 4.10A. Direct and Indirect Commodity Requirements of Final Expenditure Categories Nova Scotia 1965, Model I

$$[I - (I - \hat{\mu}) \overset{*}{B} \overset{*}{J}] - 1 [(I - \hat{\mu}) \overset{*}{D} : \overset{*}{E}]$$

		Personal consumption	Capital formation	Inventory change	Federal government defence	Federal government civil	Provincial government
No.		1	2	3	4	5	6
1	Agricultural products	0.036859	0.000173	- 0.067346	0.000271	0.000811	0.000263
2	Forestry products	0.002870	0.004375	0.040895	0.001280	0.002161	0.004731
3	Primary fish	0.019638	0.000118	0,004683	0.000738	0.000394	0.000168
4	Mining products	0.011954	0.016641	0.524301	0.016476	0.007177	0.009886
5	Food, textiles	0.091205	0.000594	0.023491	0.003704	0.001976	0.000841
6	Wood, paper products	0.014781	0.029155	0.032214	0.007497	0.014224	0.032183
7	Steel, metal products	0.017742	0.138946	0.048738	0.046123	0.020792	0.020623
8	Non-metals, petroleum, chemicals	0.038802	0.045519	0.175775	0.017440	0.023458	0.035015
9	Construction	0.019575	0,585469	0.012774	0.080155	0.253074	0.363901
10	Transportation, communications	0.098996	0.080997	0.034720	0.034388	0.059318	0.145952
11	Distribution	0.137108	0.039832	0.010202	0.028460	0.027618	0.043772
12	All other services	0.329182	0.068182	0.048907	0.053850	0.048053	0.129003
13	Totals	0.818711	1.010001	0.889354	0,290381	0.459057	0.786338

TABLE 4.10B. Direct and Indirect Industry Requirements of Final Expenditure Categories
Nova Scotia 1965, Model I

 $\begin{bmatrix}\mathbf{I} - \overset{*}{\mathbf{J}} \left(\mathbf{I} - \hat{\boldsymbol{\mu}}\right) \overset{*}{\mathbf{B}}\end{bmatrix} - 1 \overset{*}{\mathbf{J}}\end{bmatrix} \begin{bmatrix} \left(\mathbf{I} - \hat{\boldsymbol{\mu}}\right) \overset{*}{\mathbf{D}} : \overset{*}{\mathbf{E}}\end{bmatrix}$

		Personal consumption	Capital formation	Inventory change	Federal government defence	Federal government civil	Provincial government
No.		1	2	3	4	5	6
1	Agriculture	0.041077	0.001624	- 0.060539	0.001084	0.001693	0.002467
2	Forestry	0.002513	0.003887	0.034334	0.001129	0.001918	0,004209
3	Primary fishing	0.019638	0.000118	0.004683	0.000738	0.000394	0.000168
4	Mining	0.011954	0.016641	0.524301	0.016476	0.007177	0.009886
5	Foods, textiles	0.091205	0.000594	0.023491	0.003704	0.001976	0.000841
6	Sawmills, pulp and paper	0,014699	0.028975	0.032530	0.007453	0.014137	0.031983
7	Iron, steel, metals, machinery	0.017951	0.139192	0.049685	0.046217	0.020919	0.020812
8	Non-metals, petroleum, chemicals	0,038593	0.045274	0.174828	0.017346	0.023331	0.034827
9	Construction	0.019575	0.585469	0.012774	0.080155	0.253074	0.363901
10	Transportation, communications	0.098996	0.080997	0.034720	0.034388	0.059318	0.145952
11	Distribution	0.137108	0.039832	0.010202	0.028460	0.027618	0.043772
12	All other services	0.325402	0.067399	0.048345	0.053232	0.047501	0.12752
13	Total output	0.818711	1.010002	0.889353	0.290381	0.459057	0.78633

TABLE 4.10A. Direct and Indirect Commodity Requirements of Final Expenditure Categories
Nova Scotia 1965, Model I

$$[I - (I - \hat{\mu}) \overset{*}{B} \overset{*}{J}] - 1 [(I - \hat{\mu}) \overset{*}{D} : \overset{*}{E}]$$

M			Total			Exp	orts			
Municipal government	Education	Hospital	domestic demand	Foreign	Canada	New Brunswick	Prince Edward Island	New- foundland	Total	
7	8	9	10	11	12	13	14	15	16	No
0.000806	0.000061	0.004172	0.021677	0.051813	0.029726	0.046855	0.011748	0.083921	0.041679	
0.004240	0.003559	0,002558	0.003133	0,084358	0.016013	0.009544	0.011499	0.017241	0.040258	
0.000623	0.000058	0.003689	0.011761	0.078234	0.056467	0.220764	0.031792	0.057119	0.076669	
0.025443	0.004902	0.010042	0.013620	0.087237	0.153898	0.118792	0.051653	0.076258	0.118879	
0.003123	0.000293	0.018505	0.054717	0,392472	0.283273	0.194960	0,159491	0.286544	0.311937	
0.019044	0.024463	0.016686	0.017503	0.290928	0.068220	0.053119	0.075201	0.107965	0.150523	
0.017741	0.012313	0.014804	0.034170	0.163738	0.457833	0.393611	0.104692	0.125094	0.314440	
0.035448	0.021586	0.022830	0.035693	0.032784	0.030862	0.093233	0.669113	0.421929	0.080958	
0.263249	0.161814	0.177543	0.140253	0,018513	0.025761	0.022175	0.016824	0.018655	0.022124	
0.158392	0.072985	0.063185	0.090358	0.110528	0,216538	0.083660	0.056262	0.065812	0.153196	1
0.036003	0.030494	0.059574	0.095481	0.074941	0.085755	0.031059	0.020734	0.025164	0.071729	1
0.157592	0.060869	0.079321	0.223535	0.085852	0.107332	0.111498	0.060432	0.071761	0.096192	1
0.721704	0.393397	0.472909	0.741901	1.471395	1.531675	1.379266	1.269438	1.357460	1.478580	1

TABLE 4.10B. Direct and Indirect Industry Requirements of Final Expenditure Categories Nova Scotia 1965, Model I

$$[\mathbf{I} - \overset{*}{\mathbf{J}} (\mathbf{I} - \hat{\mu}) \overset{*}{\mathbf{B}}] - \overset{*}{\mathbf{I}} \overset{*}{\mathbf{J}}] [(\mathbf{I} - \hat{\mu}) \overset{*}{\mathbf{D}} : \overset{*}{\mathbf{E}}]$$

			orts	Exp			Total			Manadada
	Total	New- foundland	Prince Edward Island	New Brunswick	Canada	Foreign	domestic demand	Hospital	Education	Municipal government
1	16	15	14	13	12	11	10	9	8	7
32	0.048932	0.087378	0.014198	0.049593	0,033404	0.065682	0.024722	0.005473	0.001304	0.003263
88	0.034788	0.015261	0.010204	0,008392	0.013907	0.072691	0.002755	0.002269	0.003168	0.003690
69	0.076669	0.057119	0.031792	0.220764	0.056467	0.078234	0.011761	0.003689	0.000058	0.000623
179	0.118879	0.076258	0.051653	0.118792	0.153898	0.087237	0.013620	0.010042	0,004902	0.025443
37	0.311937	0.286544	0.159491	0.194960	0.283273	0.392472	0.054717	0.018505	0.000293	0.003123
345	0.149845	0.107313	0.074739	0.052813	0,067881	0.289711	0.017403	0.016583	0.024311	0.018946
376	0.314876	0.127367	0.108298	0.394114	0.457999	0.163915	0.034362	0.014927	0.012429	0.017932
122	0.080522	0.419655	0.665506	0.092731	0.030696	0.032607	0.035501	0.022706	0.021470	0.035257
.24	0.022124	0.018655	0.016824	0.022175	0.025761	0.018513	0.140253	0.177543	0.161814	0.263249
.96	0.153196	0.065812	0.056262	0.083660	0.216538	0.110528	0.090358	0.063185	0.072985	0.158392
29	0.071729	0.025164	0.020734	0.031059	0.085755	0.074941	0.095481	0.059574	0.030494	0.036003
88	0.095088	0.070937	0.059738	0,110217	0.106099	0.084867	0.220968	0.078410	0,060170	0.155782
180	1.478580	1.357460	1,269437	1.379268	1.531674	1,471396	0.741901	0.472907	0.393398	0.721703

TABLE 4.10C. Indirect Primary Input Requirements of Final Expenditure Categories Nova Scotia 1965, Model I

$$\overset{*}{\mathbf{V}}_{\mathbf{B}} \left[\mathbf{I} - \overset{*}{\mathbf{J}} \left(\mathbf{I} - \hat{\mu} \right) \overset{*}{\mathbf{B}} \right] = 1 \quad \overset{*}{\mathbf{J}} \left[\left(\mathbf{I} - \hat{\mu} \right) \overset{*}{\mathbf{D}} : \overset{*}{\mathbf{E}} \right]$$

		Personal consumption	Capital formation	Inventory change	Federal government defence	Federal government civil	Provincial government
No.		1	2	3	4	5	6
1	Taxes	0.050893	0.021098	0.021311	0.010616	0.012313	0.028025
2	Subsidies	- 0.008055	- 0.004034	0.000454	- 0.001902	- 0.002507	- 0.006035
3	Non-competitive imports	0.058507	0.076858	0.126972	0.024710	0.031967	0.049957
4	Wages and salaries	0,221103	0.325106	0.354386	0.092326	0.147194	0.251095
5	Unincorporated business income	0.068136	0.035308	0.023906	0.013355	0.019268	0.036690
6	Profit, rent, interest	0.115727	0.065316	0.089732	0.028433	0.033655	0.064658
7	Depreciation	0.064414	0.037133	0.047789	0.016396	0.021069	0.044934
8	Household income	0.355183	0.388425	0.399659	0.118960	0.182120	0.318968
9	Education and hospitalization	-	-	-	_	_	
10	Provincial revenue	0.019798	0.008794	0.015927	0.004633	0.005612	0.013073
11	Municipal revenue	0.033757	0.011636	0.008363	0.006431	0.006586	0.015229
12	Federal revenue	0.010488	0.010514	0.020870	0.003522	0.004689	0.007182
13	Import leakage	0.087085	0,100281	0.171942	0.033991	0.042883	0.069939
14	Total primary inputs	0.570724	0.556783	0.664548	0.183933	0.262959	0.469324
15	Factor incomes	0.404966	0.425730	0.468024	0.134114	0.200117	0.352443
16	Gross Domestic Product	0.512217	0.479925	0.537578	0.159224	0.230992	0.419367
17	Employment	0.081237	0.082078	0.070697	0.025114	0.039004	0.067897

TABLE 4.11. Transformation of Final Expenditure Flows into Primary Inputs (Indirect Impact Only)

Nova Scotia 1965, Table 1

$$\overset{*}{\mathbf{V}}_{\mathbf{B}} \mathbf{R}_{\mathbf{I}} \overset{*}{\mathbf{J}} \left[\left(\mathbf{I} - \hat{\mu} \right) \overset{*}{\mathbf{D}} \mathbf{y} + \overset{*}{\mathbf{E}} \mathbf{x} \right]$$

 $\overset{*}{\mathbb{Q}}_{B}$

Federal Federal Capital Personal Inventory Provincial government defence government civil formation consumption change government 1 2 3 No. 4 5 6 thousands of dollars 52,705.6 4,381.3 100.4 1,427.3 1,306.5 2,645.1 1 - 8,342.3 - 837.8 2.1 - 255.7 - 266.0 - 569.6 2 Subsidies 60,590.8 3,391.9 15,961.1 598.4 3,322.3 3 4,715.0 228,976.3 67,514.4 1,670.1 12,413.4 15,618.3 23,698.8 4 Unincorporated business income 70,562.1 7,332.4 112.7 1,795.6 2,044.4 3,462.9 5 119,848.2 13,564.0 422.9 3,822.8 3,571.1 6,102.5 6 66,707.3 7 Depreciation 7,711.3 225.2 2,204.5 2,235.6 4,240.9 367,831.2 1,883.5 15,994.3 30,104.8 80,663.9 19,324.2 8 Household income 9 10 Provincial revenue 20,503.3 1,826.3 75.1 622.8 595.5 1,233.9 34,958.8 39.4 1,437.4 2.416.5 864.7 698.8 11 10,861.3 2,183.5 98.4 473.6 497.5 677.8 Federal revenue 12 90,186.0 20,825.4 810.3 4,570.2 4,550.2 6,600.9 13 Total primary inputs 591,047.3 115,626.6 3,131.9 24,730.0 27,901.8 44,295.6 14 419.386.5 88,410.8 18,031.7 2,205.7 21,233.8 33,264.2 15 Factor incomes 530,457.0 99,665.6 2,533.5 21,407.8 24,509.9 39,580.6 Gross Domestic Product 16 84,130.1 17,045.0 333.2 3,376.6 4,138.6 6,408.2 17 Employment

TABLE 4.10C. Indirect Primary Input Requirements of Final Expenditure Categories Nova Scotia 1965, Model I

Municipal			Total			Exp	orts			
government	Education	Hospital	domestic demand	Foreign	Canada	New Brunswick	Prince Edward Island	New- foundland	Total	
7	8	9	10	11	12	13	14	15	16	No
	The state of the s									
0.031262	0.013702	0.016489	0.037228	0.037143	0.041689	0.037398	0.020753	0.027735	0.038172	1
- 0.006719	- 0.002996	- 0,003057	- 0.006190	- 0.008036	- 0.011873	- 0.008695	- 0.003624	- 0.007038	- 0.009664	2
0.047170	0.027159	0.031761	0.053456	0.102239	0.121931	0.140855	0.440298	0.309815	0.138023	3
0.229856	0.125227	0.148297	0.213655	0.407229	0.481640	0.386594	0.229363	0.286297	0.427079	4
0.036288	0.018846	0.025332	0.050758	0.106092	0.071942	0.108135	0,035302	0.073087	0.086066	5
0.065506	0.034356	0.045422	0.087862	0.136102	0.127593	0.111535	0.143159	0.133419	0.130273	ϵ
0.048010	0.022857	0.026370	0.050086	0.072654	0.084173	0.070715	0.056930	0.063443	0.076782	7
0.298068	0.160314	0.196688	0.312215	0.575544	0.604345	0.541467	0.300987	0.402964	0.566845	8
-	48	===	-	=	20	-		9=	-	9
0.014598	0.006633	0.007458	0.014922	0.021848	0.023862	0.020516	0.014212	0.015789	0.022065	10
0.017338	0.007402	0.009573	0.023884	0.019715	0.022051	0.019984	0.011163	0.016083	0.020321	11
0.006194	0.003959	0.005640	0.008879	0.018531	0.014681	0.012634	0.026268	0.020365	0.016641	12
0.067165	0.037986	0.044884	0.076869	0.145131	0.167983	0.181223	0.512621	0.368114	0.184078	13
0.451373	0.239152	0.290613	0,486855	0.853421	0.917093	0.846536	0.922179	0.886756	0.886729	14
0.331650	0.178429	0.219051	0.352275	0.649423	0.681175	0.606265	0.407824	0.492804	0.643418	15
0.404203	0.211992	0.258852	0.433399	0.751184	0.795164	0.705682	0.481883	0.576943	0.748707	16
0.062996	0.034208	0.043180	0.069689	0.131055	0.132271	0.131216	0.062373	0.093456	0.127114	17

TABLE 4.11. Transformation of Final Expenditure Flows into Primary Inputs (Indirect Impact Only)
Nova Scotia 1965, Table 1

$$\overset{*}{\mathbf{V}}_{\mathbf{B}} \; \mathbf{R}_{\mathbf{I}} \; \overset{*}{\mathbf{J}} \; [\; (\mathbf{I} - \hat{\mu}) \, \overset{*}{\mathbf{D}} \mathbf{y} + \overset{*}{\mathbf{E}} \mathbf{x}]$$
 . . .

 $\overset{*}{Q}_{b}$

Municipal			Total			Exp	orts			
government	Education	Hospital	domestic demand	Foreign	Canada	New Brunswick	Prince Edward Island	New- foundland	Total	
7	8	9	10	11	12	13	14	15	16	No
			1	thousan	ds of dollars					
971.7	1,262.2	1,021.5	65,821.6	5,111.8	7,334.6	1,127.9	265.5	613.9	14,453.7	1
- 208.9	- 276.0	- 189.4	- 10,943.5	- 1,105.9	- 2,088.8	- 262.2	- 46.4	- 155.8	- 3,659.2	2
1,466.2	2,501.8	1,967.6	94,515.0	14,070.7	21,451.8	4,248.1	5,633.9	6,857.9	52,262.3	3
7,144.8	11,535.2	9,187.2	377,758.7	56,045.0	84,737,1	11,659.3	2,934.8	6,337.3	161,713.5	4
1,128.0	1,736.0	1,569.4	89,743.3	14,600.9	12,657.1	3,261.3	451.7	1,617.8	32,588.7	5
2,036.2	3,164.7	2,814.0	155,346.3	18,731.1	22,447.9	3,363.8	1,831.8	2,953.3	49,327.9	6
1,492.4	2,105.5	1,633.7	88,556.2	9,999.1	14,808.9	2,132.7	728.5	1,404.3	29,073.5	7
9,265.2	14,767.2	12,185.2	552,019.3	79,209.4	106,325.0	16,330.2	3,851.3	8,919.8	214,635.6	8
-	=0	-	-	-	=	- 1	-	==	-	9
453.8	611.0	462.0	26,383.6	3,006.8	4,198.1	618.8	181.9	349.5	8,355.1	10
538.9	681.9	593.1	42,229.4	2,713.3	3,879.6	602.7	142.8	356.0	7,694.4	11
192.5	364.7	349.4	15,698.7	2,550.3	2,583.0	381.0	336.1	450.8	6,301.2	12
2,087.7	3,499.1	2,780.6	135,910.3	19,973.8	29,554.0	5,465.5	6,559.3	8,148.3	69,700,9	13
14,030.5	22,029.2	18,004.0	860,796.6	117,452.3	161,348.1	25,530.8	11,799.8	19,628.7	335,759.6	14
10,309.0	16,435.8	13,570.6	622,848.1	89,377.0	119,842-1	18,284.4	5,218.3	10,908.4	243,630.2	15
12,564.2	19,527.5	16,036.3	766,282.2	103,381.9	139,896.6	21,282.8	6,166.0	12,770.9	283,497.9	16
1,958-2	3,151.0	2,675.1	123,216.0	18,036.4	23,271.1	3,957.4	798.1	2,068.7	48,131.6	17

TABLE 4.12. Import Content of a Dollar of Finally Delivered Product Illustrative 12x12 Model I, Nova Scotia, 1965

		Co	ntent of a dollar	of final sales of o	lomestic producti	on
	Commodities	Non- competitive commodity imports	Competitive imports	Total imported commodity inputs (1) + (2)	Domestic content (GDP)	Primary import leakage ¹
No.		1	2	3	4	5
1	Agricultural products	.060	.170	.230	.770	.076
2	Forestry products	.023	.057	.080	.920	.031
3	Primary fish	.050	.146	.196	.804	.062
4	Mining products	.033	.108	.141	.859	.086
5	Food, textile products	.124	.197	.321	.679	.151
6	Wood, paper products	.077	.109	.186	.814	.143
7	Steel, metal products	.165	.185	.351	.649	.213
8	Non-metals, mineral, petroleum	.616	.030	.645	.355	.704
9	Construction activity	.101	.191	.292	.708	.133
10	Transportation, communications	.048	.055	.102	.898	.083
11	Distribution services	.029	.024	.053	.947	.080
12	All other services	.078	.041	.120	.880	.129
		Content of final domestic p	sales of	Import	Total import content of typical dollar of domestic final use	
		Total import content (2) + (5)	Domestic content (GDP less income leakage)	ratio µ	μ+[(I-μ)x Column (3)]	μ+[(I - μ)x Column (6)]
		6	7	8	9	10
1	Agricultural products	.246	.754	.345	.495	.506
2	Forestry products	.088	.912	.007	.086	.094
3	Primary fish	.208	.792	.125	.296	.307
4	Mining products	.193	.807	.166	.283	.328
5	Food, textile products	.348	.652	.559	.700	.713
6	Wood, paper products	.251	.749	.516	.606	.638
7	Steel, metal products	.399	.601	.737	.829	.842
8	Non-metals, mineral, petroleum	.734	.266	.267	.739	.805
9	Construction activity	.324	.676	.000	.292	.324
10	Transportation, communications	.138	.862	.017	.117	.152
11	Distribution services	.105	.895	.000	.053	.105

¹ Non-competitive commodity imports plus remittable profits and interest, not accruing to the domestic economy. Source: Tables 4.1, 4.6 and 4.9.

products while impact on primary inputs requires a transformation to demand for industries.

It may be noted that Tables 4.8B for Nova Scotia and 4.8B for the Atlantic Region are both defined in industry by commodity space, though the dimensions differ: (12×12) in the case of Nova Scotia and (8×12) in the case of the Atlantic Region.

Direct and Indirect Requirements for Primary Inputs per Unit Final Delivery of Industry Output $V_B [I - \mathring{J} (I - \hat{\mu}) \mathring{B}]^{-1}$ (Table 4.8A) Q_B

Table 4.8A shows direct and indirect requirements of primary inputs per unit final deliveries of each of the industry outputs in the system. Thus we may note for example that the secondary wood processing industry (column 6) generates, directly and indirectly \$430 in wages and salaries, \$605 in households income, and .121 units of employment per thousand dollars final delivery of industry output.

Comparison of these results with the corresponding direct input coefficients (\hat{J} ($I - \hat{\mu}$) \hat{B}) yields primary multipliers (see Table 4.16 below).

The most useful of these multipliers relate to household income, factor income and employment. For further discussion see below.

Direct and Indirect Requirements for Domestically Produced Products per Unit of Final Expenditure Categories $[I - (I - \hat{\mu}) BJ]^{-1}$ $[(I - \hat{\mu}) D : E]$. (Table 4.10A)

Table 4.2 shows final expenditure coefficients which represent domestic expenditure patterns \hat{D} and export patterns \hat{E} . Table 4.10A shows the requirements for domestically produced products associated with \hat{D} and \hat{E} . The coefficients in $[I-(I-\hat{\mu})\ \hat{B}\ \hat{J}]\ (I-\hat{\mu})\ \hat{D}$ can be compared with $(I-\hat{\mu})\ \hat{D}$ in order to obtain an indication of the degree to which domestic production is induced over and above the direct purchases by domestic final users.

From Table 4.10A we may observe, for example, that one million dollars of federal defence expenditure on goods and services generates total domestic requirements of \$459,057 in commodities. As is to be

expected, construction accounts for over half of this demand (\$253,074). To take another example, one million dollars of personal expenditure on goods and services generates total domestic requirements \$818,711 in commodities. In the case of every type of final domestic expenditure category, there is a competitive import leakage of $\hat{\mu}D$.

Final demand for export categories differs from final demand for domestic expenditures in the sense that it is assumed that all goods exported from the economy are domestically produced. Thus one million dollars of export to foreign countries generates a total demand for \$1,471,395 while one million dollars of shipments to Canadian destinations other than the Atlantic Provinces, generates a total requirement for \$1,531,694 of locally produced commodities.

Direct and Indirect Requirements for the Output of Industries per Unit Final Expenditure Categories $[I - (I - \hat{\mu}) BJ]^{-1} J[(I - \hat{\mu}) D : E]$ (Table 4.10B)

Table 4.10B shows total requirements for the output of industries per unit final expenditure category. We note that total demand for domestic commodities is equal to total demand for domestic industries for each category of final expenditure.

Indirect Requirements for Primary Inputs per Unit Final Expenditure Categories $V_B [I - \hat{J} (I - \hat{\mu}) \hat{B}]^{-1} \hat{J} [(I - \hat{\mu}) \hat{D} : \hat{E}]$ (Table 4.10C)

Indirect requirements of primary inputs per unit of final demand expenditure category are shown in Table 4.10C. Here we may observe, for example, that one million dollars of federal defence expenditure generates \$118,900 in household incomes over and above the \$652,580 directly paid to households in the form of wages, salaries and military pay. Similarly, a million dollars of provincial government expenditures or goods and services generates \$318,968 in household income over and above the \$288,613 paid directly to households in the form of wages, salaries and interest.

We may equally well take an example from the set of export categories E. Here we may observe, that one million dollars of a typical set of exports to fore countries generates \$575,544 in household incomes.

Check on the Basic Model (Table 4.11)

We obtain a check on the accuracy of the model from the fact that

$$\begin{bmatrix} v_D & \vdots & v_E \\ \vdots & \vdots & \vdots \\ Q_D & \vdots & Q_E \end{bmatrix}$$

+
$$V_{B}$$
 $[I - J(I - \hat{\mu}) B]^{-1} J(I - \hat{\mu}) v_{B}$

$$= \begin{bmatrix} V_B & \vdots & V_D & \vdots & V_E \\ \vdots & \vdots & Q_D & \vdots & Q_E \end{bmatrix} \quad i_{(n+p+r)}$$

In Table 4.11 the indirect primary input coefficients of Table 4.10C are multiplied by the appropriate base year totals, (i.e., the entries y and x of the base year accounts) to yield primary inputs in flow terms. When these are added to the direct primary input flows of final domestic and export categories, we obtain a column vector of total primary inputs, in flow terms. Thus entries in the column "total exports" of Table 4.11 plus entries in the column "total domestic demand" plus the primary input entries in the column "total domestic

demand" of Table 3.2, plus the one entry in equal $$\operatorname{\textsc{Op}}$$

the sum of all primary input flows as shown in column 31 of Table 3.2.

Direct and Indirect Generation of Household Income and Employment by Final Expenditure Categories (Table 4.13)

From Table 4.11 we can also derive distributions relating to primary inputs generated by the various final demand categories. Thus in Table 4.13 we show household income and employment generated by the final demand categories. From Table 4.13 we may observe that exports generated 20.4% of household income; while federal expenditures on goods and services accounted for 18.3% and personal consumption expenditures for 35.0% of household income. One could similarly attribute total wages and salaries, taxes, etc. to the various final demand categories.

While the contribution of final expenditures to domestic income can be estimated on the basis of aggregates in a closed economy, or in an economy in which foreign trade is of relatively small importance, in an open economy such as that of Nova Scotia, which moreover has a large import surplus, input-output analysis offers the only reliable method of obtaining the kind of results presented in Table 4.13.

Direct and Indirect Import Generation by Final Demand Expenditures (Table 4.14)

Table 4.11 when combined with the base year flow accounts of Table 3.2 yields a similar distribution with respect to imports. Table 4.14 shows competitive import content of final demand in column (1). This is obtained as the difference between intermediate purchases (row 13 of Table 3.2) and total primary inputs (row 14 of Table 4.11). In columns (2) and (3) are shown total non-competitive import content and total import leakage respectively. The latter exceeds the former by profits, rent and interest remitted or remittable out of the province. Column (2) is obtained from row 3 of Table 4.11, column (3) comes from row 13 of Table 4.11. Total import content is shown on an alternate basis, i.e., in column (4) as the sum of columns (1) and (2) and in column (5) as the sum of columns (1) and (3). Thus we may observe, for example, that direct and indirect requirements of imports for personal consumption are \$380.2 million of commodities, composed of \$229.6 million of competitive imports and \$150.6 million of non-competitive imports. There is an additional leakage of \$29.6 million in remitted or remittable profits, interest and rent, making the total direct and indirect requirements of imports for personal consumption \$409.8 million. Imports related to personal consumption represent 53.7% of total imports. The total import content of export is \$126.6 million; 16.6% of total imports to Nova Scotia.

Table 4.15 shows imports and domestic content of each type of final expenditure. Import content is entered from Table 4.14. Domestic content is obviously the difference between total expenditure and its import content. Corresponding to the two measures of import content, we have two measures of domestic content. Column (4) is total expenditure less commodity imports, i.e. contribution to Gross Domestic Product. Column (5) is contribution to GDP net of profits, interest and rent remitted or remittable. Line 16 of Table 4.11 provides an independent check on GDP (Column 4).

In columns (6) and (7) we obtain the import content of various types of final expenditure. Thus personal expenditure has an import content of 36.7% (39.6%), capital formation 51.8% (54.3%), etc. Foreign exports have an import content of intermediate inputs of 24.9% (29.2%).

When we sum overall final expenditures we observe that the total expenditure of \$2,146.6 million resolves to \$658.8 million commodity imports and \$1,460.8 million Gross Domestic Product. The overall import coefficient for the economy is 32%. The Keynesian average propensity to import is 47%.

Output, Input and Primary Multipliers (Table 4.16)

The output multiplier measures the gross sum of commodity requirements from the domestic economy associated with the delivery for final use of one unit of product. It may also be calculated on the basis of the gross sum of industry outputs associated with the delivery for final use of one unit of industry output.

Output multipliers calculated on the basis of final delivery of domestically produced products are obtained by summing direct and indirect domestically produced commodity requirements necessary to deliver one unit for final use. The multipliers are given by $i'_m [I - (I - \hat{\mu}) BJ]$ from Table 4.4.

Output multipliers calculated on the basis of final delivery of industry output are obtained by summing all direct and indirect industry inputs required to deliver one unit of industry output for final use. Multipliers in this case are given by $i'_n [I - \mathring{J}(I - \hat{\mu}) \mathring{B}]^{-1}$ from Table 4.7.

The measure indicates backward linkage and examination of Table 4.16 shows that manufactured products and construction activity tend to require more domestically produced intermediate goods and services than do primary industries or services.

The input multiplier is a general measure of interdependence in the domestic economy and its most interesting characteristic is its invariance to the direct intermediate input coefficient. As in the case of the output multiplier, it can be calculated on the basis of delivery of a unit of industry output or alternately, a unit of domestically produced product.

The input multiplier is obtained by dividing the sum of total (i.e., direct plus indirect) domestically produced intermediate requirements by the sum of direct domestically produced intermediate requirements. The input multiplier with respect to final delivery of industry output is thus obtained by dividing

$$i'_{n} [I - \mathring{J}(I - \hat{\mu}) \mathring{B}] - 1 - i'_{n}$$

from Table 3.8A by the corresponding element in i'_n [\mathring{J} ($I - \hat{\mu}$) \mathring{B}] from Table 3.5D.

Evidently, the input multiplier with respect to delivery of a unit of domestically produced product is similarly obtained by dividing

$$i'_{m} [I - (I - \hat{\mu}) \mathring{B} \mathring{J}]^{-1} - i'_{m}$$

from Table 4.4 by the corresponding element in i'_m (I - $\hat{\mu}$) BJ from Table 4.3B.

The input multiplier appears to be invariant to the total intermediate input coefficient. When the direct input coefficient is low, as in the case of services, we would expect the output multiplier to be also low. The input multiplier, however, measures the degree to which domestically produced intermediate inputs generate further indirect domestic production. The general magnitude of the input multipliers thus yields a "rule of thumb" indicator for an economy as a whole which can be seen as a useful first approximation for a general measure of interdependence.8

The primary multiplier is one of the most useful indicators which can be derived from input-output analysis. It measures the degree to which backward linkage within an economy multiplies initial outlay on any categories of primary input such as wages and salaries, household incomes, factor income or employment. As in the case of the output multiplier and the input multiplier, the primary multiplier can be calculated with respect to industry output or commodity output.

We recall that a set of primary multipliers with respect to industry output is obtained by dividing elements of the matrix

$$\overset{*}{\overset{V_B}{V_B}} [I - \overset{*}{J} (I - \hat{\mu}) \overset{*}{B}]^{-1}$$
 (Table 4.8B)

⁸ For further discussion, see Section V of this chapter.

by the corresponding elements in the matrix

$$\overset{*}{V}_{B}$$
 (Table 4.2)

The alternative set of primary multipliers with respect to products are obtained by dividing elements of the matrix

by corresponding elements in the matrix $\overset{*}{\underset{O_{\mathbf{P}}}{V_{B}}} \overset{*}{\underset{\bullet}{*}} \dots \overset{*}{\underset{\bullet}{J_{*}}}.$

Final demand input multipliers may be defined as the ratio of total requirements for domestically produced commodities to direct requirements only. These multipliers are thus formed by dividing the appropriate elements of i'_m [I - (I - $\hat{\mu}$) BJ] [I - $\hat{\mu}$) \hat{D} :E]

by corresponding elements of the vector $i'_m [I - \hat{\mu}] \stackrel{*}{D} : \stackrel{*}{E}$

Final demand primary multipliers are meaningful only for the public sectors because these are, of course, domestic production activities. For these public sectors primary input multipliers are calculated by dividing elements in selected rows of the matrix

$$\overset{\bullet}{V}_{B} \begin{bmatrix} I - \mathring{J} (I - \hat{\mu}) \mathring{B} \end{bmatrix} \mathring{J} (I - \hat{\mu}) \mathring{D}$$
by corresponding elements in the matrix $\overset{*}{V}_{D}$
...
 $\overset{\bullet}{V}_{D}$

In Table 4.16 three primary multipliers are shown; those relating to household income, factor income and employment. We note that a typical set of provincial government expenditures has a household income multiplier of 2.1 and an employment multiplier of 2.4. This means that total income and employment generated exceeds direct income and employment created by factors of 2.1 and 2.4 respectively. Interpretation of these figures requires care. High multipliers are arithmetically related to low direct income or employment coefficients. Thus, a typical dollar of provincial government expenditure directly generates 28.8 cents of household income, (Table 4.2) while 54.7 cents⁹ is spent on goods and services supplied by domestic industries. These latter generate a total of 31.9 cents of household income. (Table 4.10C.) Consequently, the household

income multiplier is 2.105, $((28.8 + 31.9) \div 28.8)$. Consider, by contrast, a typical set of educational expenditures. Here income directly generated per dollar of total expenditure is 61.8 cents; and goods and services supplied by domestic industries is only 27.6 cents.⁹ If the entire 27.6 cents were to accrue to households, the household income multipliers could still be no larger than 1.45. As some income leaks out in the form of imported commodities and other income does not accrue to households, the income multiplier of educational expenditures is only 1.26.

Household Income and Employment Generated Per Million Dollars Final Sales (Table 4.17 and 4.18)

In Table 4.17 we have combined direct and indirect generation of income and employment for industrial and final domestic production activities. This is useful in order that the user not be misled by the high value of multipliers of industries which have a very low direct impact on income and employment. In Table 4.17 we have ranked productive activities in order of total income generated per million dollars of final output. We observe, as is to be expected, that primary activities and services, including government services, yield more total income and employment per dollar of expenditure than do manufacturing industries. While some activities such as agriculture yield relatively low total income and high employment, others such as hospital services yield higher income and higher employment per dollar expenditure. Manufacturing activities with relatively high income and employment multipliers (see Table 4.12) yield low total income and low total employment per dollar final expenditure. For purposes of economic policy these data should be combined with estimates of capital-output ratios for producing activities.

Columns (2) and (6) are obtained from the direct input coefficients in Table 4.2. Columns (4) and (8) are derived from Tables 4.8B and 4.10C. Table 4.8A yields direct and indirect income and employment per \$1,000 of final sales; thus the direct income and employment are subtracted in order to arrive at columns (3) and (7). Table 4.10C yields indirect income and employment only and the direct must be added to arrive at columns (4) and (8). Income per man in Table 4.17 refers to total income generated by total employment, both direct and indirect.

The same data are re-arranged in Table 4.18 to show total employment and total income arising from an initial employment of 1,000 persons in each of the 12 industries in the system.

⁹ Derived from Matrix $(I - \hat{\mu})$ $\stackrel{*}{D}$.

TABLE 4.13. Direct and Indirect Generation of Household Income and Employment by Final Expenditure Categories

Illustrative 12 x 12 Model I, Nova Scotia, 1965

	Househol	d income	Emplo	yment
Final demand categories	Millions of dollars	%	Thousands	%
Personal consumption Capital formation Federal government: Defence Civilian Provincial government Municipal government Education Hospitalization	367.8 82.5 103.7 87.6 57.3 20.8 71.7 43.2	35.0 7.9 9.9 8.4 5.5 2.0 6.8 4.1	84.1 17.3 17.9 17.2 10.9 4.2 14.2 14.3	36.9 7.6 7.8 7.5 4.9 1.8 6.2 6.2
Sub-total:				
Domestic expenditures	(834.6)	(79.6)	(180.1)	(78.9)
Exports: Foreign Canada New Brunswick Prince Edward Island Newfoundland	79.2 106.3 16.3 3.9 8.9	7.5 10.1 1.6 0.4 0.8	18.0 23.2 4.0 0.8 2.1	7.9 10.2 1.7 0.4 0.9
Sub-total:				
Exports	(214.6)	(20.4)	(48.1)	(21.1)
Totals	1,049.2	100.0	228.2	100.0

Source: Tables 4.11 and 3.2.

TABLE 4.14. Direct and Indirect Import Generation by Final Expenditure Categories
Illustrative 12 x 12, Model I, Nova Scotia, 1965

		Primary	inputs	Total impor	rt content	
Final demand categories	Competi- tive imports	Non- competi- tive imports	Non- competitive imports plus income leakage	Com- modities only (1) + (2)	Total import leakage (1) + (3)	Percentage distribution of (5)
	(1)	(2)	(3)	(4)	(5)	(6)
		mi	llions of dolla	rs		%
Personal consumption Capital formation Federal government:	229.6 93.6	150.6 16.5	180.2 21.8	380.2 110.1	409.8 115.4	53.7 15.1
Defence Civilian Provincial government Municipal government Education Hospitalization	20.5 9.3 10.4 3.0 6.6 6.0	4.8 4.0 6.1 2.5 5.6 7.5	6.0 5.2 19.0 4.6 10.1 9.8	25.3 13.3 16.5 5.5 12.2 13.5	26.5 14.5 29.4 7.6 16.7 15.8	3.5 1.9 3.9 1.0 2.2 2.1
Sub-total: Domestic expenditures	(379.0)	(197.6)	(256.7)	(576.6)	(635.7)	(83.4)
Exports: Foreign Canada New Brunswick Prince Edward Island Newfoundland	20.2 28.6 4.6 1.0 2.5	14.0 21.6 4.2 5.6 6.9	20.0 29.6 5.4 6.6 8.1	34.2 50.2 8.8 6.6 9.4	40.2 58.2 10.0 7.6 10.6	5.3 7.6 1.3 1.0 1.4
Sub-total: Exports	(56.9)	(52,3)	(69.7)	(109.2)	(126.6)	(16.6)
Totals	435.9	249.9	326.4	685.8	762.3	100.0

Source: Tables 3.2 and 4.11.

TABLE 4.15. Domestic and Import Content of Final Expenditures Illustrative 12 x 12, Model I, Nova Scotia, 1965

	Total	Imp cont		Dom cont		Percei import (
Final demand categories	expen- diture on goods and services	Com- modities only	Total import leakage	GDP	GDP (less income leakage)	Commodities only (2) ÷ (1)	Total import leakage (3) ÷ (1)
×	(1)	(2)	(3)	(4)	(5)	(6)	(7)
		mil	llions of dolla	rs		9	6
Personal consumption	1,035.6	380.2	409.8	655.4	625.8	36.7	39.6
Capital formation	212.4	110.1	115.4	102.3	97.0	51.8	54.3
Federal government:							
Defence	134.4	25.3	26.5	109.1	107.9	18.8	19.7
Civilian	106.1	13.3	14.5	92.8	91.6	12.5	13.7
Provincial government	94.3	16.5	29.4	77.8	64.9	17.5	31.2
Municipal government	31.1	5.5	7.6	25.6	23.5	17.7	24.4
Education	92.2	12.2	16.7	80.0	75.5	13.2	18.1
Hospitalization	61.9	13.5	15.8	48.4	46.1	21.8	25.5
Sub-total:							
Domestic expenditures	(1,768.0)	(576.6)	(635.7)	(1,191.4)	(1,132.3)	(32.6)	(36.0)
Exports:							
Foreign	137.6	34.2	40.2	103.4	97.4	24.9	29.2
Canada	176.0	50.2	58.2	125.8	117.8	28.5	33.1
New Brunswick	30.1	8.8	10.0	21.3	20.1	29.2	33.2
Prince Edward Island	12.8	6.6	7.6	6.2	5.2	51.6	59.4
Newfoundland	22.1	9.4	10.6	12.7	11.5	42.5	47.0
Sub-total:							=
Exports	(378.6)	(109.2)	(126.6)	(269.4)	(252.0)	(27.8)	(32.2)
Totals	2,146.6	685.8	762.3	1,460.8	1,384.3	31.9	35.5

Source: Tables 3.2 and 4.14.

TABLE 4.16. Output, Input and Primary Multipliers Illustrative Example 12 x 12, Model I, Nova Scotia, 1965

			Prir	nary multipli	ers
	Output	Input	Household income	Factor income	Employ- ment
Industries:					
1. Agriculture	1.469	1.359	1.414	1.476	1.23
2. Forestry	1.130	1.334	1.074	1.083	1.092
3. Primary fishing	1.301	1.332	1.205	1.239	1.120
4. Coal and other mining	1.235	1.329	1.175	1.178	1.19
5. Food, textile manufacturing	1.605	1.365	2.083	2.021	2.312
6. Sawmills, pulp and paper manufacturing	1.499	1.293	1.683	1.613	1.70
7. Steel and metal manufacturing	1.378	1.341	1.474	1.472	1.523
8. Non-metallic minerals manufacturing	1.154	1.314	1.651	1.344	1.908
9. Construction	1.487	1.317	1.519	1.581	1.506
10. Transportation, communication	1.408	1.306	1.375	1.396	1.363
11. Distribution	1.270	1.334	1.192	1.191	1.160
12. Services	1.258	1.355	1.247	1.241	1.259
Commodities:					
1. Agricultural products	1.469	1.359	1.414	1.476	1.23
2. Forest products	1.187	1.342	1.112	1.126	1.12:
3. Primary fishing	1.301	1.331	1.205	1.239	1.126
4. Mining products	1.235	1.329	1.175	1.178	1.191
5. Food, textiles	1.605	1.365	2.083	2.021	2.312
6. Wood, paper, etc	1.496	1.293	1.673	1.606	1.699
7. Steel and metal manufacturing	1.378	1.341	1,474	1.472	1.523
8. Non-metallic minerals	1.158	1.314	1.648	1.346	1.899
9. Construction activity	1.487	1.317	1.519	1.581	1.500
10. Transportation, communication	1.408	1.306	1.375	1.396	1.36
11. Distribution	1.270	1.334	1.192	1.191	1.16
12. Services	1.260	1.356	1.249	1.243	1.258
Final demand categories:	13				
1. Personal consumption	_	1.333			
2. Capital formation	_ 1	1.469	2	2	_
Federal government:		1.105			
3. Defence	_ 1	1.376	1.182	1.206	1.233
4. Civilian	_	1.456	1.283	1.311	1.318
5. Provincial government	_	1.436	2.105	1.870	2.424
6. Municipal government	_ 1	1.404	1.803	1.788	1.859
7. Education	_	1.425	1.259	1.272	1.286
8. Hospitalization	_	1.414	1.394	1.418	1.231
Exports:		/			
Foreign	_	1.471	_	_	_
Canada	_	1.532	_ /	_	_
New Brunswick	_ 1	1.379	_ 1	_	_
Prince Edward Island	_	1.269	_ (_	
	n W	1.207	n e	_	_

Source: Tables 4.5 and 4.7.

TABLE 4.17. Household Income and Employment Generated Per Million Dollars of Final Sales Illustrative 12 x 12, Model I, Nova Scotia, 1965

Industry or domestic		Househol	d income		Employment				Average income
production activity	Rank (1)	Direct (2)	Indirect (3)	Total (4)	Rank (5)	Direct (6)	Indirect (7)	Total (8)	per employee (4) ÷(8) (9)
			\$'000		r	umber of	employees		\$
Federal government:									
Civilian	1	644	182	826	5	123	39	162	5,099
Education	2	618	160	778	6	119	34	153	5,085
Federal government:									
Defence	3	653	119	772	9	108	25	133	5,804
Forestry	4	712	52	764	10	123	10	133	5,744
Distribution	5	613	117	730	4	152	25	177	4,124
Hospitalization	6	499	197	696	1	187	43	230	3,026
Mining	7	570	100	670	12	107	21	128	5,234
Municipal government	8	371	298	669	8	73	63	136	4,919
Primary fishing	9	548	113	661	2	191	24	215	3,07
Transportation, etc	10	448	168	616	11	96	35	131	4,702
Agriculture	11	433	179	612	3	172	41	213	2,873
Provincial government	12	289	319	608	15	47	68	115	5,28
Wood and paper manufacturing	13	359	245	604	13	71	52	121	4,91
Construction	14	380	197	577	14	82	41	123	4,69
Services, n.e.s	15	442	109	551	16	87	23	110	5,01
Food and textiles	16	254	375	529	7	61	80	141	3,75
Steel and metal manufacturing	17	340	160	500	17	65	34	99	4,04
Petroleum, chemicals	18	98	65	163	18	15	13	28	5,82

Source: Tables 4.2, 4.8 A and 4.10 C.

TABLE 4.18. Induced Employment and Total Income Generated Per Employment of One Thousand Persons Illustrative 12 x 12, Model I, Nova Scotia, 1965

Industry	Direct employment (1)	Induced employment (2)	Total employment (3)	Total income (4)	Income per employee (5)
	nuı	mber of employee	es	\$'000	\$
Agriculture	1,000	231	1,231	3,542.1	2,877
Forestry	1,000	92	1,092	6,268.8	5,743
Primary fishing	1,000	126	1,126	3,464.3	3,077
Mining	1,000	191	1,191	6,235.5	5,235
Food, textiles	1,000	1,312	2,312	8,709.1	3,767
Wood, paper manufacturing	1,000	707	1,707	8,514.9	4,987
Steel, metal manufacturing	1,000	523	1,523	7,724.8	5,071
Petroleum, chemicals	1,000	908	1,908	11,018.1	5,774
Construction	1,000	506	1,506	7,048.6	4,680
Transportation, communications	1,000	363	1,363	6,402.7	4,698
Distribution	1,000	160	1,160	4,780.7	4,121
Services, n.e.s.	1,000	259	1,259	6,312.2	5,015

III. Closing the System

In the model as presented thus far personal consumption is treated as final expenditure on goods and services, and household income generated within the domestic economy is treated as a primary input.

With the aid of the system of accounts presented in Chapter 2 we can close the model with respect to domestically generated household income. We may usefully call the augmented system Model II, to distinguish it from the open system described earlier, which we call Model I. Whereas in Model I we were concerned, on the demand side, with personal consumption expenditure on goods and services only, in Model II the addition of the two components of savings and income taxes is required to bring about the identity with personal income. Model II also separates personal expenditures financed from income generated within the domestic economy (endogenous), from personal expenditures which are exogenous to the system. In Model II, these exogenous expenditures consist of (a) expenditures financed by transfers to persons from municipal, provincial and federal governments, and (b) expenditures by non-resident tourists and personal expenditures by residents financed from income received from the 'rest of the world'.

The purpose of closing the model with respect to household income is to build in a household consumption multiplier, which enables us conveniently to calculate additional requirements for domestic production and primary inputs which arise when households spend the incomes they receive by participating in production. Although the assumptions necessary to close the model with respect to household income are crude, the estimates of the total generation of income (employment, etc.) associated with various final demand requirements are an undoubted improvement on the 'method' of the inspired guess.

Household consumption multiplier effects are generated and can be calculated with respect to every production activity. The increments in incomes, employment, production, etc. (i.e. the differences between Model I and Model II figures) are generated when people engaged — directly or indirectly — in a specific economic activity spend their household earnings on consumer goods. It is essential for policy makers to understand that the induced increments relating to the operation of the household consumption multiplier are independent

of the source of household income. Thus, household income received from personal transfer payments, such as unemployment insurance, social welfare, etc. generates induced income, employment and production in exactly the same manner as does income deriving from productive employment. It should thus be apparent that the results for any particular activity obtained from the impact tables of Model II should, for policy purposes, be compared with the results of other alternate activities on a Model II basis, or with the Model II induced economic impact of the social payments to which persons are entitled in the absence of direct employment.

The system can be closed yet another step by shifting local public sectors into the input-output matrix. In such a model, which we call Model III, taxes paid to municipal and provincial governments are no longer treated as leakages out of the domestic spending stream. These taxes become revenues to municipal and provincial governments and are re-spent in the pattern of the base year accounts of Chapter 2.

Although the assumption here is even less realistic than that necessary to create Model II, the result serves two major purposes: (a) it gives us an order of magnitude for the complete current expenditure input-output multipliers by maintaining in the spending stream disbursements made in the form of municipal and provincial taxes, (b) it enables us to estimate the impact on the domestic economy of federal transfer payments to provincial and municipal governments.

The caveats referred to with respect to Model II apply equally to Model III. The difference between Models II and III simply consists in the fact that Model II relates to the induced effects of consumption expenditure by households, whereas Model III adds to these the induced effects of expenditures by provincial and municipal governments financed by their tax receipts. When the system is closed on the Model III basis the only "leakages" remaining from incomes of provincial residents are personal savings and federal taxes. Personal consumption and expenditures of provincial, municipal, education and hospital institutions are endogenous to income creation in Model III.

In order to explain the closed input-output Models II and III we reproduce a schema of the transfer matrix of the income-outlay and capital finance accounts of Chapter 2.

In the diagram below incomes are entered in the and outlays in the columns of households, the provincial public sectors, the federal government and the test of the world. In the case of the capital finance eccount, the row records sources and the column uses of funds. All entries til are transfers of purchasing power between the seven income outlay accounts and the capital finance account. (The transfer tij is received by i from j.) Outlays on goods and services are denoted by the vector y in the case of domestic final demand. Outlays by the rest of the world on exports are denoted by x. Total outlay made by each account in the form of transfers is denoted by the vector θ' .

Closing the System with Respect to Households: Model II

Model II closes Model I with respect to household income. The new household industry delivers factor services to intermediate and to final users. It purchases consumer goods and services and primary inputs. The total output of the household industry in the base year is equal to household income earned from participation in the domestic economy, i.e., it equals the sum of all payments by industries and by domestic final producing sectors (provincial public sectors and the federal government) to households. Thus the household row in the primary input flow matrix $Q_B\!:\!Q_D\!:\!$ of Model I becomes the household services commodity row of Model II. The input matrix of Model I is thus augmented by an additional row representing the commodity "household services" and an additional column representing the industry "households". The market share matrix J is similarly augmented by the addition of a row representing the industry "households" and a column for the commodity "household services". Household services are produced only by the household industry and the household industry produces only household services. In Model II household income is no longer a primary input.

The (augmented) matrices of Model II will be written as B, J, Q, etc. and are again assumed to have m commodities, n industries, and 1 primary inputs.

The flow vector of the household industry in the matrix B is obtained as follows:

(1) Output of the household industry is given by $\overline{g}_1 = (1, 0, 0, ...) [Q_B; Q_D] i_{(n + p)}$

where [QB:QD] is the primary input flow matrix of Model I. (\$1,049.2 million in Table 4.19)

- (2) It is assumed that all personal provincial income tax t₅₁, all personal federal income tax t₆₁, all expenditure by residents on out-of-province tourism t₇₁ and all personal savings t₈₁ derive from household income earned within the domestic economy.
- (3) The disbursements or inputs of the new household industry of Model II are obtained as follows:

$$h = \frac{\alpha d_1}{\alpha d_1} + a \qquad \text{(See page xx)}$$

 $h = \frac{\alpha \, \overset{*}{d_1}}{\dots} + a \qquad \text{(See page xx)}$ $\underset{q_1}{\overset{*}{q_1}}$ Where \dots is the coefficient vector of personal con-

sumption in . . . of Model I,
$$\overset{\boldsymbol{*}}{\overset{\boldsymbol{V}}{Q}_{D}}$$

 α is the flow scalar $(\overline{g_1} - \theta_1)$

Where
$$\theta_1 = t_{51} + t_{61} + t_{71} + t_{81}$$

is a vector of same dimension as h and ... which is empty in all cells

except four. In the appropriate four cells are contained the following value flows: provincial income tax t51, federal income tax t61, expenditure on outof-province tourism t71 and total personal savings t₈₁. (See page xx).

The matrix of Model II is the matrix ...
$$\overline{Q}_D \qquad \qquad Q_D$$
 of Model I with two changes:

(1) \overline{D} has an additional row representing the input of household services. This row is the household income primary input row of the flow matrix QD of Model I. $[\overline{Q}_D$ correspondingly has one row fewer than QD].

A Secretary Control			Incom	e outlay a	ecounts				
t _{ij} is a transfer received by i from j	House- holds	Edu- cation	Hospi- taliza- tion	Muni- cipal	Provin- cial	Federal	Rest of the world	Capital finance	Total income
Outlay on goods and services	у ₁	у2	У3	У4	У5	У6	x	У8	_
Income-outlay accounts:									
1. Households	-	-	=	t ₁₄	t ₁₅	t ₁₆	t171	-	E ₁
2. Education	=	_	320	t ₂₄	t ₂₅		(-)	t ₂₈	E ₂
3. Hospitalization	-	-	===	t34	t ₃₅		-	t ₃₈	E ₃
4. Municipal	570	-	=	-	t45	t46	S-2	t ₄₈	E ₄
5. Provincial	t ₅₁	-	100	t ₅₄	-	t ₅₆	1-1	t ₅₈	E ₅
6. Federal	t ₆₁	- (-	t ₆₄	t ₆₅	-		t ₆₈	E ₆
7. Rest of the world	t ₇₁ 1		-	970	===		-	-	E ₇
8. Capital finance account	t ₈₁	_	-	140	240	_	t ₈₇	-	E ₈
Total outlay on transfers (1 + 8)	θ_1	-	_	θ4	θ5	θ6	θ7	θ8	_
Total outlay	E ₁	E ₂	E ₃	E ₄	E ₅	E ₆	E7	E ₈	-

¹ All entries in this table correspond to the arrangements of entries of Tables 2.7 and 2.8 of Chapter 2, with the exception of the treatment of tourist expenditures. These, it will be recalled, were treated as a double adjustment to the household outlay in Tables 2.7 and 2.8 of Chapter 2. (Expenditures by non-resident tourists in the domestic market were subtracted and residents' expenditure on out-of-province tourism was added to household outlays in the row recording transactions with the rest of the world.) In Models II and III expenditures by non-resident tourists are treated as a transfer from the rest of the world to households; expenditures by residents on tourism out-of-the-province remain as a transfer by households to the rest of the world.

	Income earned			Incom	e outlay	accounts				Total	
	in domes- tic production	House- holds	Edu- cation	Hospi- taliza- tion	Muni- cipal	Provin- cial	Fe- deral	Rest of the world	Capital finance	income from transfers	Total income
Outlay on goods and services		1,035.6	92.2	61.9	31.1	94.3	240.5	- 57.3	212.4		
Income-outlay accounts:											
1. Households	1,049.2	_	_	=	4.0	14.1	93.1	22.31	-	133.5	1,182.7
2. Education	3.7	-	-		37.4	36.9	5.1	_	9.1	88.5	92.2
3. Hospitalization	5.0	-	-	_	3.2	30.0	22.5	-	1.2	56.9	61.9
4. Municipal	53.2	=	-	-	-	6.8	4.4	- 1	11.7	22.9	76.1
5. Provincial	85.1	13.8	-	_	0.4		69.3	_	14.5	98.0	183.1
6. Federal	70.5	61.9		-	0	1.0	22	-	301.5	364.4	434.9
7. Rest of the world	326.4	- 6.31	-	127	==	;=0	=	=	1,-0	- 6.3	320.1
8. Capital finance account	117.6	77.7	-	_	_	_	-	355.1	-	432.8	550.4
Total outlay on transfers (1 + 8)		147.1	_	_	45.0	88.8	194.4	377.4	338.0		
Total outlay		1,182.7	92.2	61.9	76.1	183.1	434.9	320.1	550.4		

 $^{^1}$ For convenience, the tourist earnings of residents (\$21.3) have been subtracted from tourist expenditure by residents (\$15.0) to yield a net personal expenditure on tourism of \$-6.3. Alternative treatment would have shown \$15.0 in \$t_{71}\$ and \$43.6 in \$t_{17}\$.

(2) The first vector
$$...$$
 in $...$ is obtained from $\begin{matrix} \overline{v}_1 & \overset{*}{d}_1 \\ ... & \overset{*}{q}_1 \end{matrix}$

where y_1 is the scalar: $y_1 = t_{14} + t_{15} + t_{16} + t_{17}$

Table 4.19 shows the base year flow accounts for Models I, II and III for Nova Scotia, 1965. It will assist the reader in the subsequent paragraphs:

(1) Exogenous personal income of \$154.8 million consists of sums received by households as transfer payments from municipal governments t_{14} ; from provincial governments t_{15} ; from the federal government t_{16} ; remittances and earnings from the "rest of the world" and expenditures by out-of-province tourists in the local economy t_{17} . It is assumed that this amount $(t_{14}+t_{15}+t_{16}+t_{17})$ is spent on commodities and primary inputs according to expenditure pattern of personal consumption in Model I. Note that the model assumes that all personal income taxes, t_{51} and t_{61} , all resident expenditures on tourism, t_{71} , and all personal savings, t_{81} , are paid from endogenously earned income.

(2) We note that total expenditure of the new household industry (\$1,049.2 million) plus personal expenditures from incomes not earned within domestic economy (\$154.9 million) exceed personal consumption of \$1,035.6 million) Model I by \$168.5 million. The following items of personal expenditure were excluded from personal consumption in Model I:

	Millions of dollars
Provincial income tax	13.8
Federal income tax	61.9
Residents tourist expenditure	15.0
Personal savings	77.8
Total	168.5

(3) $(\overline{g}_1 - \theta_1) = \$1,049.2$ million minus \$168.5 million = \$880.7 million. The new household expenditure flow vector is obtained by the following addition:

Commodity Inputs	a	+	$\stackrel{\star}{\alpha\stackrel{d}{d}_1}$	=	h household income
1			41.2		41.2
2	0		_		
ET.	•		1.5		1.5
1			5.6		5.6
8	*				
Ð					
•6					a r
m	0				
(m+1)	0		0		0
Sub-total intermediate inputs	0	+	698.0	=	698.0
Primary inputs (1) Education	0		7.4		7.4
(2) Hospital	0				
(3) Municipal	0		2.8		2.8
(4) Provincial	13.8		42.9		56.7
(5) Federal	61.9		53.1		115.0
(6) Rest of world	15.0		76.5		91.5
(7) Savings	77.8		0		77.8
Sub-total primary inputs	168.5		182.7		351.2
Totals	168.5		880.7		1,049.2

TABLE 4.19. Flow Accounts for Nova Scotia, 1965, Models I, II and III

						Model I					
	Indus- tries (12)	Personal consump- tion	Capital formation	Federal government: defence	Federal governme civilian		Hospitali- zation	Municipal government	Provincial government	Exports (5)	Total demand Model I
					tho	usands of do	llars				
1. Agricultural products 2. Forestry products 3. Primary fish 4. Mining products 5. Food and clothing 6. Wood, paper products 7. Steel, metal products 8. Petroleum, chemicals 9. Construction 10. Transportation, communications 11. Distribution 12. Services, n.c.s.	22.5 14.1 48.9 22.0 30.1 56.6 98.9 57.3 34.0 121.8 38.4 130.4	48.4 0.2 1.7 6.6 198.3 14.9 50.3 37.3 54.1 131.7 277.2	- 0.5 0.1 	2.0 1.0 0.7 20.6 1.6 10.1 1.9 2.8 4.5	0 4 0 26 2	1	0.3 - 0.4 2.4 0.8 1.6 0.5 10.6 1.8 2.9 2.7		2.4 2.0 0.5 33.4 8.4 1.7 6.2	7.8 6.3 5.5 40.2 112.2 49.7 108.9 20.2 	78.6 20.9 56.1 74.9 344.9 128.7 377.7 120.5 256.4 221.1 196.0 431.9
13. Total intermediate	675.0	820.7	212.4	45.2	37	.2 28.6	24.0	17.0	54.7	392.6	2,307.6
14. Households 15. Education 16. Hospitalization 17. Municipal government 18. Provincial government 19. Federal government 20. Rest of the world 21. Capital formation	766.7 49.9 34.7 22.0 205.6 117.6	3.7 5.0 3.3 50.4 62.5 90.0	-	87.7		56.9	30.9	11,5	27.2	- 14.0	1,049.2 3.7 5.0 53.2 85.1 70.5 326.4 117.6
22. Total primary	1,196.5	214.9	_	89.2	68	.9 63.6	37.9	14.1	39.6	- 14.0	1,710.7
23. Total output	1,871.5	1,035.6	212.4	134.4	106	.1 92.2	61.9	31.1	94.3	378.7	4,018.3
24. Final sales by industry less competitive imports					1211	1,196.5	-V-31-1-				e:
						Model II					
	Indus tries (12)	. '	Households Model II	Tota interme Mode	diate	Exogenous personal expenditure Model II	domest expen exclu pers	total tic final diture iding onal diture	Exports (5)	den Mo	otal nand odel I
		!-		*	the	ousands of do	ollars			<u>.</u>	
1. Agricultural products 2. Forestry products 3. Primary fish 4. Mining products 5. Food and clothing 6. Wood, paper products 7. Steel, metal products 8. Petroleum, chemicals 9. Construction 10. Transportation, communications 11. Distribution 12. Services, n.e.s. 13. Households		22.5 14.1 48.9 22.0 30.1 56.6 98.9 57.3 34.0 121.8 38.4 130.4 766.7	41 0 1 5.6 168.6 12.6 42.8 31.8 46.0 112.0 235.1	26 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	63.6 14.3 50.4 27.6 198.7 69.2 141.7 89.0 34.0 167.8 150.5 366.1 766.1	29 29 27 5	.2 .5 .6 .1	- 0.1 0.1 - 0.0 4.3 7.8 119.7 5.5 222.2 22.2 20.5 (282.5)	7.8 6.3 5.5 40.2 112.2 49.7 108.9 20.2 23.0 15.0 3.8		78.6 20.9 56.1 74.9 344.9 128.7 377.7 120.5 256.4 221.1 196.0 431.9 1,049.2
14. Total intermediate	1.	,441.7	698.0	2	,139.7	122	.7	(701.5)	392.6		3,356.6
15. Education 16. Hospitalization 17. Municipal government 18. Provincial government 19. Federal government 20. Rest of the world 21. Capital formation		49.9 34.7 22.0 205.6 117.6	3.2 4.2 2.1 56.2 115.0 91.0 77.2	2 3 7 0 5	3.2 4.2 52.7 91.4 137.0 297.2 195.4	0 0 7 9 13	1.5 1.8 1.5 1.5 1.3 1.5	(30.8)	- 14.0		3.7 5.0 53.2 98.9 132.3 341.5 195.4
22. Total primary		429.8	351.2	2	781.1	32	.1	(30.8)	- 14.0		830.0
23. Total output	1.	,871.5	1,049.2	2 2	,920.8	154	.8	(732.3)	378.7		4,186.5
24. Final sales by industry less competitive imports						781.1					

TABLE 4.19. Flow Accounts for Nova Scotia, 1965, Models I, II and III — Concluded

					М	odel III				
	Industrics Model I (12)	Пе	ruse holds	Educa	tion	Hospitali- zation	Munic gove mer	rn-	Provin- cial govern- ment	Total inter- mediate sales
					thousar	nds of dollars				
Agricultural products Forestry products Primary fish	1	22.5 4.1 48.9	42.0 0.2 1.5		=		0.3	-		64.8 14.4 50.4
4. Mining products 5. Food, clothing 6. Wood, paper, products 7. Steel, metal products 8. Petroleum, chemicals 9. Construction	5 5 5	22.0 30.1 56.6 98.9 57.3	5.7 172.1 12.9 43.7 32.4		3.0 1.8 0.9 14.4	2 0 1 0	.4 .4 .8 .6	0.6 0.2 0.3 0.7 0.4	2.4 2.0 0.5	28.8 204.9 75.9 148.8 92.1
10. Transportation 11. Distribution 12. Services, n.e.s. 13. Households 14. Education	12 2 13	21.8 38.4 30.4 56.7	47.0 114.3 240.6 - 3.2		4.1 1.7 2.7 56.9	1 2 2 30	.8 .9 .7	7.8 3.4 0.6 3.0 15.5 37.4	33.4 8.4 1.7 6.2 41.3 36.9	100.2 186.5 159.6 385.6 911.3
15. Hospitalization		19,9 34.7	4.3 2.9 57.6					3.2 - 0.4	30.0 6,8	37.5 59.6 92,7
18. Total intermediate	1,52	26.3	780.2		85.5	54	.9	73.5	169.6	2,690.0
19, Federal government	20	22.0 05.6 .7.6	116.1 93.2 77.7		6.7		.0	2.6	1.0	139.1 327.5 195.4
22. Total primary	34	5.2	287.1		6.7	7	.0	2.6	13.5	662.0
Total output	1,87	1.5	1,067.3		92.2	61	.9	76.1	183.1	3,352.4
	Total	Goods and services					Trar	sfers		Total
	inter- mediate sales	Exogenou personal expendi- ture	s Capital formation	gc n n	ederal overn- nent: efence	Federal govern- ment: civilian	Federal: Transfers	Provincia public sector borrowin		domestic demand Model III
		7		Ÿ	thousar	ids of dollars		Ť	î	1
1. Agricultural products 2. Forestry products 3. Primary fish 4. Mining products 5. Food and clothing 6. Wood, paper products 7. Steel, metal products 8. Petroleum, chemicals 9. Construction	64.8 14.4 50.4 28.8 204.9 75.9 148.8 92.1 100.2	6. - 0. 0. 26. 2. 6.	+ (2 9 2 2 0 0 (6 6 88 9 1	0.1 - 2.9 0.3 0.3 3.6 1.1	2.0 1.0 0.7 20.6 1.6	0.1 0.1 0.4 0.3 4.4 0.5 26.3			7.8 6.3 5.5 40.2 112,2 49.7 108.9 20.2	78.6 20.9 56.1 74.9 344.9 128.7 377.7 120.5 256.4
Transportation, communications I. Distribution Z. Services, n.e.s. Households Guation Hospitalization Municipal government Provincial government	186.5 159.6 385.6 911.3 77.5 37.5 59.6 92.7	7. 17. 36. - 0. 0. 0.	4 6 - 5 7 4		1.9 2.8 4.5 87.7	2.6 1.1 1.4 68.3	5.1 22.5 4.4 69.3	9. 1. 11. 14.	2 -	221.1 196.6 431.9 1,067.4 92.2 61.9 183.1
8. Total intermediate	2,690.0	116.	6 212	2.4	133.0	105.5	101.3	36.	5 392.6	3,788.4
9. Federal government 0. Rest of the world 1. Capital formation	139-1 327-5 195.4	8, 11.	9		1.5	0.6	14.0		- 14.0	133.3 355.5 195.4
22. Total primary	662.0	20.	1	-	1.5	0.6	14.0		- 14.0	684.2
Totals	3,352.4	136.	7 212	2.4	134.5	106.1	115.3	36.	5 378.7	4,472.6
Final sales by industries less competitive imports			0	กั		662.0		ŽĮ.	2	

(4) The exogenous personal expenditure vector of Model II is obtained by distributing \$154.8 million in the pattern of personal consumption in the base year. Exogenous personal expenditure of \$154.8 million is obtained by adding:

e	Millions of dollars
Transfer from municipal government t_{14}	4.0
Transfer from provincial government t_{15}	14.1
Transfer from federal government t_{16}	93.1
Transfer and incomes from rest of the world	
t ₁₇	22.3
Sub-total	133.5
Non-resident tourism expenditures within	
the province	21.3
Total	154.8

When this is distributed according to the personal consumption pattern in the base year, \$122.7 million are purchases of commodities and \$32.1 million are purchases of primary inputs.

(5) We may note that intermediate purchases of the household industry of \$698.0 million plus intermediate purchases of the exogenous personal expenditure of \$122.7 million equals \$820.7 million which is the sum of all commodities purchased by exogenous personal consumption in Model I. The increase in the recorded spending of persons in Model II as compared with Model I consists of expenditures of \$168.5 million on primary inputs.

Thus:

Millions of dollars

Personal consumption of Model I $y_1 = 1,035.6$ plus expenditure on personal taxes, savings and tourism out of the province $\theta_1 = 168.5$ Total 1,204.1

while:

Output of new household industry $g_1 = 1,049.2$ plus exogenous personal consumption from incomes not arising from sale of services within domestic economy $y_1 = 154.8$

Total 1,204.1¹⁰

Solutions to Model II are identical to those developed for the Basic Model I:

Thus
$$\overline{R}_c = [I - (I - \hat{\mu}) \stackrel{*}{\overline{B}} \stackrel{*}{\overline{J}}]^{-1}$$

$$\overline{R}_I = [I - \stackrel{*}{\overline{J}} (I - \hat{\mu}) \stackrel{*}{\overline{B}}]^{-1}$$

and all other expressions of Model II are similarly identical to those of Model I.

As in Model I, a check on the system is given by:

$$\frac{*}{\overline{Q}_B}\left[I-(I-\hat{\mu})\,\frac{**}{\overline{B}\overline{J}}\right]^{-1}\,\frac{*}{\overline{J}}\left[(I-\hat{\mu})\,\left[\frac{*}{\overline{D}}\hat{y}\right]\,\left[\hat{E}\hat{x}\right]i_{(p+x)}=Q_Bi_n\right]$$

Closing the System with Respect to Local Public Sectors — Model III

In Model II household income deriving from the sale of household services to the provincial economy is assumed to be re-spent on the purchase of consumer goods and services. Payments of taxes to local government, however, are leakages out of the spending stream. Model III closes the system yet another step by shifting the local public sectors into the inter-industry matrix. In Model III, the \overline{B} matrix of Model II is augmented to \overline{B} by adding a further four rows and columns. These represent education, hospitalization, municipal government and provincial government. Primary inputs are thus reduced to three: payments to (or subsidies from) the federal government; import leakages and depreciation/savings.

Where there is no outlay on transfers the output of the newly created industries of Model III is equal to final expenditure on goods and services of the corresponding provincial public sectors of Model I. The level of output of the newly created education and hospitalization industries of Model III is identical with final expenditure on goods and services by education and hospitalization in Model I: in terms of the transfer matrix θ_2 and θ_3 are zero and y_2 and y_3 of Model I are equal to \overline{g}_2 and \overline{g}_3 of Model III.

Where there are outlays on transfers, total expenditure is no longer limited to expenditure on goods and services. Thus expenditure by municipal government consists of two elements:

y4 expenditure on goods and services as shown in the municipal government column of the flow matrix D, of Model I.

¹⁰ Discrepancy due to rounding.

and

 θ_4 which consists of transfers t_{14} , t_{24} , t_{34} , t_{54} and t_{64} .

Expenditure of provincial government likewise consists of two elements:

y₅ expenditure on goods and services as shown in the provincial government columns of the flow matrix D of Model I

and

 θ which consists of transfers t_{15} , t_{25} , t_{35} , t_{45} and t_{65} .

The effect of Model III is to convert a dollar of revenue received by any one of the provincial public sectors into a typical dollar of expenditures, based on the allocation of expenditures between transfers to households, transfers to other provincial public sectors, and direct expenditures on goods and services. The data necessary to transform Model I into Model III are contained in the transfer matrix of pages 217 and 218. The reader is also invited to refer to Tables 2.7 and 2.8 of Chapter 2 and Table 4.2 of this chapter.

Model III augments the original Model I as follows:

- (1) Five new "commodities" and five new "industries" are introduced into the system. They represent households $\overline{\overline{g}}_1$; educational expenditures $\overline{\overline{g}}_2$; hospitalization expenditures $\overline{\overline{g}}_3$; municipal government outlays $\overline{\overline{g}}_4$ and provincial government outlays $\overline{\overline{g}}_5$.
- (2) Two new final demand expenditures are introduced to represent federal transfers to provincial public sectors (d_y) ; and net borrowing [deficit (+) and surplus (-)] of public sectors (d_x) .

Thus the outputs of the four new public sector industries in Model III are equal to E_2 , E_3 , E_4 , E_5 as shown in the transfer matrix diagram.

(3) The two domestic final expenditure categories of the original coefficient matrix D of Model I are retained because they are useful for economic analysis. They are not however included in the balances of Model III. In other words, municipal and provincial ex-

penditures are intermediate rather than final expenditures of Model III. However we retain the spending pattern of municipal and provincial outlays or goods and services in the $\overline{\overline{D}}$ matrix of Model III. The impact on the domestic economy resulting from these expenditures is different from the impact resulting from a typical dollar of municipal or provincial government outlays. The latter are based on expenditure patterns which include transfers, the former is confined to the impact of disbursements on goods and services only.

- (4) In Model III, the household industry is redefined: personal transfer payments made by municipal (t_{14}) and provincial governments (t_{15}) are intermediate transactions in Model III. The output of the household industry of Model III $\overline{\overline{g}}_1$ thus equals the output of the household industry of Model II \overline{g} , plus $t_{14} + t_{15}$.
- (5) Exogenous personal expenditure of Model III, \bar{y}_1 is correspondingly lower than exogenous expenditure of Model II (\bar{y}_1) by the amount of personal transfer payments $t_{14} + t_{15}$.
- (6) Primary inputs $\overline{\mathbb{Q}}_D$ of Model III consist of three additive terms: payments to federal government; to the rest of the world, and to the capital finance account. As in all versions of the Model any number of non-additive primary inputs can of course be recorded.

Household Industry $\overline{\overline{g}}_1$

- (1) Output of the household industry of Model III equals $\overline{g}_1 + t_{14} + t_{15}$. In terms of the accounts for Nova Scotia, 1965 the total output of the household industry is \$1,067.3 million (\$1,049.2 million + \$18.1 million).
- (2) The disbursements or inputs of the household industry of Model III are obtained in a similar manner to those of Model II. Thus:

$$h' = \alpha^1 \quad \begin{bmatrix} \binom{*}{d_1} \\ \cdots \\ q_1 \end{bmatrix} + a$$

where α is the flow scalar $\left[\overline{\overline{g}}_1 - \theta_1\right]$

 $\overset{*}{\overset{d}{d}}$... is the coefficient vector of personal consumption in $\overset{*}{\overset{D}{Q}}$ of Model I and the vector a is composed ... $\overset{*}{\overset{*}{\overset{d}{Q}}}$

of the same four elements already described with respect to Model II.

The assumption used to construct the household industry of Model III, while formally the same as that used for Model II, differs in substance insofar as provincial and federal income taxes (t_{51}, t_{61}) ; tourist expenditures out of the province (t_{71}) and personal savings (t_{81}) are now assumed to be paid from household income \overline{g}_1 which exceeds household income (\overline{g}_1) of Model II by the sum of personal transfers received from municipal and provincial governments $(t_{14} + t_{15})$. Inasmuch as the amount of these payments is small relative to total household income, the (substantive) change in assumption has a very small effect on the outcome of the model. The crude nature of the proportionality assumption used in Model III would make it absurd to adjust for this difference.

Education Industry \overline{g}_2 and the Hospital Industry \overline{g}_3

Output here is identical to final expenditure on goods and services of Models I and II $(\overline{g}_2 = \$92.2 \text{ million})$; $\overline{g}_3 = \$61.9 \text{ million})$.

Input flows to the education industry \overline{h}_2 are equal to the flow vector $\begin{bmatrix} D_2 \\ \dots \end{bmatrix}$ of Models I and II and input flows to the hospital industry \overline{h}_3 are equal to the flow vector $\begin{bmatrix} D_3 \\ \dots \end{bmatrix}$ of Models I and II. Q_{D_3}

Expenditures on household income, which were primary in Model I (and thus contained in the Q_D portion of the expenditure vector) are of course intermediate in Models II and III and are thus contained in the D portion of the matrix $\begin{bmatrix} D_q \\ Q_D \end{bmatrix}$

Municipal Government Industry 34

The output of the municipal government industry of Model III equals

$$\overline{g}_4 = y_4 + \theta_4$$

where y_4 are municipal expenditures on goods and services in Models I and II, and θ_4 = t_{12} + t_{24} + t_{34} + t_{54} + t_{64} .

The transfer items refer to municipal transfers to households t_{14} ; to education t_{24} , to hospitals t_{34} , to provincial government, if any, t_{54} and to the federal government, if any, t_{64} .

In our example output of the municipal government industry is obtained from Table 2.2 in Chapter 2 as \$71.7 million, i.e. the sum of y_4 = \$31.1 million and θ_4 = \$40.0 million.

The disbursements or inputs to the municipal government industry are obtained as

$$h_4 = D_4 + a_4$$

$$Q_{D_4}$$

where

 $\begin{array}{c} D_4 \\ \dots \end{array}$ are inputs to the final expenditure vector for Q_{D4}

municipal government in the $\overset{D}{\dots}$ matrix of Models I and $\overset{D}{\dots}$

II and a_4 is a vector containing the flows t_{14} , t_{24} , t_{34} , t_{54} and t_{64} in the appropriate rows.

Provincial Government Industry $\overline{\overline{g}}_5$

The procedure for obtaining total output and input flows is similar to that described with respect to the municipal government.

Thus
$$\overline{g}_5 = y_5 + \theta_5$$

Where y_5 are provincial outlays on goods and services in Models I and II and θ_5 = t_{15} + t_{25} + t_{35} + t_{45} + t_{65} .

Disbursements or inputs to provincial government are obtained as:

$$h_5 = D_5 + a_5$$

$$Q_{D_5}$$

where

 D_5 are inputs to the final expenditure vector for

 Q_5

provincial government in $\,D\,$ of Models I and II and $\, heta_4\,$

 Q_D

is a vector containing the flows t_{15} , t_{25} , t_{35} , $t_{45} + t_{65}$ in the appropriate rows.

The effect of Model III, as can be seen from Chart 3 is to transform the financing of educational and hospitalization services by municipal and provincial transfer into intermediate transactions; similarly, financing of municipal services from provincial transfers are intermediate transactions in Model III.

Final expenditure categories of Model III consist of the following:

- (i) Exogenous personal expenditure
- (ii) Capital formation
- (iii) Federal government purchases of goods and services: defence
- (iv) Federal government purchase of goods and services: civilian
- (v) Federal transfers to provincial public sectors
- (vi) Borrowing by provincial public sectors (excess of expenditure over revenues for taxes and transfers)

Exogenous personal expenditure $\bar{\bar{D}}_1$

Total exogenous personal expenditure $\overline{\bar{y}}_1$ = t_{16} + t_{17} , i.e., expenditure financed from income received in the form of federal transfer payments to persons (t_{16}) and expenditure financed by the rest of the world, either in the form of incomes received by residents from sources external to the province or in the form of expenditures made by the province by non-resident tourists. For Nova Scotia, 1965 $\overline{\bar{y}}_1$ = \$136.7 million.

Inputs are obtained as $\bar{\bar{y}}_1$. $\overset{*}{\bar{d}}_1$

Capital Formation and Federal Government Purchases of Goods and Services

Total expenditures here are equal to those of Models I and II. Inputs are the same as in Models I and II.

Federal Transfers to Provincial Public Sectors

Total expenditure on these transfers is $(\theta_6 - t_{16})$, i.e. the sum of transfers items t_{26} , t_{36} , t_{46} , and t_{56} . Inputs consist of the flows t_{26} , t_{36} , t_{46} and t_{56} placed in to the appropriate rows (see Table 3).

Borrowing by Provincial Public Sectors

Total expenditure here is the sum of provincial public sector borrowing θ_8 : $t_{28} + t_{38} + t_{48} + t_{58}$. Inputs are the flows t_{28} , t_{38} , t_{48} and t_{58} placed in to the appropriate rows (see Table 3).

Solutions of Model III are obtained as in Models I and II

Thus
$$\bar{\bar{R}}_{I} = [I - \stackrel{*}{\bar{J}} (I - \hat{\mu}) \stackrel{*}{\bar{\bar{B}}}]^{-1}$$

and $\bar{\bar{R}}_{c} = [I - (I - \hat{\mu}) \stackrel{*}{\bar{\bar{B}}} \stackrel{*}{\bar{J}}]^{-1}$

The check on the system is given by:

$$\bar{\bar{\bar{Q}}}_{B} \left[I - \bar{\bar{\bar{J}}} (I - \hat{\mu}) \, \bar{\bar{\bar{B}}}\right]^{-1} \, \bar{\bar{\bar{J}}} \left[(I - \hat{\mu}) \, \bar{\bar{\bar{D}}} \hat{y} : \hat{E} \hat{x}\right] i_{(p+r)} = \bar{\bar{Q}}_{B} i_{n}$$

Some Illustrations of Models II and III

When households are treated as an (intermediate) industry in Model II the indirect impact of final deliveries is increased. This indirect impact now includes the requirements associated with supplying the goods and services typically purchased by households with incomes received from engaging in the various industries which are activated when one unit of product (or of industry output) is delivered for final use.

Table $_{**}$ 4.20 for example shows the matrix $[I - (I - \hat{\mu}) BJ]^{-1}$ for Model II. Comparison with Table 4.4 of Model I illustrates the increase in direct and indirect requirements. The most interesting single figure in this table is the direct and indirect requirement of household services, found in row 13, column 13. It represents a general consumption multiplier, i.e. the expenditure of one dollar on wages, salaries or other forms of income accruing to residents generates an additional 42.5 cents of household income by activating industries which produce the goods and services which are typically consumed by households. In general, row 13 of Table 4.20 records total household income generated by final

delivery of one dollar of domestically produced product. Thus one dollar of primary forest product delivered for final use generates a total household income of \$1.05; one dollar of construction activity generates \$0.82; one dollar of non-metallic mineral and petroleum products generates \$0.24, while one dollar of average income paid to residents generates an additional \$0.425.

Table 4.21 shows the similar matrix of Model III, in which we may recall, taxes paid to provincial and municipal governments are assumed to be spent by provincial public sectors in accordance with spending patterns in the base year. Indirect requirements associated with delivery for final use of any product are, accordingly, greater than those of Model II. Here again special interest attaches to the entry in row 13, column 13 which shows total income generated when one dollar is paid out to households in the form of wages, salaries, etc. In Model III we observe that an additional 60.6 cents of household income is generated. Thus, when locally paid taxes remain within the system there is an increase of 42.8% in indirectly generated income. If we consider 1.425 and 1.606 as the consumption multipliers corresponding to Models II and III respectively, there is an increase of 12.7% in this multiplier. One dollar of primary forest product delivered for final use now generates \$1.25 of household income; one dollar of construction activity \$0.96; one dollar of non-metallic mineral, petroleum and chemical products \$0.29. Table 4.21 also indicates the degree to which the four provincial public sectors in the system are activated. Thus delivery of one dollar of household services requires 5.6 cents of educational services, 2.8 cents hospital services, 11.5 cents of provincial government services and 5.6 cents of municipal services. In this model these estimated requirements for public sector services equal estimated revenues of these public sectors.

From the expression
$$...$$
 $[I - \mathring{J}(I - \hat{\mu}) \mathring{B}]^{-1} \mathring{J}$ of \mathring{Q}_B

Models II and III (Tables 4.22, 4.23) we can obtain requirements of primary inputs associated with delivery for final use of one unit of product. Thus for example, delivery of one unit of primary forest product for final use in Model II generates 13.1 cents in federal revenue; 20.8 cents in total indirect taxes; 15.2 cents in noncompetitive imports. Corresponding results for Model III are federal revenue 15.6 cents; indirect taxes 24.2 cents; non-competitive imports 19.1 cents. From Tables 4.22 and 4.23 we may note, in particular, that one dollar

spent on wages, salaries and other forms of local household income generates 16.9 cents in federal revenue in Model III and 19.1 cents in Model III. These results yield a first estimate of the "feedback" to the federal government from expenditures on labour services or on personal transfer payments in Nova Scotia. The estimate is, of course, incomplete because the federal revenues deriving from incomes which accrue in other Canadian provinces are not included in these figures. They are, from the point of view of the provincial economy, an "import leakage".

It is possible to construct, for Models II and III tabulations of household income and employment similar to that shown in Table 4.13 for Model I. In Model II, exogenous expenditure consists of spending by the federal government; provincial public sectors; industries (capital formation) and the rest of the world (exports, spending by non-resident tourists, etc.).

In Table 4.24 we may note that \$319.7 million (30.5%) of total household income of \$1,049.2 million is generated by federal expenditures; \$328.0 million (31.3%) by the rest of the world; \$283.9 (27.0%) by provincial public sectors and \$117.6 million (11.2%) by capital expenditures of industries. A similar breakdown with respect to employment yields similar results. We note that total employment generated is 228,000 which corresponds with employment totals shown in Tables 3.2 and 4.13.

In Model III provincial public sectors are considered as endogenous to the economy. Thus exogenous expenditures are reduced to three main categories: federal spending, capital expenditures by industries and expenditures by the rest of the world. There is a fourth item necessary to complete the account. This is the sum of net borrowing by public sectors. In Table 4.25 we thus observe that \$495.4 million (46.4%) of household income is generated by federal spending and transfers; \$128.4 million or 12% by industrial capital expenditures; \$399.7 million (39.5%) by exports and tourist expenditures or remittances from non-residents and \$43.9 million (4.1%) by public sector borrowing. The reason why the federal government assumes a greater weight in income generation in Model II is because federal grants and transfers to provincial governments are now shown as originating with federal government. It should be noted that total household income in Model III (\$1,067.4 million) exceeds that of Model II by \$18.2

 $\begin{tabular}{ll} \textbf{TABLE 4.20. Direct and Indirect Requirements for Commodities Per Unit Commodity Output for Final Use \\ & Illustrative 12 \times 12 \ Model II, Nova Scotia, 1965 \end{tabular}$

No.	Inputs	Agriculture products	Forestry products	Fish	Mining products	Food, textile		Wood, paper	Steel, metals
1	Agriculture products	1.036	.035	.031	030		.094	.027	.022
2	Forestry products	.014	1.007	.004	.017		.006	.153	.003
3	Fish	.031	.020	1.020	.016		.220	.015	.012
4	Mining products	.019	.013	.016	1.013		.012	.011	.040
5	Food, textiles	.152	.094	.096	.073	1	.100	.070	.055
6	Wood, paper	.018	.016	.026	.027		.036	1.062	.016
7	Steel, metals	.021	.025	.041	.044		.025	.026	1.067
8	Petroleum chemicals	.086	.057	.084	.043		.050	.054	.054
9	Construction	.053	.036	.026	.036		.028	.028	.041
10	Transportation, communications	.124	.128	.139	.123		.146	.172	.178
11	Distribution	.131	.137	.134	.123		.120	.135	.125
12	Services, n.e.s.	.383	.343	.332	.346	3	.288	.337	.255
13	Household income	.872	1.053	.941	.955		.754	.864	.714
14	Totals	2.940	2,963	2.889	2.846	2	2.877	2.954	2.582
		Petroleum, chemicals	Con- struction	Transportat communi- tions	on Dis	tri- tion		vices e,s.	House- holds
1	Agriculture products	.007	.026		.027	.032		.024	.044
2	Forestry products	.001	.009		.003	.003		.004	.003
3	Fish	.004	.014		.015	.017		.013	.023
4	Mining products	.012	.031		.014	.013		.026	.014
5	Food, textiles	.018	.064		.068	.080		.062	.109
6	Wood, paper	.007	.059		.016	.017		.025	.018
7	Steel, metals	.009	.049		.024	.020		.016	.021
8	Petroleum, chemicals	1.024	.100		.071	.043		.040	.046
9	Construction	4019	1.025		.048	.028		.061	.023
10	Transportation, communications	.057	.187		1.176	.195		.127	.118
11	Distribution	.041	.155		.126	1.128		.100	.164
12	Services, n.e.s.	.117	.334		.426	.408		1.302	.394
13	Households income	.235	.823		.878	1.040		.786	1.425
14	Totals	1.552	2.875	:	2.889	3.025		2.587	2.404

Source: Table 4.4 of Model II.

 $\begin{tabular}{ll} \textbf{TABLE 4.21. Direct and Indirect Requirements for Commodities Per Unit Commodity Output for Final Use} \\ \textbf{Illustrative 12 x 12 Model III, Nova Scotia, 1965} \\ \end{tabular}$

	Inputs	Agricultural products	Forestry products	Fish	Mining products	Food, textiles	Wood,	Steel,	Petroleum,	
No.		pioducis	products		products	textiles	paper	metals	chemicals	tion
1	Agricultural products	1,042	.041	.036	.035	.098	.032	.026	.009	.030
2	Forestry products	.016	1.008	.005	.018	.007	.153	.004	.002	.010
3	Fish	.035	.024	1.023	.019	.223	.018	.014	.005	.016
4	Mining products	.023	.017	.018	1.017	.014	.015	.043	.013	.034
5	Food, textiles	.167	.111	.110	.087	1.112	.083	.065	.022	.075
6	Wood, paper	.024	.023	.032	.033	.040	1.067	.021	.008	.064
7	Steel, metals	.027	.031	.046	.050	.029	.031	1.070	.011	.054
8	Petroleum, chemicals	.096	.069	.094	.053	.059	.064	.062	1.027	.108
9	-	.096	.087	.068	.033	.063				
10	Construction		į.				.068	.072	.032	1.058
11	Transportation, communication Distribution	.158	.166	.170	.154	.172	.202	.201	.067	.212
12		.452	.168	.395	.149	.141	.160	.145	.049	.177
12	Services, n.e.s.	.432	.419	.393	.409	.341	.397	.303	.135	.387
13	Household income	1.055	1.255	1.110	1.123	.896	1.025	.841	.287	.962
14	Education	.064	.060	.050	.052	.045	.051	.041	.016	.045
15	Hospital	.022	.030	.025	.024	.020	.022	.018	.007	.020
16	Provincial government	.086	.138	.115	.104	.086	.097	.074	.032	.082
17	Municipal government	.089	.058	.049	.058	.051	.059	.049	.018	.051
18	Total output	3.610	3.705	3.509	3.460	3.396	3.545	3.049	1.741	3.385
		Transpor- tation, communi-	Distri- bution	Services n.e.s.	House- holds	Educa- tion	Hospita			Municipal overnment
		cation				11104-15-11				
1	Agricultural products	.034	.038	.033	.050	.039	.0	40	.036	.038
2	Forestry products	.004	.004	.006	.005	.007	.0	06	.007	≈ 007
3	Fish	.018	.021	.018	.027	.021	.0	23	.020	.021
4	Mining products	.017	.016	.031	.018	.019	.0	23	.021	-027
5	Food, textiles	.084	.095	.083	.124	.098	.1	06	.091	.096
6	Wood, paper	.024	.023	.034	.024	.044	.0	34	.042	.039
7	Steel, metals	.030	.026	.024	.027	.034	.0	34	.035	.035
8	Petroleum, chemicals	.083	.054	.056	.057	.067	.0	64	.068	.070
9	Construction	.099	.073	.124	.068	.219	.2	30	.309	.252
10	Transportation, communication	1.214	.229	.176	.152	.194	.1	73	.213	.221
11	Distribution	.158	1.156	.140	.192	.183	.1	96	.176	.179
12	Services, n.e.s.	.503	.477	1.401	462	.427	.4	08	.423	.450
13	Household income	1.084	1.223	1.052	1.606	1.266	1.1	37	1.130	1.215
14	Education	.063	.058	.095	.056	1.049	0.	46	.266	.542
15	Hospital	.029	.026	.030	.028	.023	1.0	21	.187	.066
16	Provincial government	.136	.110	.120	.115	.098	.0	89	1.091	.102
17	Municipal government	.066	.065	.137	.056	.052	.0	50	.089	1.054
							1		- 1	

Source: Table 4.4 of Model III.

TABLE 4.22. Direct and Indirect Primary Input Requirements Per Unit Commodity Output delivered for Final Use Illustrative 12 x 12 Model II, Nova Scotia, 1965

No.	Primary inputs	Agricultural products	Forestry products	Fish	Mining products	Foo- textil		Wood, paper	Steel, metals
1	Depreciation	.048	.243	.207	.196		.162	.181	.150
2	Education and hospital	.006	.007	.007	.007		.005	.006	.005
3	Provincial revenue	.071	.122	.101	.090		.074	.083	.063
4	Municipal revenue	.078	.044	.037	.047		.041	.048	.041
5	Federal revenue	.073	.131	.114	.136		.107	.130	.095
6	Import leakage	.216	.199	.213	.239		.272	.281	.328
7	Total primary	.668	.748	.679	.714		.662	.731	.682
8	Taxes	.186	.208	.177	.174		.144	.162	.131
9	Subsidies	048	015	013	009	-	.012	011	-,015
10	Non-competitive imports	.166	.152	.165	.149		.216	.183	.253
11	Wages	.380	.526	.481	.764		.485	.590	.588
12	Factor incomes	.936	1.120	1.004	1.077		.842	1.005	.815
13	Gross Domestic Product	1,298	1.557	1.374	1.437	1	.135 1.337		1.081
14	Employment	.272	.217	.279	.193		.192	.180	.147
		Petroleum, chemicals	Construc- tion	Transportat communica		stri- tion	Serv n.e		House- holds
1	Depreciation	.082	.159		.287	.221		.221	.183
2	Education and hospital	.002	.006		.006	.007		.006	.010
3	Provincial revenue	.028	.071		.119	.095		.098	.101
4	Municipal revenue	.014	.042		.052	.053		.122	.044
5	Federal revenue	.058	.114		.094	.158		.111	.169
6	Import leakage	.742	.265		.224	.247		.256	.229
7	Total primary	.927	.656		.782	.782		.812	.735
8	Taxes	.048	.150		.203	.184		.250	.205
9	Subsidies	003	011	-	.042	012		018	010
10	Non-competitive imports	.644	.202		.155	.156		.174	.174
11	Wages	.172	.629		.682	.684		.447	.264
12	Factor incomes	.371	.908		.982	1,183		.904	.484
13	Gross Domestic Product	.497	1.206	1	1.429	1.577		1.356	.862
14	Employment	.045	.179		.191	.248		.165	.097

Source: Table 4.9 of Model II.

TABLE 4.23. Direct and Indirect Primary Input Requirements Per Unit Commodity Output delivered for Final Use Illustrative 12 x 12 Model III, Nova Scotia, 1965

No.	Primary inputs	Agricultural products	Forestry products	Primary fishing	Mining products	Foo text produ	ile	Wood paper products	Steel, metal products	Non-metals, petroleum, chemicals	Construc- tion
1	Depreciation	.252	.274	.232	.22	2	.184	.206	.170	.090	180
2	Federal revenue	.096	.156	.135	.15	7	.125	.150	.111	.065	.131
3	Import leakage	.270	.261	.265	.29	0	.315	.330	.366	.757	.307
4	Total primary	.618	.691	.632	.66	i8	.624	.686	.647	.913	.618
5	Taxes	.217	.242	.205	.20)2	.167	189	.152	.056	.173
6	Subsidies	050	017	015	01	1 -	.014	013	016	004	012
7	Non-competitive imports	.201	.191	.198	.18	32	.243	.214	.277	.654	.229
8	Wages	.515	.672	.604	.88	36	.588	.707	.681	.209	.731
9	Factor incomes	1.130	1.335	1.183	1.2	55	.992	1.176	.951	.425	1.056
10	Gross Domestic Product	1.549	1.834	1.605	1.60	57 1	1.329	1.559	1.256	.568	1.397
11	Employment	.310	.259	.314	.2:	28	.221	.214	.174	.055	.208
		Transpor- tation, communica- tion	Distri- bution	All oth		louse- hold	Edu	cation	Hospital	Provincial govern- ment	Municipal government
1	Depreciation	.31	.24	49	.262	.210		.189	.176	.182	.192
2	Federal revenue	.119	.1	80	.144	.191		154	.141	:145	.150
3	Import leakage	.28	7 .3	03	.334	.284		.336	.362	.359	.340
4	Total primary	.72	.7	32	.740	.685		.679	.678	.686	.681
5	Taxes	.23	7 .2	15	.294	.236		.200	.184	.187	.199
6	Subsidies	04	50	14 -	.021	012		012	011	013	013
7	Non-competitive imports	.19	5 .1	91	.225	.209		.227	.270	.216	.227
8	Wages	.83	2 .8	17	.642	.397		1.031	.930	.800	.916
9	Factor incomes	1.20	1 1.3	77 1	.185	.677		1.379	1.235	1.200	1.279
10	Gross Domestic Product	1.71	2 1.8	27 1	.720	1.111		1.755	1.582	1.556	1.657
11	Employment	.22	4 .2	86	.219	.135		.262	.328	.231	.246

Source: Table 4.9 of Model III.

 $\begin{array}{c} \textbf{TABLE 4.24. Direct and Indirect Generation of Household Income and Employment by Final Expenditure Categories} \\ \textbf{Illustrative 12 x 12 Model II, Nova Scotia, 1965} \end{array}$

Final demand categories	Household inc	come	Employп	ent
That domaid drogores	\$ millions	%	000	%
Federal government:				
Personal transfers 1 Goods and services:	47.1	4.5	10.8	4.7
Defence Civilian	147.8 124.8	14.1 11.9	28.0 25.6	12.3 11.2
Sub-totals	319.7	30.5	64.4	28.2
Exports:				
Foreign . Canada . Atlantic Provinces Tourists and other rest of world income ¹	112.9 151.5 41.5 22.1	10.8 14.4 4.0 2.1	25.7 33.6 9.7 5.0	11.3 14.7 4.3 2.2
Sub-total of exports	328.0	31.3	74.0	32.5
Provincial public sectors:			ľ	
Education Hospitalization Municipal:	102.1 61.4	9.7 5.8	21.1 18.5	9.3 8.1
Goods and services Transfers ¹ Provincial:	29.6 2.0	2.8 0.2	6.2 0.5	2.7 0.2
Goods and services Transfers ¹	81.7 7.1	7.8 0.7	16.5 1.6	7.2 0.7
Sub-total of provincial public sectors	283.9	27.0	64.4	28.2
Capital formation and inventory change	117.6	11.2	25.4	11.1
Total	1,049.2	100.0	228.2	100.0

 $^{^{\}rm 1}$ The sum of these items equals Exogenous Personal Expenditure. Source: Tables 4.10 (iii) and 4.11 for Model II.

TABLE 4.25. Direct and Indirect Generation of Household Income and Employment by Final Expenditure Categories

Illustrative 12 x 12 Model III, Nova Scotia, 1965

Final demand categories	Household	lincome	Employment			
	\$ millions	%	000's	%		
Federal government:						
Transfers to government 1	116.5	10.9	25.9	11.3		
Transfers to persons 1	66.1	6.2	14.6	6.4		
Goods and services:						
Defence	169.3	15.9	32.3	14.1		
Civilian	143.5	13,4	29.4	12.9		
Sub-totals	495.4	46.4	102.2	44.7		
Capital formation	128.4	12.0	27.5	12.1		
Exports:						
Foreign	136.2	12.8	31.0	13.6		
Canada	184.0	17.3	40.7	17.9		
Atlantic Provinces	48.4	4.5	10.9	4.8		
Other (tourists, etc.)1	31.1	2.9	6.8	3.0		
Sub-total of exports	399.7	37.5	89.4	39.3		
Public sector borrowing	43.9	4.1	9.1	3.9		
Totals	1,067.4	100.0	228.2	100.0		

¹ The sum of these items equals Exogenous Personal Expenditure. Source: Tables 4.10 C and 4.11 of Model III.

TABLE 4.26. Direct and Indirect Import Generation by Final Demand Expenditures Categories Illustrative 12×12 Model II, Nova Scotia, 1965

Final demand categories	Competitive imports	Non- competitive imports	Total import content	Percentage distribution of import content
		millions of dollars		%
Federal government: Personal transfers¹ Goods and services:	29.4	19.3	48.7	4.1
Defence	48.0 32.6	22.8 19.3	70.8 51.9	10.3 7.6
Sub-totals	110.0	61.4	171.4	25.0
Exports: Foreign Canada Atlantic Provinces Other (tourism, etc.) ¹	41.2 56.8 15.8 13.8	27.8 39.9 21.8 9.1	69.0 96.7 37.6 22.9	10.1 14.1 5.5 3.3
Sub-totals	127.6	98.6	226.2	33.0
Provincial public sectors: Education Hospitals Municipal:	25.6 17.4	18.1 15.0	43.7 32.4	6.4 4.7
Goods and services Transfers! Provincial:	8.5 1.3	6.1 0.8	14.6 2.1	2.1 0.3
Goods and services Transfers ¹	25.6 4.4	16.1 2.9	41.7 7.3	6.1 1.1
Sub-totals	82.8	59.0	141.8	20.7
Capital formation	115.5	30.9	146.4	21.3
Totals	435.9	249.9	685.8	100.0

¹ The sum of these items equals Exogenous Personal Expenditure.

 $\begin{tabular}{ll} \textbf{TABLE 4.27. Domestic and Import Content of Final Expenditures} \\ \textbf{Illustrative } 12 \times 12 \ Model \ II, Nova \ Scotia, 1965 \end{tabular}$

	Total	Towns at	Domestic	Total supply			Ratios		
Final demand categories	expenditure on goods and services	Import content	content	require- ments (2) + (3)	(2) ÷(1)	(3) ÷ (1)	(4) ÷ (1)	(2) ÷ (4)	(3) ÷ (4)
	1	2	3	4	5	6	7	8	9
5		millions o	f dollars						
Federal government: Personal transfers Goods and services: Defence	93.0 134.4	48.7	87.4	136.1	.52	.94	1.46	.36	.64
Defence	106.1	70.8 51.9	198.6 168.4	269.4 220.3	.53 .49	1.48 1.59	2.00 2.08	.26 .24	.74 .76
Sub-totals	333.5	171.4	454.5	625.8	.51	1.36	1.88	.27	.73
Exports: Foreign Canada Atlantic Provinces Other (tourism, etc.) ¹ Sub-total of exports	137.6 176.0 65.1 43.7	69.0 96.7 37.6 22.9 226.2	171.7 217.0 65.3 41.0 495.6	241.3 313.7 102.9 63.9 721.8	.51 .55 .58 .52	1.25 1.23 1.00 .94 1.17	1.75 1.78 1.58 1.46 1.71	.29 .31 .37 .36	.71 .69 .63 .64
Provincial public sectors: Education Hospitals Municipal: Goods and services _Transfers1	92.1 61.9 31.1 4.0	43.7 32.4 14.6 2.1	141.8 85.6 43.6 3.8	185.5 118.0 58.2 5.9	.47 .52 ,47	1.54 1.38 1.40 .95	2.01 1.91 1.87 1.48	.24 .27 .25 .36	.76 .73 .75
Provincial: Goods and services Transfers ¹	94.4 14.1	41.7 7.3	127.3 13.2	169.0 20.5	.44 .52	1.35 .94	1.79 1.45	.25 .36	.75 .64
Sub-totals	297.6	141.8	415.3	557.1	.48	1.40	1.87	.25	.75
Capital formation	212.4	146.4	173.4	319.8	.69	.82	1.51	.46	.54
Totals	1,265.9	685.8	1,538.7	2,224.5	.54	1.22	1.76	.31	.69

¹ The sum of these items equals Personal Exogenous Expenditure.

TABLE 4.28. Direct and Indirect Import Generation by Final Expenditure Categories Illustrative 12×12 Model III, Nova Scotia, 1965

Final demand categories	Competitive imports	Non- competitive imports	Total import content	Percentage distribution of import content
		millions of dollars		%
Federal government:		1		
Transfers to governments	32.0	23.2	55.2	8.1
Transfers to persons	34.4	22.8	57.2	8,3
Goods and services:				
Defence	53.7	26.9	80.6	11.8
Civilian	37.3	22.6	59.9	8.7
Sub-totals	157.4	95.5	252.9	36.9
Capital formation	121,0	34,8	155,8	22.5
Exports:				
Foreign	47.0	31.9	78.9	11.5
Canada	64.8	45.5	110,3	16.1
Atlantic Provinces	18.0	23.3	41.3	6.0
Other (tourism, etc.)	16.1	10.7	26.8	3.9
Sub-total of exports	145.9	111.4	257.3	37.5
Public sector borrowing	11.6	8.2	19.8	2.5
Totals	435.9	249.9	685.8	100.0

TABLE 4.29. Domestic and Import Content of Final Expenditures Illustrative 12 x 12 Model III, Nova Scotia, 1965

Final demand categories	Total expenditure on goods	Import content	Domestic content	Total supply require-			Ratios		
	and services	0011101111		ments (2) + (3)	(2) ÷ (1)	(3) ÷ (1)	(4) ÷ (1)	(2) ÷ (4)	(3) ÷ (4)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		millions o	f dollars						
Federal government:						4			
Transfers to government	101.3	55.2	159,6	214.8	.54	1.58	2.12	.26	.74
Transfers to persons	93.1	57.2	112.2	169.4	.51	1.21	1.82	.34	.66
Goods and services:									
Defence	134.4	80.6	226.8	307.4	.60	1.69	2.29	.26	.74
Civilian	106.1	59.9	192.3	252,2	.56	1.81	2.38	.24	.76
Sub-totals	434.9	252.9	690.9	943.8	.58	1.59	2.17	.27	.73
Capital formation	212.4	155.8	201.0	356.8	.73	.95	1.68	.44	.56
Exports:									
Foreign	137.6	78.9	200.5	279.4	.57	1.46	2.03	.28	.72
Canada	176.0	110.3	257.0	367.3	.63	1.46	2.09	.30	.70
Atlantic Provinces	65.1	41.3	76.2	117.5	.63	1.17	1.80	.35	.65
Other (tourism, etc.)	43.6	26.8	53.1	79.9	.61	1.22	1.83	.34	.66
Sub-total of exports	422.3	257.3	586.8	844.1	.61	1.39	1.99	.30	.69
Public sector borrowing	36.6	19.8	60.0	79.8	.54	1.63	2.18	.25	.75
Totals	1,106.2	685.2	1,538.7	2,224.5	.62	1.39	2.01	.31	.69

TABLE 4.30. Household Income and Employment Generated Per Million Dollars of Final Sales Illustrated 12×12 Model II, Nova Scotia, 1965

		Househol	d income			Emplo	yment		Average income per
	Rank	Direct	Indirect	Total	Rank	Direct	Indirect	Total	employee (4) ÷ (8)
	1	2	3	4	5	6	7	8	9
			\$,000			numb	er of empl	oyees	\$
Federal:									
Civilian	1	644	1,177	1,821	5	123	119	242	7,525
Defence	2	653	1,099	1,752	7	108	100	208	8,423
Education	3	618	1,108	1,726	6	119	109	228	7,570
Hospitalization	4	499	990	1,489	1	187	111	298	4,997
Household industry	5	++	1,425	1,425	-	1.00	97	97	+3+1
Municipal government	6	371	953	1,324	9	73	128	201	6,587
Provincial government	7	289	866	1,155	15	47	127	174	6,638
Forestry	8	712	377	1,089	8	122	85	207	5,260
Distribution	9	613	427	1,040	4	152	96	248	4,193
Mining	10	570	385	955	10	107	86	193	4,948
Primary fishing	11	548	393	941	2	191	88	279	3,372
Transportation, etc.	12	448	430	878	12	96	95	191	4,597
Agriculture	13	433	439	872	3	172	100	272	3,205
Wood and paper manufacturing	14	359	503	862	13	71	109	180	4,789
Construction	15	380	443	823	14	82	97	179	4,598
Services, n.e.s.	16	442	343	785	16	87	76	163	4,815
Food and textiles	17	254	500	754	11	61	131	192	3,927
Steel and metal manufacturing	18	340	374	714	17	65	82	147	4,857
Petroleum, chemicals	19	99	133	232	18	15	29	44	5,272

Source: Tables 4.2, 4.8A and 4.10C of Model II.

TABLE 4.31. Induced Employment and Total Income Generated Per Employment of One Thousand Persons Illustrative 12 x 12 Model II, Nova Scotia, 1965

Industry		Employment		Total	Income per	
, in the second	Direct	Induced	Total	income	employee	
	nu	mber of employees		\$'000	\$	
Agriculture	1,000	575	1,575	5,049.2	3,205	
Forestry	1,000	701	1,701	8,948.7	5,260	
Primary fishing	1,000	463	1,463	4,934.4	3,372	
Mining	1,000	797	1,797	8,891.9	4,948	
Food and textiles	1,000	2,158	3,158	12,401.3	3,927	
Wood, paper manufacturing	1,000	1,534	2,534	12,135.0	4,789	
Steel and metal manufacturing	1,000	1,274	2,274	11,045.1	4,857	
Petroleum, chemicals	1,000	1,978	2,978	15,702.2	5,272	
Construction	1,000	1,191	2,191	10,073.7	4,598	
Transportation, etc.	1,000	985	1,985	9,126.8	4,597	
Distribution	1,000	625	1,625	6,814.5	4,193	
Services, n.e.s.	1,000	872	1,872	9,015.5	4,815	
Household industry	===	- 1	-	-	. 	

TABLE 4.32. Household Income and Employment Generated Per Million Dollars of Final Sales Illustrative 12 x 12 Model III, Nova Scotia, 1965

		Househol	d income			Emplo	oyment		Average income per
Industry or domestic production activity	Rank	Direct	Indirect	Total	Rank	Direct	Indirect	Total	employee (4) ÷(8)
	1	2	3	4	5	6	7	8	9
			\$'000			numb	er of empl	oyees	\$
Federal government:								ľ	
Civilian	1	644	1,341	1,985	5	123	153	276	7,192
Defence	2	653	1,252	1,905	9	108	132	240	7,937
Household industry	3	196	1,606	1,606	-	21	135	135	. =
Education	4	617	649	1,266	6	119	143	262	4,832
Forestry	5	712	543	1,255	7	122	128	250	5,020
Distribution	6	613	610	1,223	4	152	134	286	4,276
Municipal government	7	204	1,011	1,215	8	30	216	246	4,939
Hospitalization	8	498	639	1,137	1	187	142	329	3,456
Provincial government	9	226	904	1,130	11	24	207	231	4,892
Mining	10	570	553	1,123	12	107	121	228	4,054
Primary fishing	11	548	562	1,110	2	191	123	314	3,535
Transportation, etc.	12	448	636	1,084	10	96	137	233	4,652
Agriculture	13	432	623	1,055	3	172	138	310	3,403
Services, n.e.s.	14	442	610	1,052	17	87	131	218	4,826
Wood and paper manufacturing	15	359	666	1,025	14	71	142	213	4,813
Construction	16	380	622	962	15	82	126	208	4,625
Food and textiles	17	254	642	896	13	61	160	221	4,054
Steel and metal manufacturing	18	340	501	841	16	65	109	174	4,833
Petroleum, chemicals	19	99	188	287	18	15	40	55	5,218

TABLE 4.33. Induced Employment and Total Income Generated Per Employment of One Thousand Persons Illustrative 12×12 Model III, Nova Scotia, 1965

Industry or production activity		Employment		Total	Income
and the processor country	Direct	Induced	Total	income	per employee
	nui	nber of employees	\$'000	\$	
Agriculture	1,000	794	1,794	6,105.4	3,403
Forestry	1,000	1,050	2,050	10,291.0	5,020
Primary fishing	1,000	646	1,646	5,818.7	3,535
Mining	1,000	1,119	2,119	10,437.0	4,925
Food and textiles	1,000	2,639	3,639	14,753.5	4,054
Wood, paper manufacturing	1,000	2,003	3,003	14,454.2	4,813
Steel, metal manufacturing	1,000	1,680	2,680	12,953.3	4,833
Petroleum, chemicals	1,000	2,690	3,690	19,255.1	5,218
Construction	1,000	1,543	2,543	11,761.3	4,625
Transportation, etc.	1,000	1,426	2,426	11,286.6	4,652
Distribution	1,000	872	1,872	8,005.1	4,276
Services, n.e.s.	1,000	1,498	2,498	12,054.5	4,826
Household industry	1,000	· -	_		
Education	1,000	1,193	2,193	10,596.6	4,832
Hospitalization	1,000	753	1,753	6,058.2	3,456
Provincial government	1,000	8,413	9,413	46,046.3	4,892
Municipal government	1,000	7,235	8,235	40,672.8	4,939

TABLE 4.34. Output, Input and Employment Multipliers, Models I, II and III Illustrative 12 x 12 Model, Nova Scotia, 1965

	Industries	Out	put multiplie	rs	Inp	out multiplier	s	Employment multipliers			
No.	Haustres	I	II	III	I	II	III	I	II	III	
1	Agriculture	1.47	2.94	3.61	1.36	2.49	3.21	1.23	1.58	1.79	
2	Forestry	1.13	2.97	3.72	1.33	2.43	3.19	1.09	1.70	2.05	
3	Primary fishing	1.30	2.89	3.51	1.33	2.44	3.13	1.13	1.46	1.65	
4	Mining	1.23	2.85	3.46	1.33	2.47	3.19	1.19	1.80	2.12	
5	Food and clothing	1.60	2.88	3.40	1.37	2.69	3.27	2.31	3.16	3.64	
6	Secondary wood products	1.50	2.95	3.54	1.29	2.62	3.33	1.71	2.53	3.00	
7	Steel and metal manufacturing	1.38	2.58	3.05	1.34	2.54	3.22	1.52	2.27	2.68	
8	Non-metallic minerals	1.15	1.55	1.73	1.31	2.53	3.23	1.91	2.98	3.69	
9	Construction	1.49	2.87	3.39	1.32	2.50	3.16	1.51	2.19	2.54	
10	Transportation	1.41	2.89	3.65	1.31	2.48	3.20	1.36	1.98	2.43	
11	Distribution	1.27	3.03	3.69	1.33	2.48	3.22	1.16	1.62	1.87	
12	Services	1.26	2.58	3.56	1.36	2.50	3.38	1.26	1.87	2.49	
13	Households	90	2.40	3.07	-	2.72	3.56	-	=	<u></u>	
14	Education	4	-	3.84	-		3.18	_	=	2.19	
15	Hospitalization		#	3.68	- 1	- 1	3.22	_	-	1.75	
16	Municipal government	-	-	4.41	-	-	3.58	-	-	8.26	
17	Provincial government	-1	-	4.20	-	-0	3.52	-	-	9.41	

Table 4.35. Import Content of a Dollar of Finally Delivered Product (on Import Leakage Basis) Models I, II and III Illustrative 12 x 12 Model, Nova Scotia, 1965

		Tot	al imported input co	ntent	Total in	nport content of type of domestic final us	ical dollar e
No.		I	II	Ш	I	II	III
1	Agricultural products	.246	.548	.652	.506	.704	.772
2	Forestry products	.088	.452	.570	.094	.456	.573
3	Primary fishing	.208	.534	.633	.307	.592	.678
4	Mining products	.193	.524	.621	.328	.603	.684
5	Food, textile products	.348	.610	.692	.713	.828	.864
6	Wood and paper products	.251	.551	.644	.638	.782	.828
7	Steel and metal products	.399	.646	.720	.842	.907	.926
8	Non-metals, mineral and petroleum products	.734	.815	.845	.805	.864	.886
9	Construction activity	.324	.609	.690	.324	.609	.690
10	Transport and communication	.138	.442	.562	.152	.452	.569
11	Distribution services	.105	.465	.571	.105	.465	.571
12	All other services	.171	.443	.594	.171	.444	.594

million. These are personal transfer payments from municipal and provincial governments which become endogenous household receipts in Model II. Table 4.25 also shows the origin of employment. As in Model II, there is little difference in the impact of exogenous spending on income and on employment creation within the provincial economy. In Model III, close to one half of the total employment of 228,200 is sustained by federal government expenditure.

Table 4.26 shows the import content of the various types of exogenous expenditures in Model II. This table is thus similar to Table 4.14 and the figures are derived in a similar manner. An indication of the feedback of federal expenditures to other Canadian provinces is given by the fact that federal spending which generates \$319.7 million in Nova Scotia also generates a further \$171.4 million of imports into Nova Scotia. While a certain (unknown) part of these imports originates from foreign countries, the production of (provincially imported) Canadian goods and services generates additional household incomes elsewhere in Canada by virtue of the consumption multiplier.

Expenditures by the rest of the world in Nova Scotia generate \$328.0 million of household income, as we saw for Table 4.24. They generate also \$226.2 million in goods and services imported into Nova Scotia. Similarly provincial public sectors generate \$141.8 million in provincial imports, in addition to \$283.9 million of household income. In the case of industrial capital formation, incomes generated (\$117.6 million) fall short of imports generated (\$146.4 million). In summary, Table 4.26 shows that federal expenditures generate 25.0%, exports 33.0%; provincial public sectors 20.7% and capital expenditures of industries 21.3% of all provincial imports on Model II basis.

In Table 4.27 the import content of exogenous expenditures as shown in Table 4.26 is compared with the domestic content. The latter is the contribution of exogenous expenditure to Gross Domestic Product. It should be noted that total GDP in Model II exceeds GDP of Model I by \$77.7 million, because personal savings are treated in a manner similar to capital consumption allowances when households are endogenous to the system. Column 1 records expenditures on goods and services of Model II (see Table 4.19). Column 4, which is formed by adding import and domestic content shows, total requirements necessary to sustain exogenous final

expenditures. These, it will be recalled, include requirements set up by virtue of the fact that in Model II exogenous expenditure generates endogenous consumption expenditures. The ratios shown in columns 5 to 9 are of considerable interest. Column 5 shows the import content of exogenous expenditures. As noted above, it is highest for industrial capital formation (69%). Import content of provincial public sectors (average 48%) is fractionally lower than that of federal government expenditures (51%) while the total import content of exports is 54%. The reason here is that the production of exports requires a somewhat higher input of imported goods than does production of public sector services or federal government services. The ratios of domestic content shown in Column 6 are inversely related to those of Column 5. Thus provincial public sectors have the highest domestic content (140%) and industrial capital formation the lowest (82%). Column 7 shows the sum of import and domestic content. This is higher for provincial public sectors and federal spending (187% and 188%) than for exports (171%) or capital formation (151%). Columns 8 and 9 again record import and domestic content respectively, that time as a proportion of total requirements. The pattern, of course, remains unchanged. Table 4.28 and 4.29 show similar results for Model III.

Table 4.30 which shows direct and indirect household income and employment generated by final delivery of one unit of each of the 12 products and by final expenditure categories, is similar to Table 4.17 of Model I, and is derived in a similar manner. The activities are ranked in order of total income generated, which ranges from a high of \$1,821,000 per typical million dollars of federal government spending on defence to a low of \$232,000 per million dollars of final deliveries of non-metallic mineral and petrochemical products. The ranking of the 12 products is not changed – forest products still generating the greatest and petrochemical products the least total income per dollar of final delivery. In Model II, however, all public sector services generate a greater total income than any of the products in the system. This is undoubtedly due to their relatively higher direct labour input. Comparison of Tables 4.17 and 4.30 also shows an increase in the relative spread between the greater and lesser income generating activities. In Model I, for example, food and clothing generated \$529,000 and federal civilian spending \$826,000 of household income per million dollars of expenditure. In Model II, the corresponding figures were \$754,000 and \$1,821,000.

The ranking of activities in terms of employment in Table 4.30 is the same as that for Model I (Table 4.17) for the six activities ranking highest in both Model I and Model II; i.e., (1) hospitalization; (2) primary fishing; (3) agriculture; (4) distribution; (5) federal civilian government; and (6) education. It is also the same for the six activities ranking lowest in terms of employment i.e. (13) secondary wood products; (14) construction; (15) provincial government; (16) services; (17) steel and metal manufacturing; and (18) non-metallic mineral products. In the intermediate range, however, there are changes in ranking: thus food and clothing products which ranked 7th in Model I fall in Model II, while mining for example, which ranked 12th comes up to 10th place.

The ranking of average income created per job created is considerably different in Models I and II. Whereas in Model I agriculture showed the lowest average income (\$2,873) followed by hospitals (\$3,752); in Model II agriculture is still at the bottom (\$3,205) but hospitalization (\$4,997) ranks well above primary forestry (\$3,372) and food and clothing (\$3,927). Table 4.31 is similar to Table 4.18 and presents a rearrangement of the data in Table 4.30 to show total employment and income arising from an initial employment of 1,000 persons in each of the 12 industries. Tables 4.32 and 4.33 show the same information for Model III. The ranking activities concerning household income created is again somewhat different from Model II.

Finally, Table 4.34 compares the multipliers of Models I, II and III. The output multipliers, it will be recalled, indicate gross industry output generated per unit industry output delivered. When household income is endogenous to the system, as in Model II, industries with a high household income input, such as distribution and services show a relatively larger increase in the output multiplier than those with a lower direct input of household income. Thus distribution (1.27), and forestry (1.13), have a lower output multiplier in Model I than do industries such as food and clothing (1.60), or construction (1.49). In Model II, however, distribution (3.03) and forestry (2.97) have a higher output multiplier than food and clothing (2.88) and construction (2.87). When local public sectors are also made endogenous this tendency is accentuated. Thus forestry which has the lowest Model I output multiplier (1.13), has the highest Model III output multiplier (3.72) while distribution with a Model I multiplier of 1.27 has the second highest Model III multiplier (3.69).

As far as input multipliers are concerned we note that the remarkable invariance of these multipliers in Model I continues to be manifested in Models II and III. (This matter is further investigated in Vol. II of this study.)

Another matter of some interest is the apparent lack of correlation between output and employment multipliers in Model III. The lowest output multiplier in Model III occurs in non-metallic mineral and petrochemicals (1.73), which shows the highest employment multiplier in Model III (3.69), although not in Model II. The industry with the lowest output multiplier in Model I (forestry 1.13) shows the highest output multiplier in Model III (3.72) and an employment multiplier in Model III which is neither very high or very low (2.05). The industry with the highest output multiplier in Model I (food and clothing) (1.60), and the highest employment multiplier in Model I (2.31), in Model III drops to an output multiplier of average value (3.40), but retains a relatively very high value employment multiplier (3.64).

IV. An Inter-regional Model Open to External Trade

The basic model of Section III can readily be generalized to deal with several economies linked through trade. Each of these economies transacts with all the others and also with the "rest of the world". Our inter-regional model is implicit in the format of the base year accounts of 1960 and 1965 which enter the exports of one province to another as the imports of the receiving province. Data was collected to record exports of each of the four Atlantic Provinces to every other Atlantic Province as well as exports to the rest of the world. In this context the rest of the world consists of foreign countries and Canadian destinations other than the Atlantic region. In the inter-regional system imports from the rest of the world similarly mean imports from sources other than the Atlantic Provinces.

The assumptions of the model remain the same as those set out in Section III. Thus, each province has its own particular set of commodity-industry outputs (J_i) and inputs (B_i) from which we derive, for each province, a market share matrix J_i and an input coefficient B_i . Import functions assert that competitive imports are proportional to domestic use. The import coefficients μ of the basic model of Section III are thus disaggregated by source such that $\mu_1 + \mu_2 + \mu_3 + \ldots + \mu_r = \mu$ where $1, 2, 3, \ldots$ r etc. are geographic sources of competitive imports. Here sources $1, 2, 3, \ldots$ are regions within the model,

while r is the "rest of the world" which is external to the inter-regional model. For simplicity of exposition we present initially an inter-regional model consisting of two regions and the rest of the world. The reader will be able to observe that it conforms to the mathematical form of the basic model of Section II. A generalization of the two-region model to n regions, and some illustrative examples drawn from Model II and Model III versions of our inter-regional model conclude this section.

Two-region Inter-regional Model

The notation used here conforms to that of Section III. Subscripts a and b refer to regions A and B. Two subscripts, as in m_{ab} and e_{ab} indicate the movement of commodities from source A to destination B. Thus m_{ab} are B's imports from A, i.e. commodities originating from A and moving to B. Evidently $m_{ab} = e_{ab}$. Exports e_{ar} (from A) and e_{br} (from B) moving to the rest of the world are exogenous variables, as of course are final domestic demand d_a and d_b . The system consists of 10 relationships which determine 10 variables. These are q_a , q_b , g_a , g_b , m_{ba} , m_{ab} , m_{ra} , m_{rb} , e_{ab} , e_{ba} .

The ten equation system follows:

(1)
$$q_a = B_a g_a + d_a + e_{ab} + e_{ar} - m_{ba} - m_{ra}$$

(2)
$$q_b = B_b^* g_b + d_b + e_{ba} + e_{br} - m_{ab} - m_{rb}$$

Domestic supply $(q_a - e_{ab} - e_{ar})$, plus imports from all sources, m_{ba} m_{ra} equals intermediate

use in region A: $\overset{*}{B}_a$ g_a , plus domestic final use, d_a . The same relationship holds true for region B.

(3)
$$e_{ab} = m_{ab}$$

$$(4) e_{ba} = m_{ba}$$

The exports of A to B are the imports of B from A and vice versa.

(5)
$$m_{ba} = \hat{\mu}_{ba} (\mathring{B}_{a} g_{a} + d_{a})$$

(6)
$$m_{ra} = \hat{\mu}_{ra} (B_a g_a + d_a)$$

(7)
$$m_{ab} = \hat{\mu}_{ab} (\mathring{B}_b g_b + d_b)$$

(8)
$$m_{rb} = \hat{\mu}_{rb} (\mathring{B}_b g_b + d_b)$$

Imports of any commodity to region A are proportional to domestic use in region A; $(B_a g_a + d_a)$. Note that domestic use is identically equal to $(q_a + m_{ba} + m_{ra} - e_{ab} - e_{ar})$. The import function of the inter-regional model is thus similar to that of the basic model.

(9)
$$g_a = J_a q_a$$

(10)
$$g_b = J_b^* q_b$$

The market share assumption states that requirements from the domestic economy are supplied by the industries in the same proportion as in the base year.

Solving for Commodity Outputs

From (1), (3), (5), (6), (9) and (10) we obtain:

$$\begin{aligned} q_{a} &= \stackrel{*}{B}_{a} \; g_{a} + d_{a} + \hat{\mu}_{ab} \; (\stackrel{*}{B}_{b} \; g_{b} + d_{b}) + e_{ar} - \hat{\mu}_{ba} \; (\stackrel{*}{B}_{a} \; g_{a} + d_{a}) - \hat{\mu}_{ra} \; (\stackrel{*}{B}_{a} \; g_{a} + d_{a}) \\ q_{a} &= (\stackrel{*}{B}_{a} - \hat{\mu}_{ba} \; \stackrel{*}{B}_{a} - \hat{\mu}_{ra} \; \stackrel{*}{B}_{a}) \; g_{a} + (I - \hat{\mu}_{ba} - \hat{\mu}_{ra}) \; d_{a} + \hat{\mu}_{ab} \; \stackrel{*}{B}_{b} \; g_{b} + \hat{\mu}_{ab} \; d_{b} + e_{ar} \\ \end{aligned}$$
 therefore $(I - \stackrel{*}{B}_{a} \; \stackrel{*}{J}_{a} + \hat{\mu}_{ba} \; \stackrel{*}{B}_{a} \; \stackrel{*}{J}_{a} + \hat{\mu}_{ra} \; \stackrel{*}{B}_{a} \; \stackrel{*}{J}_{a}) \; q_{a} - \hat{\mu}_{ab} \; \stackrel{*}{B}_{b} \; \stackrel{*}{J}_{b} \; q_{b} \\ &= (I - \hat{\mu}_{ba} - \hat{\mu}_{ra}) \; d_{a} + \hat{\mu}_{ab} \; d_{b} + e_{ar} \end{aligned}$

From (2), (4), (7), (8), (9) and (10) we likewise obtain:

$$(I - \mathring{B}_{b} \mathring{J}_{b} + \hat{\mu}_{ba} \mathring{B}_{b} \mathring{J}_{b} + \hat{\mu}_{rb} \mathring{B}_{b} \mathring{J}_{b}) q_{b} - \hat{\mu}_{ba} \mathring{B}_{a} \mathring{J}_{a} q_{a}$$

$$= (I - \hat{\mu}_{ab} - \hat{\mu}_{rb}) d_{b} + \hat{\mu}_{ba} d_{a} + e_{br}$$

The system, in partitioned matrix notation is:

$$\begin{bmatrix} I - (I - \hat{\mu}_{ba} - \hat{\mu}_{ra}) \stackrel{*}{B}_{a} \stackrel{*}{J}_{a} & - \hat{\mu}_{ab} \stackrel{*}{B}_{b} \stackrel{*}{J}_{b} \\ - \hat{\mu}_{ba} \stackrel{*}{B}_{a} \stackrel{*}{J}_{a} & I - (I - \hat{\mu}_{ab} - \hat{\mu}_{rb}) \stackrel{*}{B}_{b} \stackrel{*}{J}_{b} \end{bmatrix} = \begin{bmatrix} q_{a} \\ q_{b} \end{bmatrix}$$

$$= \begin{bmatrix} I - (\hat{\mu}_{ba} + \hat{\mu}_{ra}) & \hat{\mu}_{ab} & \hat{\mu}_{ab} \\ \hat{\mu}_{ba} & I - (\hat{\mu}_{ab} + \hat{\mu}_{rb}) \end{bmatrix} \begin{bmatrix} d_{a} \\ d_{b} \end{bmatrix} + \begin{bmatrix} e_{ar} \\ e_{br} \end{bmatrix}$$

$$\begin{bmatrix} q_{a} \\ \vdots \\ q_{b} \end{bmatrix} = \begin{bmatrix} I - (I - \hat{\mu}_{ba} - \hat{\mu}_{ra}) \stackrel{*}{B}_{a} \stackrel{*}{J}_{a} & - \hat{\mu}_{ab} \stackrel{*}{B}_{b} \stackrel{*}{J}_{b} \\ \vdots \\ - \hat{\mu}_{ba} \stackrel{*}{B}_{a} \stackrel{*}{J}_{a} & I - (I - \hat{\mu}_{ab} - \hat{\mu}_{rb}) \stackrel{*}{B}_{b} \stackrel{*}{J}_{b} \end{bmatrix} - 1 \begin{bmatrix} I - \hat{\mu}_{ba} - \hat{\mu}_{ra} & \hat{\mu}_{ab} \\ \hat{\mu}_{ba} & I - \hat{\mu}_{ab} - \hat{\mu}_{rb} \end{bmatrix} \begin{bmatrix} d_{a} \\ d_{b} \end{bmatrix} + \begin{bmatrix} e_{ar} \\ e_{br} \end{bmatrix}$$

$$\begin{bmatrix} g_{a} \\ \vdots \\ g_{b} \end{bmatrix} = \begin{bmatrix} \mathring{J}_{a} & 0 \\ \vdots \\ 0 & \mathring{J}_{b} \end{bmatrix} - \hat{\mu}_{ba} \stackrel{*}{B}_{a} \stackrel{*}{J}_{a} & I - (I - \hat{\mu}_{ab} - \hat{\mu}_{rb}) \stackrel{*}{B}_{b} \stackrel{*}{J}_{b} \end{bmatrix} - 1 \begin{bmatrix} I - \hat{\mu}_{ba} - \hat{\mu}_{ra} & \hat{\mu}_{ab} \\ \hat{\mu}_{ba} & I - \hat{\mu}_{ab} - \hat{\mu}_{rb} \end{bmatrix} \begin{bmatrix} d_{a} \\ d_{b} \end{bmatrix} + \begin{bmatrix} e_{ar} \\ e_{br} \end{bmatrix}$$

$$\begin{bmatrix} m_{ra} & m_{ab} \\ \vdots \\ m_{ba} & m_{rb} \end{bmatrix} = \begin{bmatrix} \hat{\mu}_{ra} & \hat{\mu}_{ab} \\ \hat{\mu}_{ba} & \hat{\mu}_{rb} \end{bmatrix} \begin{bmatrix} B_{aga} & 0 \\ \vdots & \vdots \\ 0 & B_{bgb} \end{bmatrix} + \begin{bmatrix} d_{a} & 0 \\ \vdots & \vdots \\ 0 & d_{b} \end{bmatrix}$$

Generalized n-region Inter-regional Model

The two-region solutions for commodity and industry outputs and inputs can be generalized to encompass n regions. Suppose we re-express the two-region case as follows:

$$\begin{bmatrix} \mathbf{v}_{a} & \vdots & 0 \\ \vdots & \ddots & \vdots \\ 0 & \vdots & \mathbf{v}_{b} \end{bmatrix} = \mathbf{v}^{*}$$

$$\begin{bmatrix} q_a \\ \dots \\ q_b \end{bmatrix} = \begin{matrix} * \\ * \\ g_b \end{bmatrix} = \begin{matrix} g_a \\ \dots \\ g_b \end{bmatrix} = \begin{matrix} * \\ * \\ * \\ d_b \end{bmatrix} = \begin{matrix} * \\ * \\ * \\ d_b \end{bmatrix} = \begin{matrix} * \\ * \\ * \\ 0 \end{matrix} = \begin{matrix} d_a & 0 \\ \dots \\ 0 & d_b \end{matrix}$$

$$\begin{bmatrix} e_{\mathbf{ar}} \\ \vdots \\ e_{\mathbf{br}} \end{bmatrix} = e$$

The solution for q and g are given by:

$$q = [(I - (I - \mu)^*)^* B^*]^{-1}$$
 $[(I - \mu)^* d^* + e]$

Primary inputs are given by:

$$\overset{*}{V} \overset{*}{J} [I - (I - \overset{*}{\mu}) \overset{*}{B} \overset{*}{J}]^{-1} \qquad \qquad [(I - \overset{*}{\mu}) \overset{*}{d} + e]$$

Imports are given by:

$$\mathring{\mathbf{M}} = \overset{*}{\mu} \begin{bmatrix} \overset{*}{\mathbf{B}} & \overset{*}{\mathbf{g}} + \overset{*}{\mathbf{d}} \end{bmatrix}$$

It should be clear that this notation is independent of the number of regions. Thus, M, D and E could be matrices with as many columns as there are regions, in the inter-regional system.

Suppose in an inter-regional system, we wish to know the impact of one unit commodity required for domestic final use in the region of origin on all the commodities, industries and primary inputs in the inter-regional system. Let d be a vector with zero elements everywhere except in the ith row of region j where it is unity. Let us call this vector E_j . Then

$$q = [I - (I - \mu) BJ]^{-1} [(I - \mu) E_{ij}]$$

yields total domestic requirements from the regions in the system, and

$$g = J [I - (I - \mu) B J]^{-1} (I - \mu) E_{ij}$$

yields total industry output requirements to satisfy demand for one unit of commodity i in region j.

While the inter-regional model is similar to the one region model, it is convenient in the inter-regional model to consider the impact of one unit required for final domestic use from all sources, rather than, as in the one region model, the impact of one unit required from domestic sources only. The reason is obvious. The matrix $(I - \mu)$ directs domestic final requirements of one region towards three sources of supply: competitive imports from the rest of the world μ_{ri} : domestic production of that region; $(I - \mu_{ii})$ domestic production of other regions in the system, $(\mu_{aj}, \mu_{jb}, \ldots)$. In the two-region model for example, μ is "leaked" out of the inter-regional system and supplied by "the rest of the world". Demand directed towards region A is thus $I - (\mu_{ba} + \mu_{ra})$. While the total "import leakage" with respect to region A is $(\mu + \mu_{ra})$, A's imports from B are also B's exports to A. Thus the system directs μ_{ba} towards B's industries. If we consider the four-region

TABLE 4.36. Direct and Indirect Household Income and Employment Generated Per Million Dollars of Final Sales
Inter-regional Model II

			Inter-i	egional Mod	ei II					
		Но	usehold inco	me				Employment		
	Nova Scotia	New Brunswick	Prince Edward Island	New- foundland	Atlantic total	Nova Scotia	New Brunswick	Prince Edward Island	New- foundland	Atlantic total
N. O. d.		tho	usands of dol	lars		1877	nu	mber employ	ed	
Nova Scotia:				1						
Agricultural products	898	23	10	6	937	277	5	3	2	287
Forestry products	980	19	8	5	1,012	264	4	3	2	273
Primary fish	1,001	18	7	4	1,030	264	4	3	1	272
Mining products	960	15	6	3	984	195	3	2	1	201
Food, textile products	774	20	15	31	840	191	5	5	13	214
Wood, paper products	649	13	4	3	669	136	3	1	1	141
Steel, metal products	646	13	4	3	666	135	3	1	1	140
Non-metals, petroleum, chemicals	646	13	4	3	666	135	3	1	1	140
Construction	843	19	6	4	872	184	4	2	1	191
Transportation, communications	975	15	6	3	999	223	4	2	1	230
Distribution	975	15	6	3	999	223	3	2	1	229
All other services	793	12	5	3	813	166	3	2	1	172
Household industry	1,433	18	9	4	1,464	98	4	3	2	107
New Brunswick:					3					
Agricultural products	22	898	5		925	,	262			•
Forestry products	16	987	3	-	1,006	5 4	262	1	- 1	268
Primary fish	16	995	3				236	1	- 1	241
	9			-	1,014	4	236	1	-	241
20.000000000		500	2	32/1	511	2	93	-	- 1	95
Food, textile products	43	604	15		662	11	149	6	- 4	166
Wood, paper products	15	683	2	5 55	700	3	142	- '		145
Steel, metal products	15	683	2		700	3	142	-	- 1	145
Non-metals, petroleum, chemicals	15	683	2	7-1	700	3	142	-	- i	145
Construction	22	778	₂₀ 3	9	803	5	173	1	- 1	179
Transportation, communications	15	969	3	= =	987	4	233	1	- 1	238
Distribution	15	969	3	<u> </u>	987	4	233	1		238
All other services	13	737	2		752	4	164	1	_	169
Household industry	18	1,419	4	3 20	1,441	4	98	1	- 1	103
Prince Edward Island:										
Agricultural products	74	37	812	_ #	923	16	8	266	_	290
Forestry products	72	37	811	_	920	15	8	275		
Primary fish	54	31	802	_ [887				-	298
Mining products	42	28	1,290		- 4	11	7	375	-	393
27/27/20	49			-	1,360	9	7	144	- 1	160
		36	665	- 1	750	10	9	214	-	233
Wood, paper products	52	26	555	-	633	11	6	149	-	166
Steel, metal products	52	26	555	-	633	11	6	149	-	166
Non-metals, petroleum, chemicals	52	26	555	- 1	633	11	6	149	-	166
Construction	67	31	650	-	748	14	7	164	-	185
Transportation, communications	43	25	957	- 1	1,025	9	6	263	- 1	278
Distribution	43	25	957	- [1,025	9	6	263	-	278
All other services	33 41	19 29	662	-	714	7	4	190	- 1	201
nousonous moustry	41	29	1,395	-	1,465	9	7	115	-	131
Newfoundland:										
Agricultural products	34	18	11	858	921	8	4	4	268	284
Forestry products	25	12	7	1,007	1,051	6	3	2	420	431
Primary fish	25	12	7	1,012	1,056	6	3	2	424	435
Mining products	15	7	3	535	560	3	2	1	100	106
Food, textile products	23	12	8	853	896	5	3	2	261	271
Wood, paper products	19	9	4	709	741	4	2	1	184	191
Steel, metal products	19	9	4	709	741	4	2		(1)	
Non-metals, petroleum, chemicals	19	9	4	709				1	184	191
Construction	28	11	4	100	741	4	2	1	184	191
Transportation, communications	11	12	- 1	700	744	6	3	1	155	165
	20	10	6	985	1,021	5	2	2	235	244
	20	10	6	985	1,021	5	2	2	235	244
All other services	14	7	4	654	679	3	2	1	152	158
Household industry	21	12	8	1,370	1,411	5	3	3	92	103

model with respect to final use of commodities in region A, it is clear that only competitive imports from rest of the world μ_{ra} leak out of the total system. Thus μ_{ba} , μ_{ca} and μ_{da} are import leakages to region A but μ_{ba} generates demand in region B; μ_{ca} in region C and μ_{da} in region D.

In other words, $i'\hat{\mu} = \mu_r$. Where μ_r' is a row vector of

$$\mu_{ra}$$
 . . : μ_{rb} . . : μ_{rj} . . : μ_{rn}

Total Primary Input requirements for final delivery for domestic use of a commodity is thus given by

$$VJ^*[I - (I - \mu) BJ]^{-1} (I - \mu)$$

or

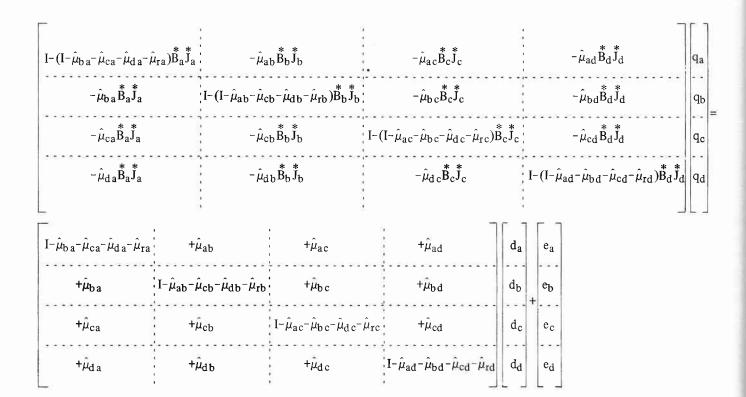
$${\overset{*}{V}}[I - {\overset{*}{J}}(I - {\overset{*}{\mu}}) {\overset{*}{B}} {\overset{*}{J}}]^{-1} (I - {\overset{*}{\mu}})$$

An inter-regional model is usually closed with respect to household income. Indeed, the generation of income within an inter-regional model is one of the more useful results which can be obtained. The model can also be closed with respect to local public expenditures in the manner described in Section III.

A Four-region Inter-regional Model

The solution of a four-region system in commodity space derives from the system below.

An inter-regional model comprising four regions, each open to the rest of the world is illustrated. The subscripts a, b, c and d refer to the four regions. In our case these represent each of the four Atlantic Provinces. The subscript r refers to the rest of the world as before.



Some Numerical Results of the Inter-regional Model

There is, as is to be expected, very little economic interdependence between the Atlantic Provinces. Even when we include households within the model, as is done here, the feedback or spill over from any one Atlantic Province to the others is very weak.

Table 4.36 shows the impact of \$1,000 of final deliveries of each of the 12 products on household income within the province in which final delivery is made, and on each of the other three Atlantic Provinces.

Thus \$1,000 of food and textile products delivered in Nova Scotia generate \$774 in household income in Nova Scotia; \$20 in New Brunswick; \$15 in Prince Edward Island and \$31 in Newfoundland. Total income generated is \$840 of which 92% accrues to Nova Scotia. Regional impact on employment is similar: one million dollars of final sales of food and clothing products create 191 jobs in Nova Scotia, 5 in New Brunswick, 5 in Prince Edward Island and 13 in Newfoundland. Total employment is thus 214 of which 89% accrues to Nova Scotia. In the case of food and clothing, the feedback to Newfoundland relates to fish caught in that province and processed in Nova Scotia. The fact that the employment impact on Nova Scotia is relatively somewhat smaller than the income-impact reflects the low earnings of people engaged in the Newfoundland fishery. In the case of other industries, inter-regional linkage is even weaker. Thus \$1,000 of Nova Scotia construction generates \$843 in Nova Scotia, \$19 in New Brunswick, \$6 in Prince Edward Island and \$4 in Newfoundland. Corresponding figures for employment are Nova Scotia 184, New Brunswick 4; Prince Edward Island 2; and 1 in Newfoundland. Thus 96.5% of impact on household income and 96.3% of the impact on employment occurred in Nova Scotia.

Other things being equal, the relative impact of expenditures in a smaller province, like Prince Edward Island, on a large one is likely to be somewhat higher. Thus \$1,000 spent on construction in Prince Edward Island generates \$650 in Prince Edward Island; \$67 in Nova Scotia, \$31 in New Brunswick and none in Newfoundland; 87% of the impact on household income is experienced in Prince Edward Island.

Perhaps the most interesting single result in Table 4.36 relates to the household industry. Here the impact on household income of \$1,000 spent on a typical set of household purchases in each of the four provinces was: Nova Scotia \$1,433 (97.9%); New Brunswick \$1,419 (98.5%); Prince Edward Island \$1,395 (95.2%) and Newfoundland \$1,370 (97.1%),11 In the case of Nova Scotia the impact on the Atlantic Region as a whole was \$1,464 with incomes in New Brunswick \$18; Prince Edward Island \$9; Newfoundland \$4. In the case of New Brunswick, Atlantic impact was \$1,441 (Nova Scotia \$18, Prince Edward Island \$4, Newfoundland - zero). In the case of Prince Edward Island, Atlantic impact was \$1,465 (Nova Scotia \$41, New Brunswick \$29, Newfoundland - zero); and in the case of Newfoundland \$1,441 (Nova Scotia \$21, New Brunswick \$12, Prince Edward Island \$8). The figures reflect the fact that Newfoundland tends to import a somewhat higher proportion of food and clothing requirements from Central Canada and foreign countries than do the three Maritime Provinces.

Whereas expenditures in one Atlantic Province generate very little income in the other Atlantic Provinces, the "leakage" of purchasing power to the rest of Canada is considerable. Thus, in our example, the expenditure of \$1,000 in Nova Scotia by a typical household generates \$1,433 in Nova Scotia, \$31 in the other three Atlantic Provinces and \$471 in the rest of Canada. A certain-unknown-part of this \$471 in turn "leaks" out to foreign countries. In the case of typical household expenditures of \$1,000 in Newfoundland, \$1,370 remain in that province, \$41 accrues to the other Atlantic Provinces and \$515 finds its way to Central Canada. The reader should bear in mind the fact that the impact of an initial expenditure of \$1,000 in this example has been blown up, so to speak, by applying the consumption multiplier which is built into Model II. The "leakages" to Central Canada, where re-spent there in similar manner, will similarly yield further round of income there.

The weak interdependence within the Atlantic Region can also be illustrated with respect to the impact of final expenditure categories. Table 4.37 is presented in dollar flows and is analogous to Table 4.11 in Section II. We observe that Nova Scotia's foreign exports generate \$119.2 million factor income within Nova Scotia, \$2.7 million in New Brunswick; \$1.4 million in Prince Edward Island and \$2.1 million in Newfoundland. Total impact on the Atlantic Provinces is thus \$125.4 million, of which 95.1% accrues to Nova Scotia.

Total factor income generated in Nova Scotia by virtue of final expenditures in Nova Scotia is \$4,113.6 million. In addition, Nova Scotia's final demand generated factor incomes of \$25.4 million in New Brunswick, \$9.8 million in Prince Edward Island and \$8.4 million in Newfoundland. Total impact on all Atlantic Provinces was \$1,157.2 million. The situation is similar with respect to the other provinces. Newfoundland, for example, earns \$230.9 million factor income from its foreign exports. In addition there is a "spill over" to Nova Scotia of \$5.4 million, New Brunswick \$2.7 million and Prince Edward Island \$1.3 million. Thus 96.1% of the total Atlantic factor income of \$240.3 million generated by Newfoundland's exports remain and Newfoundland.

¹¹ Percentages refer to the proportion of Atlantic income which accrued to the province in which expenditure was made.

TABLE 4.37. Direct and Indirect Incomes and Employment generated by Final Expenditures
Inter-regional Model II

	Factor incomes					Employment					
	Nova Scotia	New Bruns- wick	Prince Edward Island	New- found- land	Atlantic total	Nova Scotia	New Bruns- wick	Prince Edward Island	New- found- land	Atlantic total	
		m	illions of dolla	ars		thousands of employees					
Nova Scotia:						10					
Exports: Foreign Canada Exogenous personal expenditure Capital formation	119.2 168.4 90.5 131.4	2.7 3.5 3.8 4.6	1.4 1.6 1.9 0.9	2.1 2.2 0.9 0.8	125.4 175.7 97.1 137.7	24.2 32.8 18.1 25.7	0.5 0.7 0.8 0.8	0.4 0.5 0.6 0.3	0.7 0.8 0.3 0.2	25.8 34.8 19.8 27.0	
Federal government:					41			230			
Defence Civilian Provincial government Municipal government Education Hospitalization	156.6 133.1 100.7 34.0 112.4 67.3	2.8 2.3 1.9 0.6 1.9 1.3	1.1 0.9 0.6 0.2 0.7 0.5	0.7 0.5 0.4 0.1 0.4 0.3	161.2 136.8 103.6 34.9 115.4 69.4	28.0 25.9 16.8 6.4 21.3 18.5	0.6 0.5 0.4 0.1 0.4 0.3	0.3 0.3 0.2 0.1 0.2 0.1	0.2 0.2 0.1 0.0 0.1	29.1 26.9 17.5 6.6 22.0 19.0	
Totals	1,113.6	25.4	9.8	8.4	1,157.2	217.7	5.1	3.0	2.7	228.5	
New Brunswick:											
Exports: Foreign Canada Exogenous personal expenditure Capital formation	4.5 3.2 3.0 7.2	167.8 104.9 71.5 130.0	1.1 0.8 0.7 0.5	0.1	173.5 108.9 75.2 137.7	1.0 0.7 0.6 1.3	29,9 20.6 14.3 25.4	0.4 0.3 0.2 0.1	0 0 - -	31.3 21.6 15.1 26.8	
Federal government: Defence Civilian Provincial government Municipal government Education Hospitalization	1.1 1.1 2.0 0.6 1.5	63.7 64.3 96.6 27.3 80.7 48.9	0.2 0.2 0.3 0.1 0.3 0.2		65.0 65.6 98.9 28.0 82.5 50.1	0.3 0.2 0.4 0.1 0.3	11.5 12.8 16.2 4.8 17.0 14.4	0.1 0.1 0.1 0.1 0.1		11.9 13.1 16.7 4.9 17.4 14.7	
Totals	25.2	855.7	4.4	0.1	885.4	5.1	166.9	1.5	0	173.5	
Prince Edward Island:					1						
Exports: Foreign Canada Exogenous personal expenditure Capital formation	0.8 1.2 1.6 1.5	0.4 0.6 1.2 0.8	8.4 12.3 15.5 10.6	0 0 -	9.6 14.1 18.3 12.9	0.1 0.2 0.3 0.3	0.1 0.1 0.2 0.1	2.5 3.7 3.9 2.3	0 0 -	2.7 4.0 4.4 2.7	
Federal government:	1.5	0.0	10.0		12.5	0.2	0.1	2.0			
Defence Civilian Provincial government Municipal government Education Hospitalization	0.8 0.6 1.3 0.2 0.5 0.3	0.5 0.4 0.7 0.1 0.3 0.2	15.0 11.6 19.8 2.8 10.6 5.7	- - - -	16.3 12.6 21.8 3.1 11.4 6.2	0.1 0.1 0.2 - 0.1 0.1	0.1 0.1 0.1 - 0.1	3.0 2.5 3.9 0.6 2.4 2.1	- - - -	3.2 2.7 4.2 0.6 2.6 2.2	
Totals	8.8	5.2	112.3	0	126.3	1.5	0.9	26.9	0	29.3	
Newfoundland:											
Exports: Foreign Canada Exogenous personal expenditure Capital formation	5.4 0.8 2.4 2.7	2.7 0.4 1.4 0.7	1.3 0.2 0.9 0.5	230.9 35.4 44.1 75.1	240.3 36.8 48.8 79.0	1.1 0.1 0.5 0.7	0.5 0.1 0.3 0.3	0.4 0 0.3 0.1	42.6 5.2 9.1 14.3	44.6 5.4 10.2 15.4	
Federal government: Defence Civilian Provincial government Municipal government Education Hospitalization	0.3 1.2 2.2 0.4 0.9 0.9	0.1 0.6 1.1 0.2 0.5	0.1 0.3 0.4 0.1 0.2 0.3	12.6 44.5 79.0 12.9 42.4 32.0	13.1 46.6 82.7 13.6 44.0 33.7	0.1 0.2 0.4 0.1 0.2 0.2	- 0.1 0.2 - 0.1 0.1	0.1 0.1 - 0.1 0.1	2.4 8.5 12.9 2.3 11.1 8.7	2.5 8.9 13.6 2.4 11.5 9.1	
Totals	17.2	8.2	4.3	608.9	638.6	3.6	1.7	1.2	117.1	123.6	

TABLE 4.38. Direct and Indirect Household Income and Employment Generated Per Million Dollars of Final Sales Inter-regional Model III

	Household income					Employment					
	Nova Scotia	New Bruns- wick	Prince Edward Island	New- found- land	Atlantic total	Nova Scotia	New Bruns- wick	Prince Edward Island	New- found- land	Atlantic total	
		the	ousands of do	llars	numbers employed						
Nova Scotia:						ľ					
Agricultural products	1,089	32	14	8	1,143	317	7	4	3	331	
Forestry products	1,166	27	11	6	1,210	303	6	3	2	314	
Fish	1,187	26	10	6	1,229	302	6	3	2	313	
Mining products	1,132	22	9	5	1,168	230	5	3	2	240	
Food, textiles	922	28	19	36	1,005	221	7	6	14	248	
Wood, paper	770	18	6	5	799	162	4	2	1	169	
Steel, metals	767	18	6	5	796	160	4	2	1	167	
Petroleum, chemicals	767	18	6	5	796	160	6	2	1	167	
Construction	987	26	8	6	1,027	214	6	2	2	224	
Transportation, etc.	1,176	23	9	5	1,213	264	5	3	2	274	
Distribution	1,176	23	9	5	1,213	264	5	3	2	274	
Services n.e.s.	1,064	20	8	5	1,097	222	5	3	2	232	
Households	1,621	25	12	6	1,664	137	6	4	2	149	
Education	1,281	24	10	5	1,320	265	6	3	2	276	
Hospitalization	1,150	24	10	6	1,190	330	6	3	2	344	
Provincial government	1,146	24	9	5	1,184	235	6	3	2	246	
Municipal government	1,232	25	10	5	1,272	250	6	3	2	261	
New Brunswick:											
Agricultural products	31	1,080	6	1	1,118	7	301	2	- 1	310	
Forestry products	25	1,215	5	- 1	1,245	6	284	2	- 1	292	
Fish	25	1,226	5	-	1,256	6	285	2	-	293	
Mining products	14	602	2	- 1	618	3	115	1	_	119	
Food, textiles	54	723	17	1	795	13	174	7	-	194	
Wood, paper	21	817	3	-	841	5	171	1	-	177	
Steel, metals	21	816	3	-	840	5	171	1	_ }	177	
Petroleum, chemicals	21	816	3		840	5	171	1	_	177	
Construction	30	929	4	1	963	7	205	1	-	213	
Transportation, etc.	23	1,162	4	·=	1,189	5	274	2	-	281	
Distribution	23	1,162	4	7 <u>2</u> 3	1,189	5	274	2	-	281	
Services n.e.s	22	973	4	-	999	5	214	1	-	220	
Households	27	1,599	6	1	1,633	6	137	2	-	145	
Education	27	1,228	5	: 	1,260	6	285	2	:==	293	
Hospitalization	27	1,158	5	S= 1	1,190	6	356	2		364	
Provincial government	26	1,108	4	-	1,138	6	233	2	-	241	
Municipal government	27	1,177	5	54	1,209	6	248	2	320	256	

 $\begin{tabular}{l} \textbf{TABLE 4.38. Direct and Indirect Household Income and Employment Generated Per Million Dollars of Final Sales} - Concluded \\ \textbf{Inter-regional Model III} \\ \end{tabular}$

		usehold incon	Employment							
	Nova Scotia	New Bruns- wick	Prince Edward Island	New- found- land	Atlantic total	Nova Scotia	New Bruns- wick	Prince Edward Island	New- found- land	Atlantic total
		tho	usands of doll	ars			nur	mbers employe	ed	
Prince Edward Island:										
Agricultural products	95	49	922	1	1,067	20	11	294	-	325
Forestry products	93	49	923	1	1,066	20	11	303	-	334
Fish	73	43	925	1	1,042	16	10	405	-	431
Mining products	60	40	1,437	1	1,538	13	9	180	-	202
Food, textiles	66	47	765	1	879	14	11	239	- 1	264
Wood, paper	68	35	640	1	744	14	8	170	-	192
Steel, metals	68	35	640	1	744	14	8	170	-	197
Petroleum, chemicals	68	35	640	1	744	14	8	170	-	192
Construction	87	42	759	1	889	18	9	191	-	218
Transportation, etc.	62	36	1,116	1	1,215	13	8	302	-	323
Distribution	62	36	1,116	1	1,215	13	8	302	_	323
Services n.e.s	50	29	814	1	894	11	7	229	-	247
Households	59	41	1,543	1	1,644	13	9	152	-	174
Education	58	36	1,100	1	1,195	13	8	289	_ [310
Hospitalization	56	38	960	1	1,055	12	9	371	_	392
Provincial government	65	37	943	1	1,046	14	8	226	_	248
Municipal government	59	34	926	1	1,020	13	8	247	_	268
Newfoundland:										
Agricultural products	44	25	14	969	1,052	10	6	4	292	312
Forestry products	34	17	9	1,141	1,201	8	4	3	448	463
Fish	34	17	9	1,146	1,206	8	4	3	453	468
Mining products	21	10	5	633	669	5	2	1	122	130
Food, textiles	32	17	10	974	1,033	7	4	3	290	304
Wood, paper	26	13	6	809	854	6	3	2	205	216
Steel, metals	26	13	6	809	854	6	3	2	205	216
Petroleum, chemicals	26	13	6	809	854	6	3	2	205	216
Construction	37	17	6	812	872	8	4	2	179	193
Transportation, etc.	29	15	8	1,127	1,179	7	3	3	265	278
Distribution	29	15	8	1,127	1,179	7	3	3	285	278
Services n.e.s	21	11	6	787	825	5	3	2	180	190
Households	30	17	10	1,508	1,565	7	4	3	122	136
Education	29	15	.8	1,091	1,143	7	3	2	319	331
Hospitalization	33	17	10	1,008	1,068	7	4	3	293	307
Provincial government	30	15	8	1,002	1,055	7	3	2	208	220
Municipal government	31	14	6	800	851	7	3	2	180	192

TABLE 4.39. Direct and Indirect Incomes and Employment generated by Final Expenditures Inter-regional Model III

Nova Scotia: Exports: Foreign Canada Exogenous personal expenditure Capital formation Federal government: Defence Civilian Federal transfers Public sector borrowings	Nova Scotia 140.3 198.4 109.4 153.2 179.1 152.2 125.1 47.1 1,104.8	New Bruns- wick	Prince Edward Island 1.7 2.1 2.2 1.2 1.5 1.2 1.0 0.4	New- found- land	Atlantic total 148.2 208.0 117.4 161.4	Nova Scotia 28.3 38.6 21.7 29.9	New Bruns- wick thou 0.7 1.0 0.9	Prince Edward Island esands of employment 0.5 0.6 0.6	0.8 0.9	Atlantic total 3C.3 41.1
Nova Scotia: Exports: Foreign	140.3 198.4 109.4 153.2 179.1 152.2 125.1 47.1	3.7 4.8 4.7 5.9 3.9 3.1 2.8 1.0	Edward Island Illions of dolla 1.7 2.1 2.2 1.2 1.5 1.2 1.0	found- land rs 2.5 2.7 1.1 1.1 0.9	148.2 208.0 117.4	28.3 38.6 21.7	0.7 1.0 0.9	Edward Island Is	found- land oyees 0.8 0.9	total 30.3
Exports: Foreign Canada Exogenous personal expenditure Capital formation Federal government: Defence Civilian Federal transfers Public sector borrowings Totals 1 New Brunswick: Exports: Foreign Canada Exogenous personal expenditure	198.4 109.4 153.2 179.1 152.2 125.1 47.1	3.7 4.8 4.7 5.9 3.9 3.1 2.8 1.0	1.7 2.1 2.2 1.2 1.5 1.2	2.5 2.7 1.1 1.1	208.0 117.4	38.6 21.7	0.7 1.0 0.9	0.5	0.8 0.9	
Exports: Foreign Canada Exogenous personal expenditure Capital formation Federal government: Defence Civilian Federal transfers Public sector borrowings Totals I New Brunswick: Exports: Foreign Canada Exogenous personal expenditure	198.4 109.4 153.2 179.1 152.2 125.1 47.1	4.8 4.7 5.9 3.9 3.1 2.8 1.0	2.1 2.2 1,2 1.5 1.2 1.0	2.7 1.1 1.1	208.0 117.4	38.6 21.7	1.0 0.9	0.6	0.9	
Exports: Foreign Canada Exogenous personal expenditure Capital formation Federal government: Defence Civilian Federal transfers Public sector borrowings Totals 1 New Brunswick: Exports: Foreign Canada Exogenous personal expenditure	198.4 109.4 153.2 179.1 152.2 125.1 47.1	4.8 4.7 5.9 3.9 3.1 2.8 1.0	2.1 2.2 1,2 1.5 1.2 1.0	2.7 1.1 1.1	208.0 117.4	38.6 21.7	1.0 0.9	0.6	0.9	
Foreign Canada Exogenous personal expenditure Capital formation Federal government: Defence Civilian Federal transfers Public sector borrowings Totals I New Brunswick: Exports: Foreign Canada Exogenous personal expenditure	198.4 109.4 153.2 179.1 152.2 125.1 47.1	4.8 4.7 5.9 3.9 3.1 2.8 1.0	2.1 2.2 1,2 1.5 1.2 1.0	2.7 1.1 1.1	208.0 117.4	38.6 21.7	1.0 0.9	0.6	0.9	
Canada Exogenous personal expenditure Capital formation Federal government: Defence Civilian Federal transfers Public sector borrowings Totals I New Brunswick: Exports: Foreign Canada Exogenous personal expenditure	198.4 109.4 153.2 179.1 152.2 125.1 47.1	4.8 4.7 5.9 3.9 3.1 2.8 1.0	2.1 2.2 1,2 1.5 1.2 1.0	2.7 1.1 1.1	208.0 117.4	38.6 21.7	1.0 0.9	0.6	0.9	
Exogenous personal expenditure Capital formation Federal government: Defence Civilian Federal transfers Public sector borrowings Totals 1 New Brunswick: Exports: Foreign Canada Exogenous personal expenditure	109.4 153.2 179.1 152.2 125.1 47.1	4.7 5.9 3.9 3.1 2.8 1.0	2.2 1.2 1.5 1.2 1.0	1.1 1.1 0.9	117.4	21.7	0.9		- 1	
Capital formation Federal government: Defence Civilian Federal transfers Public sector borrowings Totals 1 New Brunswick: Exports: Foreign Canada Exogenous personal expenditure	153.2 179.1 152.2 125.1 47.1	3.9 3.1 2.8 1.0	1.2 1.5 1.2 1.0	0.9	20 1			0.0	0.3	23.5
Federal government: Defence Civilian Federal transfers Public sector borrowings Totals I New Brunswick: Exports: Foreign Canada Exogenous personal expenditure	179.1 152.2 125.1 47.1	3.9 3.1 2.8 1.0	1.5 1.2 1.0	0.9	161.4	29.9 □			1	31.5
Defence Civilian Federal transfers Public sector borrowings Totals I New Brunswick: Exports: Foreign Canada Exogenous personal expenditure	152.2 125.1 47.1	3.1 2.8 1.0	1.2 1.0	- 1			1.1	0.3	0.2	31.3
Civilian Federal transfers Public sector borrowings Totals I New Brunswick: Exports: Foreign Canada Exogenous personal expenditure	152.2 125.1 47.1	3.1 2.8 1.0	1.2 1.0	- 1	105.4	22.4	0.0	0.4	0.0	22.0
Federal transfers Public sector borrowings Totals 1 New Brunswick: Exports: Foreign Canada Exogenous personal expenditure	125.1 47.1	2.8 1.0	1.0	0.7	185.4	32.4	0.8	0.4	0.2	33.8
Public sector borrowings Totals 1 New Brunswick: Exports: Foreign	47.1	1.0		0.6	157.2	29.6	0.6	0.4	0.2	30.8
Totals			0.4	0.6	129.5	26.2	0.6	0.3	0.2	27.3
New Brunswick: Exports: Foreign Canada Exogenous personal expenditure	1,104.8	29.9		0.2	48.7	9.2	0.2	0.1	0.1	9.6
Exports: Foreign Canada Exogenous personal expenditure			11.3	9.8	1,155.8	215.9	5.9	3.2	2.9	227.9
Foreign										
Canada Exogenous personal expenditure				1						
Exogenous personal expenditure	6.7	197.1	1.4	0.1	205.3	1.3	35.7	0.5	***	37.5
	4.2	124.2	1.0		129.4	0.9	24.4	0.4		25.7
Capital formation	3.7	84.4	0.8	0.1	89.0	0.7	16.9	0.3	***	17.9
	9.1	153.6	0.7	0.1	163.5	1.7	30.1	0.2		32.0
Federal government:										
Defence	1.6	72.4	0.3		74.3	0.3	13.2	0.1		13.6
Civilian	1.5	73.3	0.3		75.1	0.3	14.6	0.1		15.0
Federal transfers	2.9	117.9	0.5		121.3	0.6	25.3	0.2	*****	26.1
Public sector borrowings	0.6	25.7	0.1	7474	26.4	0.1	5.3		***	5.4
Totals	30.3	848.6	5.1	0.3	884.3	5.9	165.5	1.8		173.2
Prince Edward Island:										
Exports:										
Foreign	1.0	0.6	9.6		11.2	0.2	0.1	2.8	144	3.1
Canada	1.5	0.8	14.1	933	16.4	0.3	0.1	4.1		4.5
Exogenous personal expenditures	2.1	1.5	18.9		22.5	0.4	0.3	4.7	1.00	5.4
Capital formation	1.9	1.0	12.4		15.3	0.4	0.2	2.7	0.00	3.3
Federal government:			1211		10.0	***		[0.0-10	
Defence	1.1	0.6	16.9		18.6	0.2	0.1	3.4	***	3.7
Civilian	0.8	0.5	13.1		14.4	0.2	0.1	2.8	***	3.1
Federal transfers	1.4	0.8	19.4		21.6	0.2	0.1	4.7	\$2.70	5.0
Public sector borrowings	0.4	0.2	5.3		5.9	0.1	318.8	1.2	****	1.3
Totals	10.2	6.0	109.7		125.9	2.0	1.0	26.4		29.4
Newfoundland:										
Exports:										
Foreign	7.4	3.7	1.8	259.8	272.7	1.5	0.7	0.5	48.5	51.2
Canada	1.1	0.5	0.2	40.0	41.8	0.2	0.1	0.1	6.1	6.5
Exogenous personal expenditures	2.5	2.0	0.9	43.2	48.6	0.5	0.3	0.2	8.9	9.9
Capital formation	5.3	3.2	0.6	86.0	95.1	1.0	0.4	0.2	16.5	18.1
Federal government:										
Defence	0.4	0.3	0.1	14.0	14.8	0.1	100.000	***	2.7	2.8
Civilian	1.6	0.8	0.4	49.5	52.3	0.3	0.1	0.1	9.6	10.1
Federal transfers	3.3	1.7	0.8	100.5	106.3	0.7	0.3	0.2	21.5	22.7
Public sector borrowings	0.5	0.2	0.1	14.9	15.7	0.1	72.72	·	3.2	3.3
Totals	22.1	12.4	4.9	607.9	647.3					

We may look at the situation also from the point of view of the origin of factor incomes earned within any province. Thus we note that \$129.9 million of Nova Scotia factor income arises from Atlantic Provinces exports to foreign countries. Of this \$129.9 million, \$119.2 million or 91.8% derives from Nova Scotia's own exports; \$4.5 million (3.5%) is feedback from New Brunswick's foreign exports; \$5.4 million (4.2%) from Newfoundland's. Again we note that Newfoundland has relatively fewer economic links with the other Atlantic Provinces than they have among each other.

Table 4.38 is similar to Table 4.36 and shows the inter-regional impact of a typical thousand dollars of expenditure on each of the 17 activities in Model III.

We may again take as our example food and clothing products. Final expenditure of \$1,000 on these products in Nova Scotia generates \$922 in household income in Nova Scotia, \$28 in New Brunswick, \$19 in Prince Edward Island and \$36 in Newfoundland. Total household income generated in all Atlantic Provinces is \$1,005. We note that the demand for one unit of the household industry, i.e., the effect of the typical expenditure of \$1,000 by households in Nova Scotia yields total household income of \$1,621 in Nova Scotia; \$25 in New Brunswick, \$12 in Prince Edward Island and \$6 in Newfoundland. Total income generated in all Atlantic Provinces is thus \$1,664. We note that Nova Scotia obtains 97.4% of all household income generated within the Atlantic Provinces.

Table 4.39 is similar to Table 4.37 and shows the Model III inter-regional impact of final demand categories in flow terms. Thus, in Model III, where households and local governments are treated as intermediate activities, Nova Scotia's shipments to Central Canada generate \$198.4 million factor income in Nova Scotia; \$4.8 million in New Brunswick; \$2.1 million in Prince Edward Island and \$2.7 million in Newfoundland. Total effect on the Atlantic Provinces is \$208.0 million.

V. Interdependence and the General Input-output Multiplier

In this section we return to our discussion of the set of ratios we have defined as input multipliers. We define a vector of input multipliers α corresponding to a coefficient matrix A and its Leontief inverse $(I-A)^{-1}$. We note that the set of input multipliers α is almost totally invariant to the set of direct input coefficients of

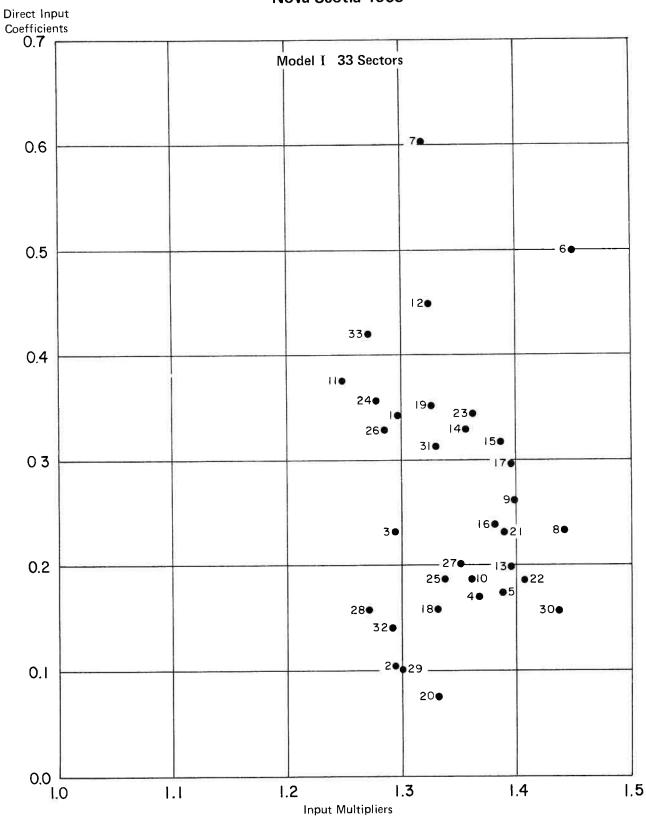
A (column sums of A) or the set of output multipliers (column sums of $(I - A)^{-1}$ (see Chart 4.3). We proceed to define a single (scalar) measure of interdependence which we call the general or Leontief input-output multiplier \overline{k} . We suggest that \overline{k} is more convenient, elegant and useful as a scalar measure of interdependence than the conventional ratio of total intermediate uses to the sum of gross value of output. Furthermore, \overline{k} is a characteristic of the coefficient matrix A and is derived without reference to flow data.

The scalar input-output multiplier k quantifies what is sometimes loosely referred to as the "matrix" or "Leontief" multiplier as distinct from the "final demand" "consumption" or "Keynesian" multiplier. As we shall see, the general input-output multiplier k is equal to $\frac{1}{1-\lambda_r}$ where λ_r is the largest characteristic root of A, and is a measure of the demand of the production system for domestically produced inputs. The general input-output multiplier k is clearly an important and useful parameter of an economy complementary to the well-known Keynesian multiplier, $k = \frac{1}{1-c}$ which measures the demand of final income earners for domestically produced consumer goods. We suggest that the scalar $\overline{k} = \frac{1}{1 - \lambda_r}$ uniquely defines the general or Leontief input-output multiplier and should become as familiar to economists dealing in partial or sectoral analysis as is the Keynesian concept of the final demand or consumption multiplier.

When the economy is open to trade, the scalar measure of interdependence can be decomposed into two (additive) portions measuring the structural interdependence of the system in the absence of imports on the one hand, and the (negative) effects of import leakages on the other. Here again, we note the analogous form of the general Leontief input-output multiplier $\overline{k} = \frac{1}{1-(\ell_{rd}-\ell_{rm})} \text{ with the Keynesian multiplier } k = \frac{1}{1-(c-m)} \text{ where } \lambda, \text{ the largest characteristic root of A is decomposed into a positive "domestic" component <math display="inline">\ell_{rd}$ and a negative import leakage component ℓ_{rm} .

In the course of this section we elaborate the substantive significance of the proposed input multipliers α and \overline{k} in yielding a clearer understanding of the

Relationship Between Input Multipliers and Corresponding Direct Input Coefficients, Nova Scotia 1965



nature of structural interdependence. As a result we suggest a simple approximation technique for the estimation of the total indirect impact of a specified set of expenditures on macro-economic variables such as income, employment or foreign exchange requirements — without explicit reference to input-output tables. Such approximation techniques are particularly useful in planning agencies in situations where it is not convenient or economical to programme complete input-output models. Even where estimates of economic impact have been made by input-output practitioners, the approximation technique here suggested can provide a good and rapid check on the quality of such estimates, and incidentally on the professional competence of the practitioners.

The notation used here will be as follows:

A is the coefficient matrix $\hat{\mathbf{J}}(\mathbf{I} - \hat{\mu})\hat{\mathbf{B}}^*$

R is the matrix $[I - \mathring{J}(I - \hat{\mu})\mathring{B}]^{-1}$

- J is the (rectangular) coefficient matrix $J\hat{q}^{-1}$ where J is a flow matrix of commodity outputs by industries and q is a flow vector of commodity output levels
- B is the (rectangular) coefficient matrix Bg -1 where B is a flow matrix of commodity inputs to industries and g is a flow vector of industry output levels
- $\hat{\mu}$ is the diagonalozed vector of import coefficients defined by $\hat{m} = \hat{\mu}(Bg + d)$ where d is a vector of domestic final demand.
- u' is the vector i'A of column sums of A
- r' is the vector i'R of column sums of R

We proceed by the following five steps:

- (i) We define an average input multiplier k for any input-output matrix A and its Leontief inverse
 (I A) -1.
- (ii) We define an orthogonal transformation of A and (I - A) -1 which, when iterated, ultimately yields the value of the general input-output multiplier k. This scalar characterizes the interdependence of the system A and is designated as the general inputoutput multiplier.
- (iii) We prove that the general input-output multiplier \overline{k} is a simple algebraic variant of the largest characteristic root (eigen value) of the coefficient matrix A.
- (iv) We define a vector P_k which characterizes the general structure of linkages within the production system A. The elements of this vector sum to \overline{k} .

(v) Finally, we decompose the scalar measure of interdependence k into two (additive) scalars; one denoting the structural interdependence of the system in the absence of import leakages and the other representing import leakages. The latter is, of course, negative.

At the end of this section we present numerical results for each of the four Atlantic Provinces (1965) and for Canada (1961) and indicate a useful rule of thumb approximation technique whereby estimates of indirect impacts of any final demand vector on major primary inputs such as income, taxes or employment, may be obtained without direct reference to the input-output model. The technique is particularly useful where interdependence is relatively weak and convergence rapid. It is suggested that these conditions obtain not only for the Atlantic Region, but for Canada as a whole.

1. Definition of the Average Input Multiplier k

The average input multiplier k of a matrix A and its inverse R is defined as the weighted average of the vector α' with respect to the column sums of the matrix A.

$$k = \alpha' u \hat{i'} u^{-1}$$
where $\alpha' = i' (R - I) \hat{i'} A^{-1}$

Individual elements of α being

$$\alpha_1 = \underbrace{r_1 - 1}_{u_1}$$

$$\alpha_2 = \underline{r_2 - 1}$$

$$\alpha_n = \frac{r_n - 1}{u_n}$$

We note that

$$\begin{aligned} k &= \frac{1}{\Sigma u} \quad \boxed{ \frac{u_1(r_1 - 1)}{u_1} + \dots \frac{u_n(r_n - 1)}{u_n} } \\ &= \frac{\Sigma r - n}{\Sigma u} \quad = \quad \frac{\Sigma \Sigma r_{ij} - n}{\Sigma \Sigma u_{ii}} \end{aligned}$$

We may thus write k as $(i'Ri - n)(i'Ai)^{-1}$

2. Definition of the Orthogonal Transformation A_t : $\leftarrow i'A A i'A^{-1}$

 A_t is formed by a normalization of A with respect to the set of its column sums i'A. The input multipliers α' of A are the set of column sums r(output multipliers) of the Leontief inverse of the transformed coefficient matrix A_t .

Proof:

Consider the matrix $A_t = \hat{i}' \hat{A} \hat{A} \hat{i}' \hat{A}^{-1}$

From its definition,

$$\alpha = [i' (I - A)^{-1} - i'] i'A^{-1}$$

$$= i' [(I - A)^{-1} - I] i'A^{-1}$$

$$= i' [A(I - A)^{-1}] i'A^{-1}$$

$$= i' [A(I - A)^{-1}] i'A^{-1}$$

$$= i' [(I - A)^{-1}] i'A^{-1}$$

$$= i' [(I - A)^{-1}] i'A^{-1}$$

$$= i' [(I - A)^{-1}] i'A^{-1}$$

$$= i' [I - i'A A i'A^{-1}]^{-1}$$

$$= i' [I - A_t]^{-1}$$
Because $A_t = i'A A i'A^{-1}$

and therefore $\alpha' = r_t'$

Further because

$$\hat{i} \stackrel{\frown}{A} [I - A]^{-1} \hat{i} \stackrel{\frown}{A}^{-1} \equiv [I - \hat{i} \stackrel{\frown}{A} A \hat{i} \stackrel{\frown}{A}^{-1}]^{-1}$$

$$R_t = \hat{i} \stackrel{\frown}{A} R \hat{i} \stackrel{\frown}{A}^{-1} \equiv [I - A_t]^{-1}$$

Evidently we obtain the transformed inverse R_t from R by the same orthogonal transformation which yields A_t from A.

Further because

$$A_{tt} = \overrightarrow{i} \overrightarrow{i} \overrightarrow{A} \overrightarrow{A} \overrightarrow{i} \overrightarrow{A} - \overrightarrow{i} \overrightarrow{i} \overrightarrow{A} \overrightarrow{A} \overrightarrow{i} \overrightarrow{A} - \overrightarrow{i} \overrightarrow{i} \overrightarrow{A} \overrightarrow{A} \overrightarrow{i} \overrightarrow{A} - \overrightarrow{i} - 1$$

and

$$R_{tt} = i'i'A A i'A^{-1} i'A R i'A^{-1} i'i'A A i'A^{-1}^{-1}$$

it follows that

$$A_{tt} = i'A^2 A i'A^2 - 1$$

and

$$R_{tt} = \widehat{i'}A^2 R \widehat{i'}A^2^{-1}$$

and in general

$$A_{t^{S}} = i'A^{S} A i'A^{S} - 1$$

and

$$R_{ts} = i'A^s R i'A^{s-1}$$

3. The General Input-output Multiplier of a Matrix A

A matrix A with a Leontief inverse R has a set of output multipliers r defined as i'R; a set of input multipliers α' defined as i'(R - I) i'A - 1; an average input multiplier k defined as (i'Ri' - n) (i'Ai) - 1. We now proceed to define \overline{k} which we call the general input-output multiplier of A as:

$$\overline{k} = [i'R_{t}si - n][i'A_{t}si]^{-1} \text{ as } s \rightarrow \infty$$

From
$$i'A^{s}$$
 R $i'A^{s}$ - $1 = [I - i'A^{s} A i'A^{s}]^{-1}$

we obtain

$$\overline{k} = [i' \hat{i'} \hat{A}^{S} R \hat{i'} \hat{A}^{S} \hat{i}^{1} - n] [i' \hat{i'} \hat{A}^{S} A \hat{i'} \hat{A}^{S} \hat{i}^{1}]^{-1} \text{ as } S \rightarrow \infty$$

Because any square matrix with distinct eigen values can be expressed in the form

$$A = P \wedge P^{-1}$$

and
$$[I - A]^{-1} = P(I - \Lambda)^{-1} P^{-1}$$

and As
$$= P \Lambda^s P^{-1}$$

we can write

$$\overline{k} = [i' i'P\Lambda sP - 1 P (I - \Lambda) - 1 P - 1 i'P\Lambda sP - 1 i'-1 - n]$$

times
$$[i'i'P\Lambda sP - 1 P\Lambda P - 1 i'P\Lambda sP - 1^{-1} i] - 1$$

= $[i'P\Lambda s (1 - \Lambda) - 1P - 1 i'P\Lambda sP - 1^{-1} 1 - n][i'P\Lambda s + 1P - 1 iP\Lambda sP - 1^{-1} i]^{-1}$

For large values of s all values of Λ^s except the value in the location of the largest characteristic root λ_r vanish. Therefore,

$$\overline{k} = \begin{bmatrix} \lambda_r^s \\ 1 - \lambda_r \end{bmatrix} i' \qquad P_r \geq 0 \qquad P^{-1} \qquad 1 \qquad (i' \quad P_r \geq 0 \quad P^{-1} \quad i^{-n} \end{bmatrix}$$

$$times \begin{bmatrix} \lambda_r^{s+1} i' \\ \lambda_r^{s+1} i' \end{bmatrix} \qquad P_r \geq 0 \qquad P^{-1} \qquad 1 \qquad (i' \quad P_r \geq 0 \quad P^{-1} \quad i^{-1} i \end{bmatrix} - 1$$

where P_1 : 0 is a square matrix containing the first column of P and otherwise zeros;

and thus

$$\overline{k} = \underbrace{\begin{bmatrix} 1 & n - n \\ 1 - \lambda_r & \\ & \lambda_r n \end{bmatrix}} = \underbrace{\frac{1}{1 - \lambda_r}}$$

We note that $1 < \overline{k} < \infty$ because $0 < \lambda_1 < 1$ for all Leontief systems. Our general input-output multiplier thus ranges from a low value of unity representing zero interdependence to a finite but unbounded upper value.

4. Definition of the Vector Pk, Representing the General Structure of Linkages in A

The vector P_k is defined as any one of the columns in the matrix

$$R A^{s}i'A^{s} - 1$$
 as $s \to \infty$

Consider the well known expansion

$$R = (I - A)^{-1} = I + A + A^2 + ... A^s$$
.

The first term (I) denotes one unit of direct demand for each of the industry outputs in the system. The second term (A) denotes the set of industry outputs required as direct inputs to I. The third term (A^2) denotes the set of industry outputs required as direct inputs to A, etc. The set of total requirements for the production of I is of course given by R.

Now consider the expansion

$$R A \hat{i}' A^{-1} = A \hat{i}' A^{-1} + A A \hat{i}' A^{-1} + A^2 A \hat{i}' A^{-1} + \dots$$

The first term denotes direct demand for the set of industry inputs $A'iA^{-1}$. Each column in the matrix $A'iA^{-1}$ consists of the normalized column vectors of A. This means that for our purposes here the direct requirements for final demand are composed of units of industry input mix, one for each industry in the system. The second term denotes the

set of industry outputs required as direct inputs to the production of $A i A^{-1}$ etc. The set of total requirements for the production of $A i A^{-1}$ is $R A i A^{-1}$.

Now consider the expansion

$$R A^{2} i'A^{2} - 1 = A^{2} i'A^{2} - 1 + A A^{2} i'A^{2} - 1 + \dots$$

Here R A² i'A² -1 clearly denotes the total set of industry outputs required for the production of A² i'A² -1 as a final demand, where A² i'A² -1 is the normalized matrix A². Recall that A² are the set of inputs directly required to produce the inputs to A, where A are the direct inputs to I.

It is now apparent that $RA^si'A^{s-1}$ as $s \to \infty$ is the matrix of total industry requirements for the normalized set of general inputs $A^si'A^{s-1}$. We shall show that each and every column of $RA^si'A^{s-1}$ ($s \to \infty$) is the vector P_k , where P_k is an eigen vector corresponding to the largest eigen value (characteristic root) of A. Furthermore i' $RA^si'A^{s-1}$ is the row vector $\overline{k}i'$, i.e. the column sum of P_k is \overline{k} . The vector P_k thus represents the general structure of linkages of A. It is unique to A, and is the industry disaggregation of the general input multiplier \overline{k} . Thus the vector P_k represents the general structure of industrial linkages implicit in A. Each of its elements represents the total industry output levels required for the production of the general set of inputs $A^si'A^{s-1}$ ($s \to \infty$).

Proof:

Because a square matrix with distinct eigen values may be expressed as PAP -1, we may write R As i'As -1 as

$$P(I - \Lambda)^{-1} P^{-1} P \Lambda s P^{-1} i' P \Lambda s P^{-1}^{-1}$$

$$= P(I - \Lambda)^{-1} \Lambda s P^{-1} i' P \Lambda s P^{-1}^{-1}$$

$$= \frac{\lambda_r s}{1 - \lambda_r} | 0 : P_r : 0 | P^{-1} 1_s i' | 0 : P_r : 0 | P^{-1}^{-1}$$

$$= \frac{1}{1 - \lambda_r} | 0 : P_r : 0 | P^{-1} i' | 0 : P_r : 0 | P^{-1}^{-1}$$

$$= | P_k, P_k \dots P_k | \text{ where } i' | P_k, P_k \dots P_k | = i' \frac{1}{1 - \lambda_r} \text{ or } i' \overline{k}$$

For example, where n = 3 and the largest characteristic root is assumed to be found in the second location (r = 2); we have

$$= \frac{1}{1 - \lambda_{2}} \begin{vmatrix} P_{12} P_{21}^{-1} & P_{12} P_{22}^{-1} & P_{12} P_{23}^{-1} \\ P_{22} P_{21}^{-1} & P_{22} P_{22}^{-1} & P_{22} P_{23}^{-1} \\ P_{32} P_{21}^{-1} & P_{32} P_{22}^{-1} & P_{32} P_{23}^{-1} \end{vmatrix}$$

$$= \frac{\bar{k}}{NR} \begin{vmatrix} P_{12} & P_{12} & P_{12} \\ P_{22} & P_{22} & P_{22} \end{vmatrix}$$

$$= \frac{\overline{k}}{\Sigma P} \quad \begin{array}{c|ccc} P_{12} & P_{12} & P_{12} \\ \hline P_{22} & P_{22} & P_{22} \\ \hline P_{32} & P_{32} & P_{32} \\ \hline \end{array}$$

$$= \quad \begin{array}{c|ccc} P_k, & P_k, & P_k \\ \hline \end{array} \quad \text{where } n = 3.$$

5. Decomposition of λ_r into ℓ_{rd} and ℓ_{rm} , where ℓ_{rd} is a Scalar Measure of the Structural Interdependence of \mathring{J} (I - $\hat{\mu}$) \mathring{B} on the Assumption that there are no Import Leakages $\hat{\mu}$, and ℓ_{rm} is a Measure of the Diminution of Linkages attributable to Import-leakages. $\lambda_r = \ell_{rd} - \ell_{rm}$

If A contains import leakages, as is the case in our model where $A = \mathring{J}(I - \hat{\mu})\mathring{B}$, it is possible to separate the effects of import leakages on linkages from the effects of internal structural relationships on linkages. Import leakages will always diminish the scalar coefficient of interdependence \overline{k} below the value it would have had, in the absence of competitive imports. By this decomposition, it is possible to determine, for open economies, the degree to which weak interdependence is attributable to import leakages (openness) and the degree to which it is attributable to under-developed internal economic structures.

Consider
$$\overline{k} = \frac{1}{1 - \lambda_r}$$

We can write

$$\mathring{\mathbf{J}}(\mathbf{I} - \hat{\boldsymbol{\mu}}) \mathring{\mathbf{B}} = \mathbf{P} \Lambda \mathbf{P}^{-1}$$

and
$$P^{-1} \stackrel{*}{J} (I - \hat{\mu}) \stackrel{*}{BP} = \Lambda$$

The largest characteristic root λ_r will be

$$\lambda_{\mathbf{r}} = \begin{bmatrix} 0 \\ P_{\mathbf{r}}^{-1} \\ 0 \end{bmatrix} \quad \stackrel{*}{\mathbf{J}} \left(\mathbf{I} - \hat{\mu} \right) \stackrel{*}{\mathbf{B}} \quad \begin{bmatrix} 0 & P_{\mathbf{r}} & 0 \\ 0 & P_{\mathbf{r}} & 0 \end{bmatrix}$$

where P_r is the eigen vector corresponding to the largest characteristic root of $\mathring{J}(I - \hat{\mu}) \mathring{B}$.

Thus

$$\lambda_{\mathbf{r}} = \begin{bmatrix} 0 \\ \vdots \\ P_{\mathbf{r}}^{-1} \\ 0 \end{bmatrix} \quad \overset{***}{\mathbf{JB}} \quad \begin{bmatrix} 0 \\ 0 \\ P_{\mathbf{r}} \\ 0 \end{bmatrix} \quad - \quad \begin{bmatrix} 0 \\ \vdots \\ P_{\mathbf{r}}^{-1} \\ 0 \end{bmatrix} \quad \overset{*}{\mathbf{J}} \quad \overset{*}{\boldsymbol{\mu}} \quad \overset{*}{\mathbf{B}} \quad \begin{bmatrix} 0 \\ 0 \\ P_{\mathbf{r}} \\ 0 \end{bmatrix}$$

$$\lambda_r = \ell_{rd} - \ell_{rm}$$

and
$$\overline{k} = \frac{1}{1 - (\ell_{rd} - \ell_{rm})}$$

In order to calculate ℓ_{rd} and ℓ_{rm} we require the vector P_r^{-1} , corresponding to the largest characteristic root λ_r and the eigen vector o P_r .

Because

$$RA^{s} i'A^{s}^{-1} = \frac{\lambda_{r}s}{1 - \lambda_{r}} \qquad 0 \qquad P_{r} \qquad 0 \qquad P-1 i'A^{s}^{-1}$$

which also equals

$$\frac{\lambda_r s}{1 - \lambda_r} \qquad P \qquad \begin{vmatrix} 0 \\ P_r - 1 \\ 0 \end{vmatrix} \qquad \hat{i'} A^{s} - 1$$

It follows that
$$\frac{\lambda_r s}{1 - \lambda_r} P \begin{vmatrix} 0 \\ P_r^{-1} \\ 0 \end{vmatrix} \equiv A^s R$$

we obtain the matrix S as

$$S = P \begin{vmatrix} 0 \\ P_r^{-1} \\ 0 \end{vmatrix} = \frac{1 - \lambda_r}{\lambda_r s} \quad AsR$$

The first row of the left hand side of this expression is:

$$P_{1r} P_{r1}^{-1}$$
 $P_{1r} P_{r2}^{-1}$ $P_{1r} P_{r3}^{-1} \dots P_{1r} P_{rn}^{-1}$

Therefore, if we divide each element of the first row of matrix S by P_{1r} (which is the first element of the eigen vector P_r) we have the vector P_r^{-1} .

The matrix S is generated as a derivative of the coefficient matrix A, because both R and λ_r derive from A, as does the eigen vector P_r corresponding to λ_r . (It is evident that we could equally well divide each element of the second row of S by the second element of the eigen vector P_r , etc.)

Some Numerical Results and Their Economic Interpretation

In the computations of α , k, λ_r , ℓ_{rd} and ℓ_{rm} we use as an illustrative example, the system for Nova Scotia in its 12 x 12 form (1965).

In Table 4.40 we show a procedure for deriving λ_r and \vec{k} by successive transformations of the type defined above.

We note that:

- (a) the principal diagonals of A_t , A_{t2} , A_{t3} , ... A_{ts} are equal to that of A, and those of R_t , R_{t2} , R_{t3} , ... R_{ts} are equal to that of R where $R = (I A)^{-1}$;
- (b) the vector of input multipliers α, derived from the (s-1)th transformation of A and R equals the vector of out multipliers (column sums of inverse R) at the sth transformation of A and R;

- (c) the set of direct input coefficient sums i'A, i'A_t, i'A_t² become ever more uniform (decreasing variance) and eventually converge to λ_r , the largest eigen value of A;
- (d) the set of input multipliers α_0 α_t α_t^2 and output multipliers r_0 r_t r_t^2 become ever more uniform

on successive transformations and converge to the value of the general input-output multiplier $\overline{k} = \frac{1}{1-\lambda_r} \; . \; \text{Convergence is so rapid that the value of} \\ \overline{k} \; \text{and} \; \lambda_r \; \text{are obtained to three decimal places after} \\ \text{three transformations of } A \; \text{and} \; R.$

TABLE 4.40. Effects of Orthogonal Transformations $A_t \leftarrow i'A$ $Ai'A^{-1}$ with Respect To $A \equiv \mathring{J}(I - \hat{\mu}) \mathring{B}$ Illustrative 12 x 12, Nova Scotia, 1965

		Hustra	ilive 12 x	12,NOVa	Scotia, 196.				
	To decade in	Principal d	iagonals	O:	riginal matrix	: A	First tra	insformatio	n to A _t
No.	Industries	A	R – I	u	ı	α	u _t	Гt	$\alpha_{\mathbf{t}}$
1 2 3 4 5 6 7 8 9 10 11 12	Agriculture Forestry Primary fishing Mining Food, textiles Sawmills, pulp and paper Iron, steel, metals, machinery Non-metals, petroleum, chemicals Construction Transportation, communications Distribution All other services Average: u Average r Average α(k) Variance of u, r, α Coefficient of variance	.006097 .000001 0 .001074 .030175 .048236 .050097 .013069 .000823 .078409 .004691 .061455	.012437 .000207 .004861 .003739 .042214 .052948 .056120 .016260 .010565 .102631 .008386 .082648	.345081 .097667 .226290 .176557 .443018 .386179 .282136 .11688 .369623 .312457 .202652 .190334 .2624	1.130259 1.301307 1.234692 1.604698 1.499335 1.153579 1.1486693 1.408220 1.270381 1.257994	1.3315 1.3292 1.3649 1.2930 1.3412 1.3139 1.3167 1.3064 1.3342	.2666 .2520 .2489 .2477 .2731 .2215 .2581 .2367 .2399 .2304 .2521 .2688 .2497	1.3588 1.3337 1.3315 1.3292 1.3649 1.2930 1.3412 1.3139 1.3167 1.3064 1.3342 1.3554 1.3316	1.3456 1.3240 1.3318 1.3289 1.3359 1.3225 1.3220 1.3262 1.3198 1.3301 1.3254 1.3222
		Secon	nd transfor	mation to	A t2	Thi	Third transformation to A t 3		
		u _t 2	r _t	2	α _t 2	u _t 3	r _t 3		α _t 3
1 2 3 4 5 6 7 8 9 10 11	Agriculture Forestry Primary fishing Mining Food, textiles Sawmills, pulp and paper Iron, steel, metals, machinery Non-metals, petroleum, chemicals Construction Transportation, communications Distribution All other services Average: u Average r	.2600 .2444 .2500 .2484 .2519 .2430 .2428 .2461 .2412 .2491 .2452 .2433	1.34 1.33 1.33 1.33 1.33 1.33 1.33 1.33	240 318 289 359 225 220 262 198 301 254 222	1.3292 1.3255 1.3273 1.3242 1.3332 1.3273 1.3279 1.3252 1.3257 1.3250 1.3267 1.3242	.2478 .2456 .2467 .2446 .2509 .2468 .2459 .2454 .2457 .2453 .2466 .2446	1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3	292 255 273 242 332 273 259 252 257 250 267 242	1.3285 1.3253 1.3270 1.3254 1.3279 1.3261 1.3254 1.3255 1.3256 1.3249 1.3249 1.3252
	Average $\alpha(k)$				1.3266				1.3259
	Variance of u, r, α	.00002		00049	.000006	.000002		00006	.000001
	Coefficient of variance %	2.0	0.53	3	0.18	0.67	0.1	8	0.09

In the calculations of Table 4.40 the first approximation $k_{(0)}$ of \overline{k} derives from the set of input multipliers α'_0 . The value of $k_{(0)}$ is 1.3316 (for the 12 x 12 matrix) with variance of .0004 or 1.6%. On the first transformation of A to At we obtain input multipliers α_t and the approximation k_t at 1.3279 with variance .00004 or .53%. On the second transformation of A_t to A_{t2} , we obtain input multipliers α_{t2} and the approximation k_{t2} at 1.3266 with variance of .000006 at .18%. On the third transformation to A_{+3} , we obtain input multipliers α_{t3} and a value of k_{t3} at 1.3259 with variance .000001 (.09%). By projecting the rate of convergence it would seem that k to three decimal places (on 12 x 12 basis) is 1.325. We note that convergence is so rapid that the first approximation obtained directly from A and R as the weighted sum of the input multipliers is correct to three significant figures (two decimal places) at 1.33. We further observe that as iteration proceeds, each element in α' and r' tends to \overline{k} . We also note that each element in the vector $u' = i' \underbrace{ i' A^s A i' A^{s-1}}_{\text{tends to the value of characteristic}}$ tends to the value of characteristic root λ_r as iteration proceeds.

Table 4.41 shows the matrix R As iAs $^{-1}$ (for Nova Scotia 12 x 12) where s is eleven, which approximates P_k , P_k ... P_k where P_k is the eigen vector corresponding to the largest eigen value of A. With eleven iterations we obtain a value of $\overline{k} = 1.325$ from $\overline{k} = i$ P_k; and a value of λ_r of 0.245 from $\lambda_r = \underline{k-1}$;

while the values of ℓ_{rd} and ℓ_{rm} (for the 12 x 12 matrix) are 0.306 and 0.061 respectively.

The input-output multiplier \overline{k} is equal to $\frac{1}{1-\lambda_r}$

where λ_r is the largest eigen value of A, and is a measure of the demand of the production system for domestically produced inputs. As in the case of the Keynesian system, the larger the value of λ_r , the larger the multiplier \overline{k} . Clearly the scalar input-output multiplier \overline{k} , as here defined, quantifies what is often loosely referred to as the "inter-industry" or "Leontief" multiplier, as distinct from the "Keynesian multiplier". At the level of macro-economic systems, where all intermediate transactions are netted out, and output is measured as net income, or "value added", the inter-industry multiplier has no existence or meaning. In analysing situations of partial equilibrium, however, it is exceedingly useful to have a unique measure of sectoral interdependence.

The familiar output multipliers r which derive from $(I-A)^{-1}$ measure gross value of (domestic) production required to produce one dollar of final demand for each of the industry outputs in the system. A value of r_j , for example, for industry j, tells us that there must be total gross outputs of (r-1) to produce the total inputs necessary for the final output of one unit of industry j.

The input multiplier α_j gives us the ratio of the total direct and indirect inputs as a proportion of the total direct input requirements for industry j. Thus α_j tells us the gross value of production required to produce one dollar's worth of the set of inputs directly necessary to operate industry j. To repeat, we assume that we are demanding, from the domestic economy, the set of inputs to industry j as final outputs. We note that the impact in terms of total gross industry-output requirements, of a set of commodities required as direct inputs to any one of the industries in the system, is very much less variable than the effects of a single industry-output required for final demand. By the same logic, the set of input multipliers α_t , deriving from the first transforma-

tion A_t : \leftarrow i'A Ai'A⁻¹ can be interpreted as the ratio of total direct and indirect to direct requirements when the direct inputs required to produce the inputs to industry j are treated as final demand, and so on.

In Table 4.42 we present the set of input multipliers α_0 for each of the four Atlantic Provinces on a 34 sector basis. We note that these first approximation input multipliers, deriving directly from A and R, are remarkably constant, and are almost totally independent of their corresponding direct input coefficients u'. (See scatter diagram of a 33 sector set of direct input coefficients and input multipliers, Nova Scotia, 1965.) The stability of these input multipliers suggests an approximation technique whereby the impact of any set of final expenditures on major primary inputs_such as Gross Domestic Product, household income, employment, etc. can be estimated without direct reference to the input-output models or tables. Before describing this approximation technique, we turn to examine the sensitivity of k to aggregation effects, and the relationship between weak interdependence and the openness of an economy. A comparison of results for the four Atlantic Provinces shows that an economy with a very high import ratio does not necessarily show a lower value of k than another economy with a smaller import ratio.

TABLE 4.41. Matrix RAs $i'As^{-1}$, s = 11Nova Scotia, 1965

	with the section of t				A		
No.		Agri- culture	Forestry	Primary fishing	Mining	Foods and textiles	Sawmills, pulp and paper
110.		1	2	3	4	5	6
1	Agriculture	0.013607	0.013574	0.013589	0.013576	0.013612	0.013585
2	Forestry	0.033137	0.033150	0.033144	0.033149	0.033136	0.033146
3	Primary fishing	0.006315	0.006211	0.006259	0.006217	0.006331	0.006246
4	Mining	0.048711	0.048725	0.048718	0.048725	0.048711	0.048721
5	Foods and textiles	0.007718	0.007654	0.007684	0.007658	0.007719	0.007674
6	Sawmills, pulp and paper	0.061961	0.061972	0.061967	0.061971	0.061960	0.061968
7	Iron, steel, metals, machinery	0.053947	0.053940	0.053944	0.053940	0.053946	0.053942
8	Non-metals, petroleum, chemicals	0.116118	0.116105	0.116111	0.116105	0.116114	0.116108
9	Construction	0.126233	0.126271	0.126253	0.126268	0.126232	0.126259
10	Transportation, communications	0.329959	0.330013	0.329988	0.330010	0.329957	0.329996
11	Distribution	0.088532	0.088532	0.088532	0.088532	0.088531	0.088532
12	All other services	0.439144	0.439223	0.439186	0.439218	0.439135	0.439197
13	Total output	1.325381	1.325369	1.325375	1.325369	1.325383	1.325373
		Iron, steel, metals, machinery	Non- metals, petroleum,	Con- struction	Transpor- tation, communi-	Distri- bution	All other
			chemicals		cations	oution.	services
	27	7	8	9	cations 10	11	services
	27	7		9			
1	Agriculture		8		10	11	12
1 2	Agriculture	0.013572	0.013574	0.013576	0.013574	0.013574	0.013576
	Forestry		8	0.013576 0.033149	0.013574 0.033150	0.013574 0.033150	12 0.013576 0.033149
2	Forestry	0.013572 0.033151	8 0.013574 0.033150 0.006211	0.013576 0.033149 0.006217	0.013574 0.033150 0.006210	0.013574 0.033150 0.006210	0.013576 0.033149 0.006217
2	Forestry Primary fishing Mining	0.013572 0.033151 0.006203	8 0.013574 0.033150	0.013576 0.033149 0.006217 0.048724	0.013574 0.033150	0.013574 0.033150	0.013576 0.033149 0.006217
2 3 4	Forestry	0.013572 0.033151 0.006203 0.048726	8 0.013574 0.033150 0.006211 0.048725	0.013576 0.033149 0.006217	10 0.013574 0.033150 0.006210 0.048725	0.013574 0.033150 0.006210 0.048725	0.013576 0.033149 0.006217 0.048724
2 3 4 5	Forestry Primary fishing Mining Foods, textiles	0.013572 0.033151 0.006203 0.048726 0.007650	8 0.013574 0.033150 0.006211 0.048725 0.007654	0.013576 0.033149 0.006217 0.048724 0.007658	10 0.013574 0.033150 0.006210 0.048725 0.007654	0.013574 0.033150 0.006210 0.048725 0.007654	0.013576 0.033149 0.006217 0.048724 0.007657
2 3 4 5 6	Forestry Primary fishing Mining Foods, textiles Sawmills, pulp and paper	0.013572 0.033151 0.006203 0.048726 0.007650 0.061973	8 0.013574 0.033150 0.006211 0.048725 0.007654 0.061972	0.013576 0.033149 0.006217 0.048724 0.007658 0.061971	10 0.013574 0.033150 0.006210 0.048725 0.007654 0.061972	0.013574 0.033150 0.006210 0.048725 0.007654 0.061972	0.013576 0.033149 0.006217 0.048724 0.007657 0.061971
2 3 4 5 6 7	Forestry Primary fishing Mining Foods, textiles Sawmills, pulp and paper Iron, steel, metals, machinery	0.013572 0.033151 0.006203 0.048726 0.007650 0.061973 0.053940	8 0.013574 0.033150 0.006211 0.048725 0.007654 0.061972 0.053940	0.013576 0.033149 0.006217 0.048724 0.007658 0.061971 0.053941	10 0.013574 0.033150 0.006210 0.048725 0.007654 0.061972 0.053940	0.013574 0.033150 0.006210 0.048725 0.007654 0.061972 0.053940	0.013576 0.033149 0.006217 0.048724 0.007657 0.061971 0.053941
2 3 4 5 6 7 8	Forestry Primary fishing Mining Foods, textiles Sawmills, pulp and paper Iron, steel, metals, machinery Non-metals, petroleum, chemicals	0.013572 0.033151 0.006203 0.048726 0.007650 0.061973 0.053940 0.116104	8 0.013574 0.033150 0.006211 0.048725 0.007654 0.061972 0.053940 0.116105	0.013576 0.033149 0.006217 0.048724 0.007658 0.061971 0.053941 0.116106	10 0.013574 0.033150 0.006210 0.048725 0.007654 0.061972 0.053940 0.116105	0.013574 0.033150 0.006210 0.048725 0.007654 0.061972 0.053940 0.116105	12 0.013576 0.033149 0.006217 0.048724 0.007657 0.061971 0.053941 0.116105 0.126269
2 3 4 5 6 7 8	Forestry Primary fishing Mining Foods, textiles Sawmills, pulp and paper Iron, steel, metals, machinery Non-metals, petroleum, chemicals Construction	0.013572 0.033151 0.006203 0.048726 0.007650 0.061973 0.053940 0.116104 0.126273	8 0.013574 0.033150 0.006211 0.048725 0.007654 0.061972 0.053940 0.116105 0.126270	0.013576 0.033149 0.006217 0.048724 0.007658 0.061971 0.053941 0.116106 0.126268	10 0.013574 0.033150 0.006210 0.048725 0.007654 0.061972 0.053940 0.116105 0.126271	0.013574 0.033150 0.006210 0.048725 0.007654 0.061972 0.053940 0.116105 0.126271	12 0.013576 0.033149 0.006217 0.048724 0.007657 0.061971 0.053941 0.116105 0.126269 0.330010
2 3 4 5 6 7 8 9	Forestry Primary fishing Mining Foods, textiles Sawmills, pulp and paper Iron, steel, metals, machinery Non-metals, petroleum, chemicals Construction Transportation, communications	0.013572 0.033151 0.006203 0.048726 0.007650 0.061973 0.053940 0.116104 0.126273 0.330016	8 0.013574 0.033150 0.006211 0.048725 0.007654 0.061972 0.053940 0.116105 0.126270 0.330013	0.013576 0.033149 0.006217 0.048724 0.007658 0.061971 0.053941 0.116106 0.126268 0.330009	10 0.013574 0.033150 0.006210 0.048725 0.007654 0.061972 0.053940 0.116105 0.126271 0.330013	0.013574 0.033150 0.006210 0.048725 0.007654 0.061972 0.053940 0.116105 0.126271 0.330013	0.013576 0.033149 0.006217 0.048724 0.007657 0.061971 0.053941 0.116105

TABLE 4.42. Input Multipliers, Atlantic Provinces 1965 Model I

lo.		Newfound- land	Prince Edward Island	Nova Scotia	New Brunswick
1	Agriculture	1.249	1.299	1,297	1.307
2	Forestry	1.247	1,207	1.295	1.328
3	Primary fishing	1.273	1.412	1.295	1.313
4	Metal mining .	1,251	-		1.411
5	Coal mining	a=	=	1,368	1.346
6	Non-metals, quarries	1.241	1.413	1.387	1.438
7	Meat, dairy, fruit	1,342	1.461	1.454	1.513
8	Secondary fishing	1.196	1.291	1.319	1.365
9	Miscellaneous food manufacturing, n.e.s.	1.307	1.425	1.441	1.413
0	Beverages	1.290	1.365	1.399	1.402
1	Textiles, clothing	1.302	1,356	1.360	1.397
2	Sawmills, wood manufacturing	1.203	1.335	1.249	1.223
3	Pulp and paper	1.154	1.382	1.324	1.317
ı	Printing	1.272	1.351	1.396	1.409
5	Iron, steel mills		= 1	1.356	_
5	Metal fabrication	1.287	1.348	1.388	1.35
7	Machinery and equipment	1.278	1,337	1.381	1.339
3	Transportation equipment	1.306	1,337	1.396	1,359
)	Electrical equipment	72		1.330	1.360
)	Non-metallic minerals	1.283	1,311	1,325	1.36
1	Petroleum refineries	1.280	14	1.331	1.386
2	Fertilizer, chemicals	1.295	1.337	1.389	1.36
3	Miscellaneous manufacturing, n.e.s.	1.317	1.376	1.408	1.502
1	Construction	1.297	1.318	1.361	1.383
5	Transportation, travel	1.252	1.288	1.278	1.30′
5	Radio, telephone	1.291	1.313	1,337	1.360
7	Electric power, water	1.307	1.324	1.284	1.332
3	Distribution	1.297	1,363	1.350	1.350
9	Auto operation	1.248	1.292	1.271	1.310
)	Finance, real estate	1,275	1.261	1.300	1.32
1	Dwelling services	1.340	1.299	1.438	1.450
2	Hotels, restaurants	1,279	1.319	1.329	1.349
3	Personal services	1.258	1.289	1.291	1.328
1	Business services	1,206	1.277	1.271	1.290
	Average input multiplier	1.262	1.341	1.344	1.362

TABLE 4.43. A Comparison of Multipliers, Atlantic Provinces and Canada¹

Region and dimensions of matrix	Average input multiplier	General input- output multiplier k	Character- istic root λ	l rd	l rm	Import ratio	Household income multiplier
Atlantic region (34 x 34)	1,349	1.319	.242	.301	060	.447	1.442
Newfoundland (31 x 31)	1.262	1.264	.209	.277	068	.533	1.373
Prince Edward Island (29 x 29)	1.341	1.299	.230	.287	068	.587	1.404
Nova Scotia (33 x 33)	1.344	1.312	.238	.303	066	.470	1.428
New Brunswick (33 x 33)	1.362	1.332	.249	.291	042	.470	1.427
Canada (10 x 10)	5 3	1.826	.452	.516	064		
Nova Scotia (12 x 12)	1.332	1.325	.245	.306	061		

¹ Results for the four provinces and for the Atlantic Region are derived from a 34 sector model for 1965; and for Canada from a 10 sector model for 1961.

In Table 4.43 \overline{k} is the input-output multiplier; λ_r the largest eigen value (characteristic root); ℓ_{rd} the measure of interdependence in the absence of import leakages, ℓ_{rm} the (negative) effect of import leakages, m the overall import ratio, (ratio of all imports to Gross Domestic Product) and h is the household income multiplier as measured by the principal diagonal element of the household row and column in Model II, when households are treated as an industry.

We note that Newfoundland exhibits the lowest value of \overline{k} at 1.264, while for Prince Edward Island \overline{k} equals 1.299. The import ratio for Newfoundland was .533, while that of Prince Edward Island was .587. This would indicate that the economy of Prince Edward Island, although more open than that of Newfoundland, was somewhat more integrated — probably with respect to the linkages between the relatively strong agricultural sector and the food processing industries in Prince Edward Island. We note that ℓ_{rd} and ℓ_{rm} for Newfoundland were .277 and .068 respectively, compared with the value of .287 and .063 for Prince Edward Island.

As for Nova Scotia and New Brunswick, each had an import ratio of .470. The general input-output multiplier for Nova Scotia, however, (1.312) was lower than that for New Brunswick (1.332); while Nova Scotia ℓ_{rd} and ℓ_{rm} were .303 and .066 respectively, compared with .291 and .042 for New Brunswick. Once again, the reason lies in the stronger agro-industrial complex of New Brunswick as well as its well developed forestry industry complex.

The input-output multiplier for the Atlantic Region as a whole was 1.319 with values of ℓ_{rd} and ℓ_{rm} of .301 and .060. We note that the input-output multiplier for a region as a whole is not necessarily

higher than that of each of its constituent economies. Thus the value of \overline{k} for New Brunswick exceeds the value of k for the Atlantic Region as a whole. To the degree that component regions of a trading bloc trade with each other, the value of k for the regional trading system as a whole, will of course tend to be larger than the value of \overline{k} for its constituent parts. Indeed, the comparison of scalar measures of interdependence of the units comprising a regional trading bloc, with the corresponding income for the region as a whole might prove a useful quantitative indicator of the degree of complementarity and inter-regional interdependence within the regional system. Clearly a system composed of four economic units, each trading primarily with the rest of the world will exhibit much less overall interdependence than one composed of four units, transacting substantial trade with each other.

Sensitivity of \bar{k} to Aggregation Effects

Next we turn to a brief examination of the sensitivity of \overline{k} and λ_r to aggregation effects. Below we compare results obtained for Nova Scotia (1965) from a 12×12 sectors analysis with those obtained from a 33×33 sector one. We show values of $\overline{k},\,\lambda_r,\,\ell_{rd}$ and ℓ_{rm} and we also show the vector P_k for the four provinces. The values obtained for each of the 12 industries are entered as obtained from a 12×12 system; and as obtained from a 33×33 sector analysis, subsequently aggregated to the corresponding 12 sectors. We observe that \overline{k} is remarkably insensitive to aggregation errors.

Presumably the value of \overline{k} obtained from the 33 sector matrices is more accurate than that derived from a 12 sector model. The difference, however, is small, at 1.0%.

	k	$\lambda_{\mathfrak{r}}$	ℓ_{rd}	l _{rm}
Nova Scotia (33 x 33)	1.312	.238	.303	.066
Nova Scotia (12 x 12)	1.325	.245	.306	.061
Absolute difference	.013	.007	.003	005
Percentage difference	1.0	2.9	1.0	- 7.6

It should be noted, however, that the aggregation errors introduced by the loss of data in the 12×12 matrix, as compared with the 33 x 33 matrix result in substantial differences in the industrial components of \overline{k} , (i.e. individual elements of the eigen vector P_k .)

Below we compare the eigen vector P_k of the 12×12 Nova Scotia matrix with that obtained for the 33×33 Nova Scotia matrix.

Table 4.44 shows the eigen vector for each of the four provinces, on a 33-sector basis. Thus, for every

dollar of domestically produced intermediate goods in Newfoundland, there is a total demand for 34.3 cents of gross output of financial services, 27.8 cents transportation services, and so on. The total production of intermediate goods and services will be \$1.26. We note that the average input multiplier, derived as the weighted sum of input multipliers, yields a fairly close approximation of the general input-output multiplier \overline{k} , except in Prince Edward Island. Evidently the general input-output multiplier is a more accurate measure of interdependence than the average input multiplier, but again, the difference is small.

Comparison of Aggregations of the Vector Pk

No.	Nova Scotia industrial sectors	P _k (12 x 12) matrix	P _k (33 x 33) matrix subsequently aggregated	Absolute differ- ences	Percen- tage differ- ences
					%
1	Agriculture	.0136	.0054	.0082	60.2
2	Forestry	.0331	.0263	.0068	20.5
3	Primary fishing	.0063	.0003	.0060	95.2
4	Mining	.0487	.0448	.0039	8.0
5	Food, textiles	.0077	.0029	.0048	62.3
6	Sawmills, pulp and paper	.0620	.0969	0349	- 56.2
7	Iron, steel, metals, machinery	.0539	.0687	0148	- 27.4
8	Non-metals, petroleum, chemicals	.1161	.1006	.0155	13.3
9	Construction	.1263	.0725	.0538	42.5
10	Transportation and communication	.3300	.3646	0346	- 10.4
11	Distribution	.0885	.0797	.0088	9.9
12	All other services	.4392	.4494	0102	- 2.3
	Total k	1.3254	1.3121	.0133	1.0

TABLE 4.44. Industrial Disaggregation of Linkage Effects – Eigen Vector $P_{\boldsymbol{k}}$

	New- foundland	Prince Edward Island	Nova Scotia	New Brunswick
Agriculture	.0006	.0056	.0054	.0036
Forestry	.0141	.0003	.0263	.0479
Primary fishing	.0001	.0001	.0003	.0000
Metal mining	-	(m.)	-	-
Coal mining	S=	-	.0331	.0138
Non-metals, quarries	.0070	.0038	.0117	.0106
Meat, dairies, fruit	.0000	.0006	.0002	3000.
Fish processing	.0000	.0000	.0001	.0000
Miscellaneous foods, n.e.s.	.0003	.0006	.0022	.0012
Beverages	.0000	.0000	.0000	.0000.
Textiles, clothing	.0002	.0008	.0004	.0004
Sawmills, wood products	.0075	.0066	.0159	.0216
Pulp and paper products	.0045	.0015	.0214	.0299
Printing	.0378	.0724	.0596	.053
ron-steel mills	~ I	-	.0164	.=
Metal fabrication	.0099	.0028	.0281	.019
Machinery and equipment	.0018	.0010	.0029	.002
Transportation equipment	.0006	.0127	.0193	.003
Electrical equipment	c c	- 1	.0020	.007
Non-metal mineral products	.0131	.0019	.0088	.015
Petroleum refining	.0239	5=(.0856	.089
Fertilizer, chemicals	.0037	.0089	.0045	.006
Miscellaneous manufacturing	.0021	.0010	.0017	.002
Construction	.0718	.0843	.0725	.085
Transportation, travel	.2776	.2587	.2569	.280
Radio, telephone, telegraph	.1226	.1020	.1077	.105
Electric power, water	.0313	.0464	.0488	.044
Distribution	.0824	.1091	.0797	.086
Auto operation	.0929	.0944	.0802	.072
Finance, real estate	.3430	.3409	.2215	.238
Owelling services	_	7-1	12-1	:=
Hotels, restaurants	.0345	.0426	.0216	.013
Personal services	.0109	.0165	.0114	.011
Business services	.0703	.0830	.0659	.064
Total \overline{k}	1.2645	1.2987	1.3121	1.332
Average input multiplier k	1.262	1.341	1.344	1.362

Approximation Technique

From an examination of the characteristics of the general input-output multiplier, it may be seen that it is possible to estimate the impact of final expenditures on macro-economic variables, such as income, employment and Gross Domestic Product, by deriving a single scalar parameter relating the indirect income (or employment) generated by a unit of a general set of inputs. Once we have such a parameter, we can obtain a remarkably close approximation to the impact of one dollar of final demand for each commodity (or industry) in the system, simply by multiplying the direct input coefficient by this scalar and adding the result to the direct income (or employment) generated. This scalar parameter is obtained by dividing the sum of the indirect household income generated (per unit of industry output) by the sum of the direct domestically produced intermediate requirements; and similarly for other primary inputs. Thus, in the illustrative example for Nova Scotia, the coefficients for household income and employment are .566 and .126 respectively. In Table 4.45 we present the results for Nova Scotia on a 12 sector basis, and in Table 4.46 the same technique is used on a 71 sector model for the Atlantic Region as a whole.

The advantages of this approximation procedure are considerable. Once the general properties of an economy are known, it is possible to make close estimates of the effect of introducing new industries or activities on major primary inputs without direct reference to input-output inverses. Indeed, these estimates can be further improved with very little trouble by dealing separately with one or two dominant inputs, especially in industries where the intermediate input coefficient is substantial, leaving the rest to be multiplied by a constant factor.

For example, in the 12 x 12 illustration for Nova Scotia, 12 we note that industries 5 (food and textiles) and 6 (wood products) each have a substantial set of intermediate inputs. Thus, in industry 5, the intermediate input coefficient is :443018, and one input alone (i.e., primary fishing) accounts for .199337. In industry 6, the intermediate input coefficient is .386179 and one input alone (i.e., forestry) accounts for .119815. In Table 6 the first estimates of indirect income obtained by using the scalar parameter, were seen to be .251 per unit of final use of food and textile products and .218 for wood products.

TABLE 4.45. Approximation Estimates of Household Income Per Unit of Final Use, Obtained Without
Direct Reference to Input-output Inverses

Nova Scotia, 1965

Industries	Direct inter- mediate inputs	Estimated indirect household income	Actual indirect household income	Direct household income	Actual total household income (3) + (4)	Estimated total household income (2) + (4)	Per- centage error	Ratio (3) ÷ (1)
	1	2	3	4	5	6	7	8
							%	
Agriculture	.345	.195	.179	.433	.612	.628	+ 2.6	.519
Forestry	.098	.055	.052	.712	.764	.767	+ 0.4	.537
Primary fishing	.226	.128	.112	.548	.660	.676	+ 2.4	.496
Mining	.176	.100	.100	.570	.670	.670	- 0.1	.566
Food, textiles	.443	.251	.275	.254	.529	.505	- 4.6	.621
Sawmills, pulp and paper	.386	.218	.245	.359	.605	.577	- 4.5	.636
Iron-steel, machinery	.282	.160	.161	.340	.501	.499	- 0.3	.571
Petroleum, chemicals	.117	.066	.064	.099	.163	.165	+ 1.1	.551
Construction	.369	.209	.197	.380	.577	.589	+ 2.1	.534
Transportation, communications	.312	.177	.167	.448	.616	.625	+ 1.4	.537
Distribution	.203	.115	.117	.613	.730	.727	- 0.4	.579
All other services	.190	.108	.109	.442	.551	.550	- 0.3	.574
Total	3.149		1.782					.566

¹ Calculated at six decimals and rounded to three.

¹² See Table 4.3D.

TABLE 4.46. Approximation Estimates of Employment Per Unit of Final Use Obtained Without Direct Reference to Input-output Inverses¹
Nova Scotia, 1965

Industries	Direct inter- mediate inputs	Estimated indirect employ-ment	Actual indirect employ-ment	Direct employ- ment	Actual total employment (3) + (4)	Estimated total employment (2) + (4)	Per- centage error	Ratio (3) ÷ (1)
	1	2	3	4	5	6	7	8
				- 33.73			%	
Agriculture	.345	.043	.040	.173	.213	.216	1.7	.116
Forestry	.098	.012	.011	.122	.133	.134	0.9	.114
Primary fishing	.226	.029	.025	.190	.215	.219	2.1	.106
Mining	.176	.022	.021	.107	.128	.130	1.3	.116
Food and textiles	.443	.056	.079	.061	.140	.117	- 17.0	.180
Sawmills, pulp and paper	.386	.049	.050	.071	.121	.120	- 1.3	.130
Iron-steel, machinery	.282	.036	.035	.064	.099	.100	1.6	.120
Petroleum, chemicals	.117	.015	.013	.015	.028	.030	4.5	.115
Construction	.369	.047	.041	.082	.123	.128	4.1	.112
Transportation, communications	.312	.039	.035	.096	.131	.136	3.4	.112
Distribution	.203	.026	.024	.153	.177	.178	0.6	.121
All other services	.190	.024	.023	.087	.110	.111	1.3	.119
Totals	3.149		.397					.126

¹ Calculated at six decimal places and rounded to three.

To obtain a better estimate of additional income and employment generated per unit of final use of these outputs, we proceed as follows:

We observe that this simple refinement has reduced the error drastically. Thus in industry 5, estimated household income is now within 0.5% of its actual value

(compared with 4.6%), while estimated employment is within - 3.8% compared with - 17.0% previously. In the case of industry 6, estimated household income is now within 0.4% of its actual value (compared with - 4.5% previously) while estimated employment is within - 0.5% (compared with - 1.3% previously).

	Illustrative 12 x 12	Nova Scotia table
***************************************	Industry 5	Industry 6
Household income		
Income due to predominant input	$.199337 \times .548380 = .109312$	4119815 x .711904 = .085296
Plus:		
Income due to all other direct and in- direct inputs	.243681 + (.226291 x .199337) times .566 = .288789 x .566	.266364 + (.119815 x .097667) times .566 = .278066 x .566
	= .163455	= .157385
Total estimated household income	.272767	.242681
Actual household income	.275273	.245556
Employment		
Employment due to predominant input	.199337 x .190679	.119815 x .121924
	= .038010	= .014609
Plus:		
Employment due to all other direct and indirect inputs	.243681 + (.226291 x .199337) times .126 = .288789 x .126 = .036387	.266364 + (.119815 x .097667) times .126 = .278066 x .126
Total actimated ampleyment		= .035036
Total estimated employment	.074397	.049645
Actual employment	.079742	.050253

Approximation Technique with Simple Adjustment on a 71 x 71 Matrix

In the case of a more disaggregated example of 71 sectors, we have selected ten industries in which inter-

mediates are large and contain predominant single inputs. Below we present the results obtained from making simple adjustments.

Approximation Estimates of Household Income for Per Unit of Final Use, for Selected Industries, with Adjustments to Take Account of Large Single Inputs

Atlantic Region (71 x 71)¹

	Estimated indirect household income	Estimated total income before adjustment	Estimated total income after adjustment	Actual total household income	Per- centage error
					%
Agriculture	.208	.669	.643	.610	5.2
Other fish products	.405	.615	.682	.671	1.5
Clothing	.168	.507	.496	.494	0.5
Sawmills	.312	.643	.696	.696	0.0
Pulp and paper	.293	.498	.533	.527	1.2
Wire products	.186	.517	.518	.519	- 0.3
Auto-truck bodies	.136	.246	.258	.259	- 0.5
Cement	.130	.494	.449	.440	1.8
Fertilizer	.117	.229	.213	.214	- 0.5
Business services	.260	.628	.646	.665	- 2.9

¹ Calculated at six decimal places.

In Table 4.46 we show the results yielded by the unadjusted approximation technique on a detailed 71×71 matrix for the Atlantic Region. We note that the error exceeds 10% in only 3 of the 71 industries. With the simple adjustments demonstrated, it is clear that these estimates could be made more accurate with very little effort.

It should be emphasized that the approximation technique demonstrated here is not intended as a substitute for the use of input-output tables, but as an illustration of the convenient properties of general interdependence deriving from our empirical findings of the relative invariance of the input multipliers α . The approximation technique is practical precisely because

most users of input-output tables know the direct income (employment, tax, etc.) effect of the new activity which is to be treated as a final demand; furthermore, they generally also know the direct income (employment, tax, etc.) effect of its predominant input(s). Indeed, the direct coefficient vector of the activity and that of its predominant inputs, when known, is usually different from the coefficients embodied in the input-output table. This is particularly true where these coefficients wrap up supply (import) effects and technical input effects – as is the case in our system. The user can calculate without reference to input-output tables, the direct impact of an activity and that of its predominant input(s) on major primaries, and subsequently apply the appropriate factor to all the remaining gross value of miscellaneous inputs.

TABLE 4.47. Approximation Estimates of Household Income Per Unit of Final Use, obtained without Direct Reference to Input-output Inverses¹
Atlantic Region 1965

Item No.	Industries	Estimated indirect household income	Actual indirect household income	Direct household income	Actual total household income	Estimated total household income	Per- centage error
							%
1	Agriculture	.235	.176	.434	.610	.669	+ 9.6
2	Forestry	.054	.047	.693	.740	.747	+ 0.9
3	Fishing, shellfish	.139	.122	.493	.616	.633	+ 2.8
4	Fishing, other	.129	.104	.592	.696	.721	+ 3.7
5	Metal mining	.124	.109 .092	.238 .611	.347 .703	.362 .708	+ 4.3 + 0.7
7	Non-metal mining	.107	.092	.324	.417	.431	+ 0.7 + 3.2
8	Quarries	.072	.072	.725	.797	.797	0
9	Meat products	.333	.343	.139	.483	.473	- 2.0
10	Poultry products	.378	.407	.125	.532	.503	- 5.5
11	Dairy products	.323	.340	.205	.546	.529	- 3.1
12 13	Shellfish products	.419	.450	.207	.657	.626	- 4.7
14	Other fish products Fruit and vegetables	.338	.395 .301	.276 .202	.671 .504	.615 .503	- 8.4 - 0.2
15	Feed manufacturers	.175	.183	.134	.317	.309	- 2.5
16	Bakeries	.118	.105	.378	.483	.496	+ 2.7
17	Confectionery	.156	.120	.364	.485	.520	+ 7.3
18	Sugar refineries	.082	.082	.086	.168	.168	- 0.1
19 20	Miscellaneous foods	.169	.172	.155	.327	.324	- 1.0
20	Soft drinks	.186 .139	.147 .147	.358	.506 .286	.545 .278	+ 7.7 - 2.8
22	Breweries	.107	.106	.139	.514	.514	+ 0.1
23	Shoe factories	.073	.076	.405	.482	.479	- 0.5
24	Leather products	.116	.122	.491	.614	.607	- 1.0
25	Cotton mills	.084	.081	.286	.368	.371	+ 0.7
26	Woollen mills	.223	.223	.389	.612	.613	+ 0.1
27 28	Cordage and canvas	.113	.120	.211	.332	.325	- 2.1
29	Clothing	.178 .258	.166 .311	.328 .384	.494 .696	.507 .643	+ 2.6 - 7.6
30	Miscellaneous wood products	.252	.256	.264	.521	.516	- 0.9
31	Furniture	.178	.172	.457	.629	.636	+ 1.0
32	Pulp and paper	.258	.286	.240	.527	.498	- 5.4
33	Paper products	.218	.211	.263	.474	.481	+ 1.5
34	Printing ,	.121	.124	.583	.707	.704	- 0.5
35 36	Iron-steel mills	.230	.222	.345	.567	.575	+ 1.3
37	Iron foundries	.117 .219	.109 .225	.605 .341	.714 .567	.722 .561	+ 1.1 - 1.0
38	Metal fabricating	.180	.187	.339	.526	.520	- 1.2
39	Wire products	.185	.187	.331	.519	.517	- 0.5
40	Machinery and equipment	.118	.121	.470	.591	.588	- 0.5
41	Aircraft and parts	.092	.093	.541	.634	.633	- 0.2
42 43	Autos, truck bodies	.124	.137	.121	.259	.246	- 4.9
44	Railway rolling stock	.284 .106	.286 .109	.181	.468 .594	.466 .590	- 0.4 - 0.6
45	Appliance manufacturing	.100	.107	.392	.500	.495	- 1.0
46	Communications equipment	.089	.088	.370	.458	.459	+ 0.2
47	Electric wire	.092	.099	.141	.241	.234	- 3.0
48 49	Cement	.175	.121	.318	.440	.494	+ 12.1
50	Clay-concrete products	.255	.256 .239	.379	.636 .641	.634 .746	- 0.2 + 0.7
51	Petroleum refining	.060	.063	.060	.123	.120	+ 0.7
52	Fertilizer manufacturing	.133	.118	.096	.214	.229	+ 7.3
53	Paint-varnishes	.116	.118	.286	.405	.402	- 0.6
54	Miscellaneous chemicals	.110	.094	.235	.329	.345	+ 4.
55	Miscellaneous manufacturing	.146	.140	.444	.585	.591	+ 1.0
56	Scrap iron	.297	.244	.0	.244	.297	+ 21.0
57 58	Construction – residential	.151	.166 .223	.434	.601 .561	.585 .548	- 3.0 - 3.4
59	Transportation	.176	.147	.488	.635	.665	+ 4.0
60	Communications	.107	.106	.559	.666	.667	+ 0.
61	Electric power	.145	.136	.256	.393	.401	+ 2.
62	Water and gas	.189	.180	.527	.708	.717	+ 1.3
63	Distribution	.125	.127	.611	.739	.737	- 0.3
64 65	Auto operation	.082	.073	.367	.440 .652	.449	+ 2.0 - 12.9
66	Travel and entertainment	.083	.652 .080	.0	.652	.569 .442	- 12.5 + 0.7
67	Dwelling services	.102	.106	.324	.439	.426	- 0.
68	Hotels, restaurants	.188	.182	.460	.643	.648	+ 0.8
69	Personal services	.079	.076	.777	.853	.857	+ 0.4
70	Business services	.242	.279	.385	.665	.628	- 5.0
71	Services to primary industry	.128	.134	.666	.800	.794	- 0.

¹ Calculated at six decimals and rounded to three.

TABLE 4.48. Approximation Estimates of Employment Per Unit of Final Use, obtained without Direct Reference to Input-output Inverses¹
Atlantic Region 1965

No.	Industries	Indirect employ- ment	Indirect employ- ment	Direct employ- ment	total employ- ment	Estimated total employ- ment	Per- centage error
1	Agriculture	.056	.041	.161	.203	.218	% 73
2	Forestry	.013	.010	.126	.136	.139	7.3 2.6
3	Fishing, shell	.039	.028	.307	.336	.346	3.1
4	Fishing, other	.030	.022	.305	.328	.336	2.5
5	Metal mining	.034	.025	.035	.060	.069	15.1
7	Coal mining	.025	.018 .020	.130 .061	.149 .081	.156 .088	4.4 9.0
8	Quarries	.021	.015	.021	.036	.042	15.3
9	Meat products	.140	.103	.026	.130	.167	28.6
10	Poultry products	.173	.127	.038	.166	.211	27.6
11 12	Dairy products	.134 .313	.099	.046 .063	.145	.180 .377	24.6 28.2
13	Other fish products	.220	.162	.080	.243	.301	24.0
14	Fruit and vegetables	.107	.078	.062	.141	.169	20.1
15	Feed manufacturers	.066	.048	.027	.076	.094	22.9
16 17	Bakeries	.030	.022	.077	.100	.108	8.2
18	Confectionery	.034 .024	.025 .018	.100 .014	.125 .032	.134	7.2 20.3
19	Miscellaneous foods	.051	.037	.033	.070	.084	19.1
20	Soft drinks	.041	.030	.062	.093	.103	11.7
21	Distilleries	.045	.033	.031	.064	.077	18.6
22	Breweries	.029	.021	.032	.054	.062	14.4
23 24	Shoe factories	.022 .037	.016 .027	.133	.150 .190	.156 .200	3.9 5.2
25	Cotton mills	.024	.017	.074	.092	.099	6.9
26	Woollen mills	.084	.062	.109	.172	.194	13.2
27	Cordage and canvas	.037	.027	.043	.071	.081	13.9
28	Clothing	.052	.038	.116	.154	.168	8.9
29 30	Sawmills, sash-door	.083	.061	.087	.148	.170	14.8
31	Miscellaneous wood products Furniture	.070 .051	.052 .037	.056 .108	.108 .146	.127 .159	17.3 9.3
32	Pulp and paper	.077	.057	.036	.093	.114	22.0
33	Paper products	.055	.040	.053	.094	.108	15.6
34	Printing	.033	.024	.100	.125	.133	7.0
35	Iron-steel mills	.061	.045	.056	.101	.118	16.0
36	Iron foundries	.031	.022	.153	.176	.184	4.7
37 38	Structural metal	.062 .054	.045 .039	.065	.110 .103	.127 .117	14.9 13.9
39	Wire products	.052	.038	.059	.097	.111	14.1
40	Machinery and equipment	.035	.025	.084	.110	.119	8.4
41	Aircraft and parts	.026	.019	.121	.140	.147	5.1
42	Autos, truck bodies	.040	.029	.028	.058	.069	18.2
43 44	Railway rolling stock	.085	.062 .023	.039	.101 .121	.124 .129	22.2 6.9
45	Boat and ship building	.031	.023	.075	.098	.107	8.5
46	Communications equipment	.025	.018	.078	.096	.103	6.9
47	Electric wire	.029	.021	.023	.045	.053	17.2
48	Cement	.032	.023	.048	.072	.080	11.8
49 50	Clay-concrete products	.046 .059	.041 .044	.059 .081	.100 .125	.115 .141	14.8 12.7
50 51	Non-metallic products	.039	.044	.005	.125	.024	26.0
52	Fertilizer manufacturing	.032	.023	.019	.043	.051	19.6
53	Paint-varnishes	.033	.024	.043	.068	.077	13.1
54	Miscellaneous chemicals	.024	.018	.032	.051	.057	12.9
55 56	Miscellaneous manufacturing	.042	.030	.090	.121	.132	9.2
56 57	Scrap iron	.072 .047	.053 .034	.0 .089	.053 .124	.072	36.0 10.1
58	Construction – residential	.059	.043	.072	.115	.131	13.5
59	Transportation	.043	.031	.106	.138	.150	8.3
60	Communications	.029	.021	.113	.135	.143	5.8
61	Electric power	.039	.028	.037	.066	.076	15.6
62 63	Water and gas	.049	.036 .026	.056 .160	.092 .186	.105 .196	14.2 5.1
64	Auto operation	.019	.014	.091	.106	.111	4.8
65	Travel and entertainment	.220	.162	.0	.162	.220	36.0
66	Financial services	.021	.016	.063	.079	.084	7.3
67	Dwelling services	.029	.021	.0	.021	.029	36.0
68	Hotels, restaurants	.053	.039	.161	.200	.214	7.1
69 70	Personal services	.021	.016 .054	.253	.269 .126	.275 .145	2.1 15.4
70 71	Services to primary industry	.041	.034	.367	.398	.143	2.7

¹ Calculated at six decimals and rounded to three.



TABLE 4.1. Market Share Coefficients and Import Coefficients Atlantic Region 1965, Model I

$\mathring{\mathbf{J}}, \mathring{\mathbf{M}} \mu$

	Agricultural products	Forestry products	Primary fish	Mining products	Food, textiles
	1	2	3	4	5
Agriculture	1.000000	0,063250	72	-	_
Forestry, fishing	-	0.922411	1.000000		1
Mining	12	7/2	177	1.000000	
Foods, textiles	-	-0		40	0.999950
Manufacturing, all other	92	0.014340	377		0.000050
Construction	:-	40		-	74
7 Transportation, communications, distribution	=		S=5		_
All other services	-	-	12-	===	7/2
Total commodity output	1.000000	1.000000	1.000000	1.000000	1.000000
Total imports	0.209670	0.033986	0.016398	0.186114	0.470040

TABLE 4.2. Input Coefficients of Industries and Final Expenditures Atlantic Region 1965, Model I

$\overset{*}{B},\overset{*}{D},\overset{*}{E}\quad\overset{*}{V_{B}}\overset{*}{V_{D}}\overset{*}{V_{E}}$

		Agri- culture	Forestry, fishing	Mining	Foods, textiles	Manufac- turing, all other	Con- struction	Transpor- tation, communi- cations, distri- bution	All other services	Personal con- sumption
No.		1	2	3	4	5	6	7	8	9
1	Agricultural products	0.016433	0.000432	22	0.108833	0.000071	0.000293	0.000010	_	0.041840
2	Forestry products	0.007729	_	0.002882	0.000019	0.097634	40		==	0.000735
3	Primary fish		-		0.179202		_	-	544	0.002284
4	Mining products	0.007747	0.004279	0.000453	0.000828	0.025471	0.020290	0.000263	0.011387	0.005007
5	Food, textiles	0.131753	0.030604	-	0.064574	0.002138	0.001098	0.001076	0.000599	0.196461
6	Wood, paper products	0.004656	0.012327	0.013180	0.038608	0.043799	0.087467	0.002904	0.020939	0.015419
7	Steel, metal products	0.030570	0.063286	0.108850	0.020356	0.068230	0.136399	0.025167	0.008732	0.049227
8	Non-metals, petroleum, chemicals	0.084540	0.040199	0.026944	0.009834	0.026640	0.090049	0.028763	0.011966	0.032455
9	Construction	0.028808	0.010747	0.017837	0.007085	0.008050	0.000673	0.013106	0.049467	:14
10	Transportation, communications	0.032810	0.033310	0.048002	0.060445	0.065617	0.080723	0.087400	0.045835	0.059978
11	Distribution	0.023790	0.013561	0.011918	0.022233	0.028581	0.050343	0.014356	0.004591	0.133644
12	All other services	0.113683	0.038223	0.076467	0.034033	0.043513	0.070200	0.121429	0.066022	0.253870
13	Total intermediate input	0.482519	0.246970	0.306534	0.546050	0.409743	0.537535	0.294474	0.219538	0.790920
14	Taxes	0.030230	0.047707	0.030088	0.011038	0.010107	0.021535	0.029695	0.102097	0.126626
15	Subsidies	- 0.032393	- 0.003649	- 0.000333	-	~ 0.001235	-	- 0.023859	- 0.005342	17-
16	Non-competitive imports	0.007456	0.003518	0.043649	0.129267	0.180835	0.043085	0.012397	0.065122	0.082454
17	Wages and salaries	0.100660	0.355568	0.308982	0.186750	0.241504	0.314644	0.432988	0.217514	322
18	Unincorporated business income	0.315481	0.193581	0.026356	0.011349	0.010409	0.028353	0.071124	0.080665	-
19	Profit, rent, interest	0.018826	0.089470	0.184934	0.090590	0.108009	0.036330	0.091734	0.215444	32
20	Depreciation	0.077222	0.066835	0.099791	0.024956	0.040627	0.018518	0.091448	0.104963	2744
21	Household income	0.434489	0.622687	0.346246	0.241223	0.276486	0.360724	0.539302	0.413120	_
22	Education and hospitalization	_		-	-	_			-	0.007562
23	Provincial revenue	- 0.003086	0.047328	0.021756	0.007762	0.007127	0.012917	0.029016	0.036616	0.054598
24	Municipal revenue	0.029401	0.000991	0.008884	0.006811	0.007044	0.005626	0.007528	0.068833	0.003803
25	Federal revenue	- 0.028001	0.000324	0.018249	0.019250	0.022381	0.012041	0.005505	0.022709	0.060664
26	Import leakage	0.007456	0.014865	0.198541	0.153948	0.236590	0.052639	0.032727	0.134221	0.082454
27	Total primary inputs	0.517481	0.753030	0.693466	0.453950	0.590257	0.462465	0.705526	0.780462	0.209080
28	Factor incomes	0.434967	0.638619	0.520271	0.288689	0.359920	0.379328	0.595845	0.513622	
29	Gross Domestic Product	0.510025	0.749512	0.649817	0.324682	0.409417	0.419380	0.693128	0.715340	0.126626
30	Employment	0.161965	0.218046	0.055108	0.059423	0.049264	0.076411	0.093128	0.087507	0.120020
31	Total output	1,000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

TABLE 4.1. Market Share Coefficients and Import Coefficients Atlantic Region 1965, Model I

*, * μ

Wood, paper products	Steel, metal products	Non-metals, petroleum, chemicals	Con- struction	Transportation, communications	Distri- bution	All other services	
6	7	8	9	10	11	12	No.
72	=	≆	=		÷	0,012874	1
0.002549	-		-	= 1	.~	-	2
0.77	.=.	- 1	-	-	3.75	V.=	3
0.000068	:	0,000029		E	3.6	78	4
0.997383	1.000000	0.999970				-	5
S# 1	-	==	1.000000	=	92	_	6
-		-	1 -	1.000000	1.000000	1,00	7
= 1	=	i≆: 1	(41)	14 t	12	0.987126	8
1.000000	1.000000	1.000000	1.000000	1,000000	1.000000	1.000000	9
0.478066	0.809016	0.277840		1942	24	0.002098	10

TABLE 4.2. Input Coefficients of Industries and Final Expenditures Atlantic Region 1965, Model I

$\overset{*}{B},\overset{*}{D},\overset{*}{E} \quad \overset{*}{V}_{B}\overset{*}{V}_{D}\overset{*}{V}_{E}$

Capital formation	Inventory change	Federal govern- ment	Federal govern- ment	Pro- vincial govern-	Municipal govern-	Educa- tion	Hos- pital-	Total domestic		Exports		Total inter- mediate	Total demand	
		defence	civil	ment	ment		ization	demand	Foreign	Canada	Total	demand	demand	
10	11	12	13	14	15	16	17	18	19	20	21	22	23	No.
_	2.561022 3.504091	0.000391	0.000864	0.000670	0.000903 0.001422	_	0.008808	0.023548 - 0.001247	0.023981	0.065128	0.039060	0.012549	0.019806	1
***	3,304091		0.000014	-	0.001422	-	0.000061	0.001247	0.034601	0.013247	0.026775	0.017157	0.010310	2
-	- 3.731853	0.010297	0.000839	0.000490	0.019822	0.002193	0.003789	0.001330	0.276518	0.160702	0.237407	0.019495	0.009892 0.030846	3
	- 0,706122	0.010297	0.000839	0.000490	0.019822	0.002193		0.003911	0.276318	0.169793 0.240522	0.237407	0.010553 0.014207	0.030846	5
_	- 0.727341	0.010044	0.003243	0.002097	0.008330	0.028363	0.041840	0.012693	0.359350	0.240322	0.278428	0.014207	0.078360	6
0.387102	- 0.205363	0.003049	0.002149	0.014228	0.008330	0.020303	0.013233	0.012093	0.036837	0.136333	0.117774	0.051813	0.047317	7
0.367102	0.305564	0.012116	0.005410	0.021000	0.042193	0.012492	0.033832	0.021535	0.002925	0.237090	0.005770	0.032730	0.026351	8
0.612898	0.303304	0.088546		0.459158	0.256865	0.173336	0.132793	0.155510	0.002723	0.010000	0.003770	0.034832	0.020331	9
-	_	0.012665		0.065285	0.104239	0.033890		0.045762	0.038263	0.099516	0.060710	0.064266	0.056084	10
		0.015383	145.0	0.009152	0.012967	0.014835	0.032757	0.081791	0.009755	0.025297	0.015451	0.021369	0.046366	11
_	_	0.034683	1	0.037717	0.092854	0.031693	0.045160	0.157826	0.000010	0.023147	0.008489	0.072575	0.102375	12
1.000000	1.000000	0.306658		0.617353	0.564230	0.317511	0.254772	0.721759	1.000000					
1.000000	1,000000	0.300036	0.363413	0.01/333	0.304230	0.31/311	0.334773	0.721739	1.000000	1.043567	1.015965	0.369662	0.582124	13
_	_	-	2.5	=	-	-	=	0.073728	-	152	-	0.039069	0.049907	14
_	-	-	=:	-	5 55	_	=	_	-	- 0.043567	- 0.015966	- 0.007856	- 0.005326	15
_	-	0.009684	0.006007	0.013505	0.039963	0.033638	0.096389	0.055453	12	722	72	0.071154	0.057526	16
-	-	0.683658	0.608578	0.208859	0.297440	0.576850	0.523633	0.131696	i e	-	-	0.286156	0.192693	17
_	-	-	-		-	-	7	-	-	-	-	0.061132	0.029256	18
-	-	-	*	0.160284	0.098367	0.072000	0.025205	0.017365	-		-	0.114673	0.062229	19
_	-	=	==:	=	- 1	72	-	(20)		9.77	1,77	0.066010	0.031590	20
-	-	0.683658	0.608578	0.268105	0.330787	0.599361	0.530916	0.137787	-	-	_	0.395003	0.247362	21
_	_				- 1	= =	100	0,004403	1,55	-	177	=	0.001864	22
_	-	-	-	-	_	-	-	0.031789	72	-	-	0.021109	0.023559	23
_	_	-	==1	=	_	70	120	0.002214	155		= 1	0.020654	0.010821	24
_	_	0.000604	0.00000	0.114545	-	0.000100	0.114214	0.035321	-	- 0.043567	- 0.015966	0.013815	0.019997	25
_	_	0.009684	0.006007	0.114543	0.104983	0.083128	0.114311	0.066726		-		0.113747	0.082682	26
-	_	0.693342	0.614585	0.382647	0.435770	0.682489	0.645226	0.278241	-	- 0.043567	- 0.015966	0.630338	0.417876	27
_	_	0.683658	0.608578	0.369142	0.395807	0.648850	0.548838	0.149060	12	- 2	_	0.461960	0.284178	28
_	-	0.683658	0.608578	0.369142	0.395807	0.648850	0.548838	0.222788	· ·	- 0.043567	- 0.015966	0.559183	0.360349	29
-	-	0.113910	0.116630	0.041614	0.063506	0.142297	0.199310	0.029612	~	-		0.091221	0.056191	30
		1.000000												

TABLE 4.3 A. Coefficient Matrix of Commodity Requirements for Commodities Without Import Leakage Atlantic Region 1965, Model I

** BJ

Agricultural products 1 0.016433 0.007729	Forestry products 2 0.001439	Primary fish	Mining products	Food, textiles	Wood, paper products
		3	4	5	
	0.001430			,	6
0.007747 0.131753 0.004656 0.030570 0.084540 0.028808 0.032810 0.023790 0.113683 0.482519	0.001889 0.004803 0.036594 0.012293 0.061288 0.042809 0.011850 0.033742 0.014424 0.043072 0.264202	0.000432 0.004279 0.030604 0.012327 0.63286 0.040199 0.010747 0.033310 0.013561 0.038223 0.246970	0.002882 0.000453 0.013180 0.108850 0.026944 0.017837 0.048002 0.011918 0.076467 0.306534	0.108828 0.000024 0.179193 0.000829 0.064571 0.038608 0.020359 0.009835 0.007085 0.060445 0.022233 0.034033	0.000079 0.097378 0.000012 0.025415 0.002215 0.043719 0.068215 0.026673 0.008057 0.065534 0.028542 0.043499
Steel, metal products	Non-metals, petroleum, chemicals	Con- struction	Transportation, communications	Distri- bution	All other services
7	8	9	10	11	12
0.000071 0.097634 0.025471 0.002138 0.043799 0.068230 0.026640 0.008050 0.065617 0.028581 0.043513 0.449743	0.000074 0.097631 0.000005 0.025470 0.002140 0.043799 0.068229 0.026639 0.008050 0.065616 0.028581 0.043513	0.000293	0.000010	0.000010	0.000212 0.000100 0.011340 0.002288 0.020729 0.009013 0.012901 0.049201 0.045668 0.004838 0.066635
	0.004656 0.030570 0.084540 0.028808 0.032810 0.023790 0.113683 0.482519 Steel, metal products 7 0.000071 0.097634 0.025471 0.002138 0.043799 0.068230 0.026640 0.008050 0.065617 0.028581	0.004656	0.004656 0.012293 0.012327 0.030570 0.061288 0.063286 0.084540 0.042809 0.040199 0.028808 0.011850 0.010747 0.032810 0.033742 0.033310 0.133683 0.043072 0.038223 0.482519 0.264202 0.246970 Steel, metal products Non-metals, petroleum, chemicals Construction 7 8 9 0.000071 0.000074 0.000293 0.075634 0.097631 0.000075 0.025471 0.025470 0.020290 0.002138 0.002140 0.001098 0.043799 0.043799 0.087467 0.068230 0.068229 0.136399 0.026640 0.026639 0.090049 0.068617 0.068616 0.080723 0.028581 0.028581 0.050343 0.043513 0.043513 0.070200	0.004656 0.030570 0.084540 0.084540 0.028808 0.032810 0.032810 0.023790 0.014424 0.113683 0.043072 0.482519 0.264202 0.246970 0.38223 0.076467 0.482519 0.264202 0.246970 0.306534 0.013850 0.010747 0.033310 0.048002 0.019180 0.011918 0.011918 0.011918 0.011918 0.038223 0.076467 0.306534 Steel, metal products Non-metals, petroleum, chemicals Con-struction Transportation, communications 7 8 9 10 0.000071 0.097634 0.097634 0.097634 0.0025471 0.002138 0.002140 0.0043799 0.043799 0.068230 0.068230 0.068229 0.136399 0.028763 0.0286640 0.026640 0.026640 0.026639 0.008050 0.008050 0.008050 0.008050 0.008581 0.0028581 0.0028581 0.0028581 0.003333 0.0070200 0.121429	0.004656 0.030570 0.084540 0.084540 0.028808 0.028808 0.033742 0.033710 0.033742 0.033710 0.01747 0.017837 0.007085 0.032810 0.033742 0.033310 0.048002 0.011918 0.022233 0.113683 0.043072 0.12429 0.264202 0.246970 0.306534 0.306534 0.306534 0.306534 0.306534 0.306534 0.306534 0.546043 Distribution Distribution Steel, metal products Non-metals, petroleum, chemicals Construction Struction Transportation, communications Distribution 7 8 9 10 11 0.000071 0.097634 0.097631 0.002138 0.002138 0.002140 0.002138 0.002140 0.068230 0.068230 0.068230 0.068229 0.136399 0.028763 0.008050 0.008050 0.008050 0.008050 0.008581 0.0028581 0.002343 0.007200 0.0121429 0.0121429 0.013106 0.013106 0.013106 0.013106 0.013106 0.013106 0.013106 0.013106 0.013106 0.013106 0.013106 0.013106 0.013106 0.008731 0.0087400 0.028763 0.0087400 0.028763 0.0087400 0.028763 0.0087400 0.028763 0.0087400 0.028881 0.028881 0.028881 0.028881 0.028881 0.050343 0.0121429 0.01121429 0.121429

TABLE 4.3 B. Coefficient Matrix of Commodity Requirements for Commodities with Import Leakage Atlantic Region 1965, Model I

 $(\mathbf{I} - \hat{\mu}) \overset{**}{\mathbf{BJ}}$

	(1 p) 20				
Agricultural products	Forestry products	Primary fish	Mining products	Food, textiles	Wood, paper products
1	2	3	4	5	6
0.012987 0.007467 0.006305 0.069824 0.002430 0.005838 0.061052 0.028808 0.032810 0.023790 0.113445 0.364755	0.001137 0.001825 0.003909 0.019393 0.006416 0.011705 0.030915 0.011850 0.033742 0.014424 0.042981 0.178298	0.000342 	0.002784 0.000369 0.006879 0.020789 0.019458 0.017837 0.048002 0.011918 0.076307 0.204343	0.086010 0.000023 0.176254 0.000675 0.034220 0.020151 0.003888 0.007103 0.007085 0.060445 0.022233 0.033962 0.452049	0.000062 0.094069 0.000012 0.022685 0.001174 0.022818 0.013028 0.019262 0.008057 0.065534 0.028542 0.043408 0.316651
Steel, metal products	Non-metals, petroleum, chemicals	Con- struction	Transportation, communications	Distri- bution	All other services
7	8	9	10	11	12
0.000056 0.094316 0.020730 0.001133 0.022860 0.013031 0.019238 0.008050 0.065617 0.028881 0.043422 0.317033	0.000058 0.094313 0.000005 0.020730 0.001134 0.022860 0.013031 0.019238 0.008050 0.065616 0.028581 0.043422 0.317037	0.000231 	0.000008	0.000008	0.000167 0.0009696 0.009230 0.001212 0.010819 0.001721 0.049201 0.045668 0.00483 0.066495
	0.012987 0.007467 0.006305 0.069824 0.002430 0.005838 0.061052 0.028808 0.032810 0.023790 0.113445 0.364755 Steel, metal products 7 0.000056 0.094316 0.020730 0.001133 0.022860 0.013031 0.019238 0.008050 0.065617 0.028581	Agricultural products 1 2 0.012987 0.001137 0.001825 0.006305 0.003909 0.069824 0.019393 0.002430 0.006416 0.005838 0.011705 0.068808 0.011850 0.033742 0.023808 0.013445 0.042981 0.364755 0.178298 Steel, metal products 7 8 0.000056 0.000058 0.094316 0.094315 0.094316 0.094316 0.094316 0.094316 0.022860 0.01134 0.022860 0.013031 0.010331 0.01238 0.019238 0.008050 0.028581 0.	Agricultural products Forestry products Primary fish 1 2 3 0.012987 0.001137 0.000342 0.007467 0.001825 —— 0.006305 0.003909 0.003483 0.016219 0.002430 0.006416 0.006434 0.005838 0.011705 0.012087 0.061052 0.039915 0.029930 0.028808 0.011850 0.010747 0.032810 0.033742 0.033310 0.028808 0.011850 0.010747 0.032810 0.023790 0.014424 0.013561 0.113445 0.042981 0.038143 0.364755 0.178298 0.163356 Steel, metal products Non-metals, petroleum, chemicals Construction 7 8 9 0.000056 0.000058 0.00231 0.004313 0.000133 0.001134 0.000182 0.022860 0.022860 0.045652 0.013031 0.013031 0.026050 0.019238 0.019238 0.019238 0.065617 0.022860 0.045652 0.013031 0.013031 0.026050 0.008050 0.008050 0.008051 0.008051 0.008051 0.0028581 0.028581 0.050343 0.050343 0.050343 0.050343 0.050343 0.050343 0.050343 0.050343 0.050343 0.050343 0.050343 0.050343 0.050343 0.050343 0.050343 0.001342 0.0043422 0.043422 0.070053	Agricultural products Forestry products Primary fish Mining products 1 2 3 4 0.012987 0.001137 0.001825	Agricultural products Forestry products Primary fish Mining products Food, textiles 1 2 3 4 5 0.012987 0.001137 0.000342 0.007467 0.001825 0.000673 0.003909 0.003483 0.000369 0.000675 0.006305 0.003909 0.003483 0.000369 0.000675 0.069824 0.019393 0.016219 0.034220 0.002430 0.006416 0.006434 0.006879 0.020151 0.005838 0.011705 0.012087 0.020789 0.003888 0.061052 0.030915 0.029030 0.019458 0.007103 0.028808 0.011850 0.010747 0.017837 0.007085 0.028808 0.033742 0.033310 0.048002 0.060445 0.023790 0.014424 0.013561 0.011918 0.022233 0.113445 0.042981 0.038143 0.076307 0.033962 0.364755 0.178298 0.163356 0.204343 0.452049 Steel, metal products Non-metals, petroleum, chemicals Construction communications on the petroleum, chemicals Construction communications on the petroleum, communications on the

TABLE 4.3 C. Coefficient Matrix of Industry Requirements for Industry Outputs without Import Leakage Atlantic Region 1965, Model I

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	Agri- culture	Forestry, fishing	Mining	Foods, textiles	Manufac- turing, all other	Con- struction	Transportation, communications, distribution	All other services
	1	2	3	4	5	6	7	8
Agriculture	0.018385	0.000924	0.001167	0.109272	0.006806	0.001197	0.001573	0.000850
Forestry, fishing	0.007141	0.000031	0.002692	0.179318	0.090170	0.000223	0.000007	0.000053
Mining	0.007747	0.004279	0.000453	0.000828	0.025471	0.020290	0.000263	0.011387
Foods, textiles	0.131749	0.030605	0.000002	0.064574	0.002142	0.001107	0.001077	0.000601
Manufacturing, all other	0.119869	0.115781	0.148980	0.068701	0.139954	0.313683	0.056826	0.041582
Construction	0.028808	0.010747	0.017837	0.007085	0.008050	0.000673	0.013106	0.049467
Transportation, communications, distribution	0.056600	0.046871	0.059920	0.082678	0.094197	0.131066	0.101755	0.050426
All other services	0.112219	0.037731	0.075483	0.033595	0.042953	0.069296	0.119866	0.065172
Total output	0.482519	0.246970	0.306534	0.546050	0.409743	0.537535	0.294474	0.219538

TABLE 4.3 D. Coefficient Matrix of Industry Requirements for Industry Outputs with Import Leakage Atlantic Region 1965, Model I

 $\mathring{\mathbf{J}}(\mathbf{I} - \hat{\mu}) \mathring{\mathbf{B}}$

			J (Ι μ) D				and the second second	
	Agri- culture	Forestry, fishing	Mining	Foods, textiles	Manufac- turing, all other	Con- struction	Transportation, communications, distribution	All other services
	1	2	3	4	5	6	7	8
Agriculture	0.014920	0.000833	0.001158	0.086452	0.006580	0.001133	0.001568	0.000848
Forestry, fishing	0.006893	0.000016	0.002585	0.176332	0.087056	0.000116	0.000004	0.000028
Mining	0.006305	0.003483	0.000369	0.000674	0.020730	0.016514	0.000214	0.009268
Foods, textiles	0.069822	0.016220	0.000001	0.034222	0.001135	0.000587	0.000571	0.000318
Manufacturing, all other	0.069422	0.047534	0.047147	0.031089	0.056422	0.136610	0.027089	0.021209
Construction	0.028808	0.010747	0.017837	0.007085	0.008050	0.000673	0.013106	0.049467
Transportation, communications, distribution	0.056600	0.046871	0.059920	0.082678	0.094197	0.131066	0.101755	0.050426
All other services	0.111984	0.037652	0.075324	0.033524	0.042863	0.069151	0.119614	0.065035
Total output	0.364755	0.163356	0.204343	0.452056	0.317033	0.355850	0.263922	0.196599

TABLE 4.3 E. Inter-industry Flow Matrix Atlantic Region 1965, Model I

*B

				, ,					
	Agri- culture	Forestry, fishing	Mining	Foods, textiles,	Manu- turing, all other	Con- struction	Transportation, communications, distribution	All other services	Total
	1	2	3	4	5	6	7	8	9
					thousands	of dollars			
Agriculture	3,348.6	174.7	339.9	56,288.8	5,506.2	882.0	1,594.9	848.1	68,983.2
Forestry, fishing	1,300.7	5.9	784.1	92,370.8	72,947.1	164.3	7.5	53.2	167,633.7
Mining	1,411.0	808.6	132.1	426.5	20,605.8	14,956.7	267.1	11,362.6	49,970.3
Foods, textiles	23,996.5	5,782.8	0.5	33,263.5	1,732.5	815.9	1,091.9	599.5	67,282.9
Manufacturing, all other	21,832.7	21,876.8	43,397.9	35,389.3	113,222.1	231,226.9	57,604.1	41,491.5	566,041.3
Construction	5,247.0	2,030.6	5,196.0	3,649.6	6,512.5	496.0	13,285.2	49,359.9	85,776.7
Transportation, communications, distribution	10,309.0	8,856.4	17,454.8	42,589.2	76,205.3	96,613.2	103,148.9	50,316.9	405,493.6
All other services	20,439.4	7,129.3	21,988.2	17,305.4	34,748.8	51,080.8	121,507.0	65,030.5	339,229.3
Total	87,884.9	46,665.1	89,293.4	281,282.9	331,480.1	396,235.8	298,506.6	219,062.2	1,750,410.0

TABLE 4.4. Direct and Indirect Requirements for Commodities Per Unit of Commodity Output for Final Use Atlantic Region 1965, Model I

 $R_c = INV (I - (I - \hat{\mu}) \mathring{B} \mathring{J})$

	Agricultural products	Forestry products	Primary fish	Mining products	Food, textiles	Wood, paper products
	1	2	3	4	5	6
Agricultural products Forestry products Primary fish Mining products Food, textiles Wood, paper products Steel, metal products Non-metals, petroleum, chemicals Construction Transportation, communications Distribution All other services Total output	1.019727 0.016296 0.013157 0.010535 0.074648 0.009901 0.009761 0.071622 0.039774 0.063939 0.033182 0.148625 1.511161	0.002985 1.007491 0.003650 0.006073 0.020706 0.009842 0.013708 0.035931 0.016718 0.049815 0.019010 0.061105 1.247028	0.001876 0.005427 1.003044 0.005495 0.017274 0.009569 0.013930 0.033597 0.015154 0.048208 0.017782 0.054898	0.000073 0.008345 0.000076 1.002940 0.000429 0.010597 0.022915 0.025121 0.024371 0.065949 0.016646 0.097672	0.091199 0.006292 0.184274 0.004213 1.045500 0.025749 0.008963 0.024261 0.018116 0.092577 0.032827 0.077663 1.611630	0.000512 0.101164 0.000640 0.023369 0.003558 1.027071 0.016813 0.028648 0.015623 0.090768 0.035411 0.074227
	Steel, metal products	Non-metals, petroleum, chemicals	Con- struction	Transportation, communications	Distri- bution	All other services
	7	8	9	10	11	12
Agricultural products Forestry products Primary fish Mining products Food, textiles Wood, paper products Steel, metal products Non-metals, petroleum, chemicals Construction Transportation, communications Distribution All other services	0.000502 0.101415 0.000621 0.023617 0.003520 0.027116 1.016821 0.028635 0.015624 0.090877 0.035456 0.074276	0.000505 0.101412 0.000626 0.023616 0.003521 0.027116 0.016821 1.028635 0.015624 0.090877 0.035456 0.074276	0.000401 0.014751 0.000241 0.021004 0.001360 0.051361 0.029971 0.074163 1.010068 0.113312 0.058790 0.107874	0.000134 0.003759 0.000177 0.002844 0.001005 0.005346 0.006905 0.027296 0.022659 1.110373 0.019333 0.150648	0.000134 0.003759 0.000177 0.002844 0.001005 0.005346 0.006905 0.027296 0.110374 1.019333 0.150648	0.000342 0.003550 0.000280 0.011738 0.001586 0.015362 0.004432 0.016333 0.055101 0.063780 0.010372 1.087906
Total output	1.418477	1.418483	1.483295	1.350478	1.350479	1.270781

TABLE 4.6. Competitive Imported Input Requirements Per Unit Commodity Delivered for Final Use Atlantic Region 1965, Model I

 $\hat{\boldsymbol{\mu}}_{\mathbf{B}}^{\mathbf{**}}[\mathbf{I}-(\mathbf{I}-\hat{\boldsymbol{\mu}})\stackrel{\mathbf{**}}{\mathbf{B}}]^{-1}$

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	Agricultural products	Forestry products	Primary fish	Mining products	Food, textiles	Wood, paper products						
	1	2	3	4	5	6						
Agricultural products Forestry products Primary fish Mining products Food, textiles Wood, paper products Steel, metal products Non-metals, petroleum, chemicals Construction Transportation, communications Distribution All other services Total output	0.005234 0.000573 0.000219 0.002409 0.066207 0.009069 0.041347 0.027555 - 0.000000 - 0.000000 0.000000 0.0000012 0.152927	0.000792 0.000263 0.000061 0.001389 0.018364 0.009015 0.058065 0.013824 0.000000 0.000000 0.000000 0.000128 0.101901	0.000498 0.000191 0.000051 0.001256 0.015321 0.008765 0.059007 0.012926 0.000000 - 0.000000 0.000115 0.098130	0.000019 0.000294 0.000001 0.000672 0.000381 0.009706 0.097066 0.009665 0.000000 0.000000 0.000000 0.000000 0.000205	0.024195 0.000221 0.003072 0.000963 0.040355 0.023584 0.037967 0.00934 0.000000 0.000000 0.000000 0.000163 0.139855	0.000136 0.003559 0.000011 0.005390 0.003156 0.024795 0.071220 0.011022 0.000000 0.000000 0.000000 0.000056 0.119444						
	Steel, metal products	Non-metals, petroleum, chemicals	Con- struction	Transportation, communications	Distri- bution	All other services						
	7	8	9	10	11	12						
Agricultural products Forestry products Primary fish Mining products Food, textiles Wood, paper products Steel, metal products Non-metals, petroleum, chemicals Construction Transportation, communications Distribution All other services Total output	0.000133 0.003568 0.000010 0.005401 0.003122 0.024837 0.071252 0.011017 0.000000 0.000000 0.000000 0.000005 0.000156	0.000134 0.003568 0.000010 0.005400 0.003123 0.024837 0.071252 0.011017 0.000000 0.000000 0.000000 0.000156	0.000106 0.000519 0.000004 0.004803 0.001206 0.047044 0.126958 0.028533 - 0.000000 - 0.000000 0.000227	0.000036 0.000132 0.000003 0.000650 0.000891 0.004897 0.029249 0.010502 - 0.000000 0.000000 0.000000 0.000317	0.00036 0.000132 0.000650 0.000851 0.004897 0.029249 0.010502 - 0.000000 0.000000 0.000317	0.000091 0.000125 0.000005 0.002684 0.001407 0.014070 0.018775 0.006284 0.000000 0.000000 0.000000						

TABLE 4.7. Direct and Indirect Requirements for Industry Output Per Unit Industry Output delivered for Final Use Atlantic Region 1965, Model I

$$\mathbf{R}_{\mathbf{I}} = [\mathbf{I} - \overset{*}{\mathbf{J}} (\mathbf{I} - \hat{\mu}) \overset{*}{\mathbf{B}}] - 1$$

	Agri- culture	Forestry, fishing	Mining	Foods, textiles	Manufac- turing, all other	Con- struction	Transportation, communications, distribution	All other services
	1	2	3	4	5	6	7	8
Agriculture	1.022671	0.002925	0.001859	0.092601	0.007873	0.002723	0.002311	0.001425
Forestry, fishing	0.028209	1.008073	0.007798	0.190147	0.094234	0.013974	0.003656	0.003271
Mining	0.010533	0.005494	1.002939	0.004211	0.023616	0.021002	0.002844	0.011753
Foods, textiles	0.074646	0.017275	0.000431	1.045502	0.003522	0.001365	0.001006	0.000635
Manufacturing, all other	0.091440	0.057124	0.058705	0.058978	1.073933	0.155515	0.039565	0,035 403
Construction	0.039774	0.015154	0.024371	0.018116	0.015624	1.010067	0.022659	0.055301
Transportation, communications, distribution	0.097114	0.065987	0.082593	0.125402	0.126330	0.172096	1.129704	0.073551
All other services	0.146708	0.054190	0.096413	0.076662	0.073318	0.106482	0.148707	1.085992
Total output	1.511092	1.226217	1.275105	1.611618	1.418448	1.483222	1.350452	1.2 67631

TABLE 4.8A. Direct and Indirect Primary Input Requirements Per Unit Industry Output delivered for Final Use Atlantic Region 1965, Model I

$$\mathbf{\mathring{V}}_{\mathbf{B}}[\mathbf{I} - \mathbf{\mathring{J}}(\mathbf{I} - \hat{\mu}) \mathbf{\mathring{B}}]^{-1}$$

фг

		QB						
	Agri- culture	Forestry, fishing	Mining	Foods, textiles	Manufac- turing, all other	Con- struction	Transportation, communications, distribution	All other services
	1	2	3	4	5	6	7	8
Taxes	0.053045	0.056932	0.044024	0.036075	0.027910	0.040701	0.049957	0.115178
Subsidies	- 0.036448	- 0.005709	- 0.002980	- 0.007169	- 0.005339	- 0.005013	- 0.027886	- 0.007669
Non-competitive imports	0.046840	0.021371	0.062843	0.154685	0.203095	0.081872	0.032104	0.081039
Wages and salaries	0.238725	0.422579	0.391509	0.364396	0.377177	0.465033	0.540778	0.299201
Unincorporated business income	0.350039	0.206496	0.043487	0.094230	0.047909	0.055220	0.094922	0.096190
Profit, rent, interest	0.082324	0.117276	0.221823	0.149294	0.157213	0.097530	0.141754	0.249128
Depreciation	0.112503	0.082904	0.121268	0.068617	0.072519	0.055211	0.121676	0.124722
Household income	0.636169	0.714288	0.462426	0.534435	0.472109	0.561640	0.694306	0.525089
Education and hospitalization		157	0.77	. V= :		- 3	Ge (=
Provincial revenue	0.008343	0.052457	0.028846	0.024021	0.019183	0.024169	0.039035	0.043286
Municipal revenue	0.042395	0.005966	0.016784	0.016808	0.014209	0.015693	0.019251	0.076022
Federal revenue	- 0.020606	0.003733	0.022513	0.021641	0.026893	0.019346	0.010762	0.026714
Import leakage	0.068224	0.042503	0.230136	0.194607	0.275571	0.114495	0.068276	0.161958
Total primary	0.847029	0.901849	0.881974	0.860128	0.880484	0.790553	0.953306	0.957 790
Factor incomes	0.671088	0.746351	0.656819	0.607921	0.582297	0.617782	0.777454	0.644520
Gross Domestic Product	0.800189	0.880478	0.819131	0.705443	0.677388	0.708681	0.921202	0.876751
Employment	0.209744	0.238857	0.081169	0.146032	0.100186	0.121140	0.164174	0.112181

TABLE 4.8B. Direct and Indirect Requirements for Industry Output Per Unit Commodity Output Delivered for Final Use Atlantic Region 1965, Model I

$R_I \stackrel{*}{J} \text{ or } \stackrel{*}{J} R_C$

	Agricultural products	Forestry products	Primary fish	Mining products	Food, textiles	Wood, paper products
	1	2	3	4	5	6
Agriculture Forestry, fishing Mining Foods, textiles Manufacturing, all other Construction Transportation, communications, distribution All other services	1.022671 0.028214 0.010535 0.074647 0.091493 0.039774 0.097121 0.146712	0.067495 0.932995 0.006073 0.020706 0.073902 0.016718 0.068824 0.060318	0.002926 1.008075 0.005495 0.017275 0.057149 0.015154 0.065990 0.054192	0.001859 0.007800 1.002940 0.000431 0.058724 0.024371 0.082595 0.096414	0.092597 0.190143 0.004213 1.045449 0.059047 0.018116 0.125404 0.076663	0.007866 0.096572 0.023569 0.003629 1.071292 0.015623 0.126179 0.073271
	Steel, metal products	Non-metals, petroleum, chemicals	Con- struction	Transportation, communications	Distribution	All other services
	7	8	9	10	11	12
Agriculture Forestry, fishing Mining Foods, textiles Manufacturing, all other Construction Transportation, communications, distribution All other services	0.007873 0.094236 0.023617 0.003522 1.073955 0.015624 0.126333 0.073320	0.007875 0.094239 0.023616 0.003553 1.073923 0.015624 0.126333 0.073320	0.002723 0.013978 0.021004 0.001365 0.155570 1.010068 0.172102 0.106485	0.002311 0.003658 0.002844 0.001006 0.039586 0.022659 1.129706 0.148708	0.002311 0.003658 0.002844 0.001006 0.039886 0.022659 1.129706 0.148708	0.014573 0.003593 0.011738 0.001588 0.036137 0.055101 0.074152 1.073898

TABLE 4.9. Direct and Indirect Primary Input Requirements Per Unit Commodity Output Delivered for Final Use Atlantic Region 1965, Model I

$$\overset{*}{\mathbf{V}}_{\mathbf{B}} \begin{bmatrix} \mathbf{I} - \overset{*}{\mathbf{J}} (\mathbf{I} - \hat{\boldsymbol{\mu}}) \overset{*}{\mathbf{B}} \end{bmatrix} - 1 \overset{*}{\mathbf{J}}$$

$$\overset{*}{\mathbf{Q}}_{\mathbf{B}}$$

	Agricultural products	Forestry products	Primary fish	Mining products	Food, textiles	Wood, paper products
	1	2	3	4	5	6
Taxes Subsidies Non-competitive imports Wages, salaries Unincorporated business income Profit, rent, interest Depreciation Household income	0.053046	0.056271	0.056932	0.044024	0.036075	0.027986
	- 0.036448	- 0.007648	- 0.005709	- 0.002981	- 0.007169	- 0.005340
	0.046850	0.025593	0.021376	0.062846	0.154691	0.202633
	0.238744	0.410308	0.422588	0.391516	0.364403	0.377299
	0.350042	0.213302	0.206497	0.043488	0.094228	0.048317
	0.082332	0.115642	0.117280	0.221826	0.149297	0.157113
	0.112506	0.084629	0.082905	0.121270	0.068618	0.072547
	0.636192	0.705886	0.714299	0.462434	0.534439	0.472738
Education, hospitalization Provincial revenue Municipal revenue Federal revenue Import leakage	0.008344	0.049190	0.052457	0.028847	0.024021	0.019268
	0.042395	0.008388	0.005966	0.016785	0.016808	0.014188
	- 0.020604	0.002526	0.003733	0.022514	0.021642	0.026835
	0.068238	0.047479	0.042509	0.230141	0.194615	0.274976
Total primary	0.847073	0.898097	0.901869	0.881990	0.860144	0.880554
Factor incomes	0.671117	0.739253	0.746365	0.656829	0.607928	0.582726
	0.800222	0.872504	0.880494	0.819143	0.705452	0.677917
	0.209749	0.235029	0.238859	0.081171	0.146032	0.100544
	Steel, metal products	Non-metals, petroleum, chemicals	Con- struction	Transportation, communications	Distribution	All other services
	7	8	9	10	11	12
Taxes Subsidies Non-competitive imports Wages, salaries Unincorporated business income Profit, rent, interest Depreciation Household income Education, hospitalization	0.027911	0.027911	0.040702	0.049958	0.049958	0.114378
	- 0.005339	- 0.005339	- 0.005013	- 0.027886	- 0.027886	- 0.008039
	0.203099	0.203098	0.081882	0.032108	0.032108	0.080601
	0.377184	0.377183	0.465052	0.540785	0.540785	0.298427
	0.047910	0.047911	0.055222	0.094923	0.094923	0.099459
	0.157216	0.157215	0.097538	0.141757	0.141757	0.246982
	0.072521	0.072521	0.055214	0.121678	0.121678	0.124565
	0.472118	0.472119	0.561664	0.694315	0.694315	0.526523
Provincial revenue Municipal revenue Federal revenue Import leakage	0.019183	0.019183	0.024170	0.039035	0.039035	0.042836
	0.014209	0.014209	0.015693	0.019251	0.019251	0.075589
	0.026894	0.026894	0.019347	0.010763	0.010763	0.026105
	0.275576	0.275573	0.114509	0.068281	0.068281	0.160754
Total primary	0.880502	0.880501	0.790598	0.953323	0.953323	0.956373
Factor incomes Gross Domestic Product Employment	0.582307	0.582307	0.617812	0.777465	0.777465	0.644867
	0.677398	0.677398	0.708715	0.921214	0.921214	0.875771
	0.100188	0.100189	0.121146	0.164175	0.164175	0.113438

TABLE 4.10A. Direct and Indirect Commodity Requirements of Final Expenditure Categories
Atlantic Region 1965, Model I

$$[I - (I - \hat{\mu}) \overset{**}{BJ}] - 1 [(I - \hat{\mu}) \overset{*}{D} \overset{*}{E}]$$

	Personal consumption	Capital formation	Inventory change	Federal governme defence	nt government	Provincial government	Municipal government
	1	2	3	4	5	6	7
Agricultural products Forestry products Primary fish Mining products Food, textiles Wood, paper products Steel, metal products Non-metals, petroleum, chemicals Construction Transportation, communications Distribution All other services	0.043355 0.007724 0.022008 0.009380 0.112118 0.017162 0.013939 0.039101 0.022332 0.113384 0.146100 0.321376	0.007724 0.016536 0.022008 0.000193 0.009380 0.014618 0.112118 0.001093 0.017162 0.033483 0.039101 0.047537 0.022332 0.620223 0.113384 0.076164 0.146100 0.038653		0.000 0.005 0.001 0,011 0.005 0.009 0.026 0.017 0.092 0.032 0.032	0071 0.00588 043 0.00040 575 0.00644 914 0.00230 010 0.01429 2250 0.02423 965 0.02328 821 0.23985 1139 0.05885 0013 0.02481	1 0.008879 0.000356 0.011097 5 0.002019 4 0.032470 9 0.018881 4 0.042199 8 0.467850 0.129592 7 0.038621	0.001198 0.00871; 0.000744 0.02363; 0.004244 0.02056; 0.017834 0.03834; 0.26811; 0.15600; 0.03263; 0.150099
	Education	Hospital- ization		otal nestic		Exports	
		ization	de	mand	Foreign	Canada	Total
	8	9		10	11	12	13
Agricultural products Forestry products Forestry products Primary fish Mining products Food, textiles Wood, paper products Steel, metal products Non-metals, petroleum, chemicals Construction Transportation, communications Distribution All other services	0.00011: 0.00567: 0.00010! 0.00659: 0.00056: 0.02522: 0.01009: 0.02454! 0.17840: 0.06357: 0.02731:	5 0.00 0 0.00 5 0.00 2 0.02 5 0.01 1 0.01 8 0.02 7 0.13 2 0.05 1 0.04	9210 4248 7313 4099 6085 2695 3942 9028 2839 3997 6734	0.024792 0.007041 0.013120 0.011734 0.067013 0.020665 0.026880 0.037254 0.171269 0.098510 0.099230 0.218448	0.043633 0.081078 0.037749 0.294332 0.214144 0.387090 0.053815 0.031194 0.019570 0.122062 0.038134 0.086655	0.088721 0.057257 0.050415 0.176023 0.286025 0.154640 0.263082 0.040744 0.021639 0.186584 0.054706 0.118463	0.060758 0.072036 0.042559 0.249397 0.241444 0.298804 0.133299 0.034821 0.020356 0.146558 0.044429

TABLE 4.10B. Direct and Indirect Industry Requirements of Final Expenditure Categories Atlantic Region 1965, Model I

$$[I - \mathring{J}(I - \hat{\mu})\mathring{B}] - 1\mathring{J}][(I - \hat{\mu})\mathring{D}:\mathring{E}]$$

	Personal consumption	Capital formation	Inventory change	Federal government defence	Federal government civil	Provincial government	Municipal government
	1	2	3	4	5	6	7
Agriculture Forestry, fishing Mining Foods, textiles Manufacturing, all other Construction Transportation, communications, distribution All other services Total output	0.047981 0.029177 0.009380 0.112114 0.070272 0.022332 0.259484 0.317238	0.002251 0.015531 0.014618 0.001097 0.174711 0.620223 0.114817 0.070683	2.256548 3.100860 - 3.010588 - 0.172087 0.022758 0.053194 0.106740 0.165067 2.522491	0.00190 0.00574 0.01157 0.00591 0.05317 0.09282 0.05515 0.05450	0.005868 0.006446 0.002307 0.061863 0.239858 0.083669 0.050137	0.002746 0.008629 0.011097 0.002022 0.093591 0.467850 0.168213 0.101793	0.003681 0.008836 0.023632 0.004248 0.076812 0.268118 0.188639 0.148166
	Education	Hospital- ization		tal estic		Exports	
		ization	den	and	Foreign	Canada	Total
	8	9	1	0	11	12	13
riculture		99 0.00 15 0.00 15 0.00 15 0.02 17 0.13 13 0.09	9025 17313 4100 2755 19028 16837	0.028050 0.019667 0.011734 0.067012 0.084848 0.171269 0.197741 0.215635	0.049877 0.113522 0.294332 0.214160 0.472258 0.019570 0.160196 0.085540	0.093867 0.103624 0.176023 0.286022 0.458895 0.021639 0.241291 0.116937	0.066584 0.109763 0.249397 0.241454 0.467183 0.020356 0.190996 0.097465
Total output	0.40488	0.41	5326	0.795956	1.409453	1.498297	1.443196

TABLE 4.10C. Indirect Primary Input Requirements of Final Expenditure Categories Atlantic Region 1965, Model I

$$\overset{*}{\mathbf{V}_{\mathbf{B}}}\,[\mathbf{I}\,\,\widehat{}\,\,\overset{*}{\mathbf{J}}\,\,(\mathbf{I}\,\,\widehat{}\,\,\widehat{}\,\,\overset{*}{\mathbf{B}}\,]\,\,\widehat{}\,\,\overset{*}{\mathbf{J}}\,[(\mathbf{I}\,\,\widehat{}\,\,\widehat{}\,\,\widehat{}\,\,\overset{*}{\mathbf{D}}\,:\,\overset{*}{\mathbf{E}}\,]$$

 $\overset{*}{Q}_{B}$

	Q_{B}							
	Personal consumption	Capital formation	Inventory change	Feder governi defen	ment	Federal government civil	Provincial government	Municipal government
	1	2	3	4		5	6	7
Taxes	0.045648	0.027009	0.14506	2 0.0	10485	0.013954	0.027260	0.028570
Subsidies	- 0.009636	- 0.003467	- 0.08686	- 0.00	01759	- 0.002429	- 0.004797	- 0.005546
Non-competitive imports	0.052908	0.065194	- 0.10744	0.0	19171	0.026439	0.046593	0.039069
Wages, salaries	0.244394	0.312903	0.47171	0.0	84722	0.142253	0.271936	0.228427
Unincorporated business income	0.067715	0.037386	1,25351	7 0.0	13590	0.019401	0.037266	0.037313
Profit, rent, interest	0.115956	0.071399	- 0.20268	0.03	29155	0.035837	0.067527	0.072878
Depreciation	0.069685	0.039200	0.10577	4 0.0	16481	0.021116	0.040480	0.044227
Household income	0.367790	0.379131	1.97863	0.1	10311	0.176771	0.338308	0.297207
Education, hospitalization	-	See	-		4.5	-	-	
Provincial revenue	0.022242	0.016231	0.08295	0.0	05739	0.008233	0.015976	0.015864
Municipal revenue	0.026697	0.010668	0.05412	0.0	05269	0.006004	0.011766	0.014024
Federal revenue	0.011470	0.013845	- 0.11494	7 0.0	04125	0.005980	0,011133	0.009763
Import leakage	0.088787	0.090547	- 0.52746	4 0.0	29919	0.038467	0.068601	0.063852
T	0.504671	0.540622	1 57007		71045	0.256530	0.406264	0.444037
Total primary	0.586671	0.549623	1.57907	2 0.1	71845	0.256570	0.486264	0.444937
Factor incomes	0.428066	0.421687	1.52254	2 0.1	27467	0.197491	0.376729	0.338618
Gross Domestic Product	0.533762	0.484429	1.68651	5 0.1	52674	0.230132	0.439671	0,405868
Employment	0.087797	0,081653	0.89891	0.0	24169	0.038677	0.074078	0.065709
	Education	Hospital		domestic			Exports	
	Education	lization	de	mand	F	oreign	Canada	Total
	8	9		10		11	12	13
Taxes	0.013964	0.01	5371	0.035312		0.036828	0.040443	0.038201
Subsidies	- 0.002636			- 0.006959		- 0.006990	- 0.010426	- 0.008295
The Environmental Control of the Con	0.024061		5208	0.048670		0.135103	0.140244	0.137056
-	0.127598		5918	0.232860		0.384502	0.401642	0.391012
	0.018766		3021	0.050924		0.071663	0.089543	0.078454
* sneoszatowa	0.036396		0492	0.090512		0.169772	0.167180	0.168788
Profit, rent, interest	0.021674		4271	0.053659		0.089332	0.092261	0.090445
Depreciation	0.161825		6790	0.325627		0.505296	0.548374	0.521657
Household income		0.10		0.323027		0.303290	0.346374	0.521057
Education, hospitalization	0.000024	0.00	9496	0.018070		0.024694	0.035408	0.024993
Provincial revenue	0.008034		8496	0.018070		0.024684	0.025498	
Municipal revenue	0.006474		7644	0.019297		0.016183	0.019594	0.017479
Federal revenue	0.005491		5414	0.010672		0.021764	0.020639	0.021337
Import leakage	0.036324	0.03	8510	0.077652		0.222952	0.214522	0.219750
Total primary	0.239823	0.25	1125	0.504977		0.880211	0.920888	0.895660
Factor incomes	0.182759	0.18	9432	0.374295		0.625937	0.658365	0.638253
			5015	0.456007		0.745107	0.780643	0.758604
Gross Domestic Product	0.215762	0.22	5917	0.456307		0.745107	0.760045	01/50001

TABLE 4.11. Transformation of Final Expenditure Flows into Primary Inputs (Indirect Impact Only) Atlantic Region 1965, Model I

$$\overset{*}{\mathbf{V}}_{\mathbf{B}}\mathbf{R}_{\mathbf{I}}\overset{*}{\mathbf{J}}[(\mathbf{I}-\hat{\mu})\overset{*}{\mathbf{D}}\mathbf{y}+\overset{*}{\mathbf{E}}_{\mathbf{X}}]$$

*QB

- Mariana and Carlos		Q _B						
	Personal consumption	Capital formation	Inventory change	Feder governn defen	nent	Federal government civil	Provincial government	Municipal government
	1	2	3	4		5	6	7
				thousands o	f dolla	rs		***************************************
Taxes	111,324.1	16,467.9	- 295.	3 2,	172.3	3,014.9	7,959.0	2,150.4
Subsidies	- 23,500.8	- 2,114.1	176,	-	364.5	- 524.8	- 1,400.6	- 417.5
Non-competitive imports	129,030.9	39,750.0	218.	3,	971.8	5,712.6	13,603.7	2,940.7
Wages, salaries	596,021.1	190,783.0	- 960.	17,	552.9	30,736.3	79,396.9	17,193.4
Unincorporated business income	165,141.1	22,795.0	- 2,552.	2,	815.5	4,1 91.9	10.880.7	2,808.5
Profit, rent, interest	282,790.9	43,533.3	412	6,	040.4	7,743.1	19,715.7	5,485.5
Depreciation	169,945.5	23,901.0	- 215	3,	414.6	4,562.5	11,818.8	3,328.9
Household income	896,954.6	231,164.0	- 4,028.	3 22,	854.4	38,194.6	98,775.8	22,370.5
Education, hospitalization	- 1	3.55	335		-	-	-	_
Provincial revenue	54,242.5	9,896.5	- 168.	1,	188.9	1,778.8	4,664.4	1,194.0
Municipal revenue	65,107.8	6,504.8	110,	2 1,	091.7	1,297.2	3,435.3	1,055.6
Federal revenue	27,971.6	8,441.7	234.)	854.6	1,292.1	3,250.4	734.9
Import leakage	216,530.8	55,208.2	1,073	6,	198.7	8,311.5	20,029.5	4,806.1
Total primary	1,430,753.0	335,116.2	- 3,214.	35,	603.0	55,436.6	141,974.3	33,490.0
Factor incomes	1,043,953.3	257,111.1	- 3,099.	3 26,	408.7	42,671.4	109,993.3	25,487.4
Gross Domestic Product	1,301,722.0	295,365.9	- 3,433.	31,	631.2	49,724.0	128,370.5	30,549.3
Employment	214,116.4	49,785.8	- 1,830.	. 5,	007.3	8,357.0	21,628.5	4,945.8
	Education	Hospital		otal nestic			Exports	
		ization		nand	F	oreign	Canada	Total
	8	9		10		11	12	13
Т		i .	ï	housands of	dollar 	1	Ï	
Taxes	2,885.2		228.8	147,907.3		22,176.8	- 14,914.0	37,090.9
Subsidies	- 544.7			- 29,147.7		- 4,209.3	- 3,844.7	- 8,054.0
Non-competitive imports	4,971.2	· ·	555.1	203,854.6		81,354.9	51,717.9	133,073.0
Wages, salaries	26,363.0	1	258.2	975,343.9		231,535.8	148,113.8	379,649.7
Unincorporated business income	3,877.2		338.1	213,295.9		43,153.3	33,020.7	76,173.9
Profit, rent, interest	7,519.7		371.4	379,112.6		102,231.4	61,651.2	163,882.8
Depreciation	4,478.1		519.3	224,753.4		53,793.0	34,023.3	87,816.4
Household income	33,434.8	24,1	.84.7 1	,363,904.0		304,274.2	202,224.3	506,498.5
Education, hospitalization	(-		-			122	-	77.
Provincial revenue	1,659.8		231.9	75,688.0		14,863.8	9,402.8	24,266.6
Municipal revenue	1,337.7	· ·	.08.4	80,828.2		9,745.0	7,225.8	16,970.8
Federal revenue	1,134.5	1	85.0	44,698.8		13,105.6	7,610.9	20,716.5
Import leakage	7,504.9	5,5	84.0	325,247.4		134,254.8	79,109.4	213,364.3
Total primary	49,549.8	36,4	113.2 2	,115,120.0		530,036.8	339,596.7	869,633.4
Factor incomes	37,759.9	27,4	167.7	567,751.0		376,920.7	242,785.8	619,706.4
Gross Domestic Product	44,578.6	32,7	58.0 1	911,265.0		448,681.3	287,878.4	736,559.8
Employment	7,341.1	5,4	192.7	314,844.5		69,092.6	48,010.6	117,103.1



APPENDIX I

OUTPUT AND SUPPLY FLOWS AND INPUT AND DEMAND FLOWS, 1965



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MODEL 1 NFLD., 1965 - OUTPUT AND SUPPLY FLOWS J,M (\$'000)

_		AGRIC, PRODUCTS	FORESTRY PRODUCTS	PRIMARY FISH	METALS	NONMETALS, QUARRIES	MEAT,DAIRY & FRUIT	SEC, FISH PRODUCTS	MISC, FOOD PRODUCTS	S.DRINKS, DIST,BREW	TEXTILES, CLOTHING
		1	2	3	4	5	6	7	8	9	10
1	AGRICULTURE	10059.9	55.0								
2	FORESTRY		25634.0			***					
3	PRIMARY FISHING		**	28698.0	**	**	***		***		122
4	METAL MINING)(1):		153111.3	S	***		**		-
5	NONMETAL, QUARRIES		**			16314.2	***		**		
6	MEAT, DAIRY, FRUIT		7.7			**	4168.3	40051	940		
7 8	SECONDARY FISHING					** *	797.9	42851.1	10070 7		
9	MISC. FOODS,NES S.DRINK,DIST,BREW		***			200	1173		10070.7	100242	
10	TEXTILES, CLOTHING						117.3			10824.3	1100.3
11	SAWMILLS, WOOD PR		417.8	 							1190.3
12	PULP-PAPER & PR		417.0								••
13	PRINTING					225		9			**
14	METAL FABRIC								22/		-
15	MACH. & EQUIPT		44			220					-
16	TRANSP. EQUIPT					1225					
17	NONMET.MINERAL PR					4					
18	PETR,FERT,PNT,SOAP					-			##-		-
19											
20	MISC. MANUF					 -			77.		: ***:
21	CONSTRUCTION					- 			**		
22	TRANSP,TRAVEL,ENT					100			753		(***)
23	RADIO,TEL,TELEG								**		**
24	E.POWER, WATER, GAS					177			***		
25	DISTRIBUTION					(1			***		
26	AUTO OPERATION					800			***		
27 28	FINANCE, R.E DWELLING SERVICES				••		••		***		
29	HOTELS, REST.			 		-			***		
30	PERSONAL SERVICES										***
31	BUSINESS SERVICES										
						2.00			•		
32	TOTAL OUTPUT	10059.9	26106.8	28698.0	153111.3	16314.2	5083.5	42851.1	10070.7	10824.3	1190.3
33	IMPORTS - NS	1425.0		1243		675.6	3179.3	500.0	1579.0	300.0	400.6
34	IMPORTS - NB	474.6	20.0	-	22	300.0	1051.6	50.0	4834.2	440	
35	IMPORTS - PEI	1721.3	44	5 44 5		-	3202.3	0.5	74257		157.7
36	IMPORTS - NFLD	**	1 22				122		÷	**	
37	IMPORTS - RES	4607.8	483.0	-	-	22	33583.5	797.9	7029.8	2263.0	30199.6
18	TOTAL IMPORTS	8228.7	503.0	(22)		975.6	41016.7	1348.4	13443.0	2563.0	30757.9
19	TOTAL SUPPLY	18288.6	26609.8	28698.0	153111.3	17289.8	46100.2	44199.5	23513.7	13387.3	31948.2
40	TOTAL INTER.DEM	1384.8	21995.8	20401.0		4176.2	1137.8	317.8	4178.1	69.3	2637.0
41	TOTAL DOM FIN DEM	15250.9	-46.2	2297.0	5466.5	175.2	44962.4	3459.7	19299.4	13318.0	29191.2
42	TOTAL EXPORTS	1652.9	4660.2	6000.0	147644.7	12938.4	**	40422.0	36.2	.55.0.0	120.0
											0.0
43	TOTAL DEMAND	18288.6	26609.8	28698.0	153111.2	17289.8	46100.2	44199.5	23513.7	13387.3	31948.2

		SAWMILLS, WOOD PR	PULP-PAPER & PROD.	PRINTING	FABRIC. METAL PROD	MACH. & EQUIPT.	TRANSP. EQUIPT.	NONMET. MINERAL PR	PETR,FERT, PAINT,SOAP		MISC, MFG, PROD.
		11	12	13	14	15	16	17	18	19	20
1	AGRICULTURE						355		: 45		
2	FORESTRY						155		355		
3	PRIMARY FISHING								3,000		
4	METAL MINING						••		· **		
5	NONMETAL, QUARRIES								- ***		
6	MEAT, DAIRY, FRUIT) 4.				
7	SECONDARY FISHING								-		
8	MISC. FOODS,NES								5.4		
.9	S.DRINK,DIST,BREW								5.6		
10	TEXTILES, CLOTHING			 							
11	SAWMILLS, WOOD PR		75227.3						: 		
12	PULP-PAPER & PR		13221.3	3978.1		22			7.55 7.22		
13 14	PRINTING METAL FABRIC			3976.1	4683.9	55.8					
15	MACH. & EQUIPT.			F22	4003.7	1673.1					
16	TRANSP. EQUIPT.			522	190	1075.1	340.3				
17	NONMET.MINERAL PR			722	U20		340.5	6776.6	724		
18	PETR, FERT, PNT, SOAP			922	122		125		10016.6		
19	TETR,TERT,TV1,50AL				:22		722		10010.0		
20	MISC. MANUF										627.8
21	CONSTRUCTION			-	7		-				
22	TRANSP,TRAVEL,ENT								-		
23	RADIO, TEL, TELEG			1.77	75						
24	E.POWER, WATER, GAS			275	/==		155				
25	DISTRIBUTION				:**:				***		
26	AUTO OPERATION			955	100						
27	FINANCE.R.E.				199		2 27 2		5 55 .		
28	DWELLING SERVICES			200	: **		177		**		
29	HOTELS, REST			3 77	: ***				(**		
30	PERSONAL SERVICES		***	966	i -1		1999				
31	BUSINESS SERVICES		1.00	1.98	: **e .		**		;***		
32	TOTAL OUTPUT	4179.4	75227.3	3978.1	4683.9	1728.9	340.3	6776.6	10022.2		627.8
33	IMPORTS - NS	1300.3	368.0	380.0	871.0	122	1027.0	126.8	8492.0		196.1
34	IMPORTS - NS	843.8	338.1	64.9	256.3	374.9	6.1	53.5	2154,4		230.9
35	IMPORTS - PEI	043.0	336.1	04.5	20.5	374.2	30.0	33.3	2154,4		230.9
36	IMPORTS - NFLD		722	922	20,3		30.0	-	22		720
37	IMPORTS - RES		4366.9	2148.5	12728.4	70017.1	34520.1	8981.1	18929.8		150.0
38	TOTAL IMPORTS	21992.8	5073.0	2593.4	13876.2	70391.9	35583.2	9161.4	29576.2	<u></u>	577.0
				•							
39	TOTAL SUPPLY	26172.2	80300.2	6571.5	18560.1	72120.8	35923.5	15938.0	39598.4		1204.8
40	TOTAL INTER.DEM		4955.0	2718.2	18187.3	28845.1	6436.9	15234.5	25244.5		544.0
41	TOTAL DOM.FIN.DEM		1613.0	3853.3	372.7	43275.6	29486.6	-97.0	14077.2		660.7
42	TOTAL EXPORTS	730.5	73732.2	:55	(2			800.6	276.6		5 8.5
43	TOTAL DEMAND	26172.0	80300.1	6571.5	18560.0	72120.7	35923.5	15938.1	39598.3		12047
43	TOTAL DEMAND	26172.8	0U.JUU. I	05/1.5	19200.0	/ 4 1 40. /	33743.3	13736.1	37376.3		1204.7

MODEL 1 NFLD., 1965 - OUTPUT AND SUPPLY FLOWS J,M (\$'000)

		CON- STRUCTION	TRANSP, TRAVEL,ENT	RADIO,TEL, TELEG.	ELEC.POWER WATER,GAS	DISTRIBUTA	AUTO OPERATION	FINANCE, R.E.	DWELLING SERVICES	HOTELS, REST.	PERSONAL SERVICES
		21	22	23	24	25	26	27	28	29	30
1	AGRICULTURE								730.0		
2	FORESTRY			827X					750.0		
3	PRIMARY FISHING			1.5							
4	METAL MINING							**			
5	NONMETAL, QUARRIES										
6	MEAT, DAIRY, FRUIT			**							
7	SECONDARY FISHING			: == :							
8	MISC. FOODS,NES										
9	S.DRINK,DIST,BREW										
10	TEXTILES,CLOTHING										
11	SAWMILLS, WOOD PR			:							
12	PULP-PAPER & PR										
13	PRINTING										
14	METAL FABRIC							••			
15	MACH. & EQUIPT										
16 17	TRANSP. EQUIPT NONMET.MINERAL PR							-			
18	PETR, FERT, PNT, SOAP										
19	FEIR, FERI, FINI, SOAF			-							
20	MISC. MANUF			-							
21	CONSTRUCTION	186306.0									
22	TRANSP.TRAVEL.ENT		118063.0	520				022			
23	RADIO, TEL, TELEG			12700.8				22			
24	E.POWER, WATER, GAS			.2700.6	26247.7						
25	DISTRIBUTION					101476.9					
26	AUTO OPERATION					##.	34204.6				
27	FINANCE,R.E							38970.2			
28	DWELLING SERVICES								39318.7		
29	HOTELS,REST			-57		77.				14135.0	
30	PERSONAL SERVICES										19962.0
31	BUSINESS SERVICES					200	***	35			***
32	TOTAL OUTPUT	186306.0	118063.0	12700.8	26247.7	101476.9	34204.6	38970.2	40048.7	14135.0	19962.0
33	IMPORTS - NS					22					9384
34	IMPORTS - NB	**			**		**:				122
35	IMPORTS - PEI					**					-
36	IMPORTS - NFLD			**		**		944	440	322	
37	IMPORTS - RES					**	¥=	1561.0	(20)	542	
38	TOTAL IMPORTS	**				¥#.	**	1561.0	**		22
39	TOTAL SUPPLY	186306.0	118063.0	12700.8	26247.7	101476.9	34204.6	40531.2	40048.7	14135.0	19962.0
40	TOTAL INTER.DEM	20935,9	53115.2	7722.2	17110.1	19010.8	12134.7	36530:0		3073.0	1245.8
41	TOTAL DOM, FIN. DEM	165370.1	44052.4	4978.6	9137.5	82466.1	22069.9	4001.2	40048,7	11062.0	18716.2
42	TOTAL EXPORTS	103370.1	20895.4	4778.0	7137,3	02400.1	22007.7	4001.2	70070.7	11002.0	10/10.2
							251	-	77.1	1273	
43	TOTAL DEMAND	186305.9	118062.9	12700.8	26247.6	101476.8	34204.6	40531.2	40048.7	14135.0	19962.0

	CON- STRUCTION	TRANSP, TRAVEL,ENT	RADIO,TEL, TELEG.	ELEC.POWER WATER,GAS	DISTRIBUTN	AUTO OPERATION	FINANCE, R.E.	DWELLING SERVICES	HOTELS, REST.	PERSONAL SERVICES
	21	22	23	24	25	26	27	28	29	30
1 AGRIC. PRODUCTS	46.1	(22)			3.4		¥4.	~-		:
2 FORESTRY PRODUCTS		4.5			**		**			**
3 PRIMARY FISH		**	;-				**			**
4 METALS		20.5			***					
5 NONMETAL, QUARRIES	2901.0	29.5					##C			80.0
6 MEAT, DAIRY, FRUIT 7 SEC. FISH PRODUCTS									 	60.0
8 MISC. FOOD PROD					**		221			8.0
9 S.DRINK, DIST, BREW										44
0 TEXTILES, CLOTHING		25.2	17.3		130.4		72		26.1	8.4
1 SAWMILL, WOOD PROD		18.2			89.2		108.7		1205.0	104.0
2 PULP-PAPER & PROD		53.0			340.2		22)		7.5	4.8
3 PRINTING		23.2	103.7	7.2	_ =		247.0		76.7	20.6
4 FABRIC. METAL PROD		589.3	10.6	215.4	17.1	15.8	0602		900.0	21.0
5 MACH. & EQUIPT		8.4	93.6	85.0	1106.7	158.1	968.3		0.008	31.0
6 TRANSP. EQUIPT		5774.0	***		***		77.		==	27.0
8 PETR, FERT, PNT, SOAP		6594.6	0.6	974.3	572.6	44.2	12.1		999.9	117.2
9	2474.0	0574.0	0.0	274.3	372.0	**	72.11			
MISC. MFG. PROD		24.4		**	**		**		22.7	49.0
1 CONSTRUCTION		1186.0	94.9	1507.0	427.3	237.1	817.7	10500.0	250.0	214.0
22 TRANSP,TRAVEL,ENT		5527.9	903.5	525.5	11484.0	F1.1	1328.8		817.6	450.5
RADIO, TEL, TELEG		834.0	302.3	55.0	1357.0	165.1	463.6		144.5	114.1
24 E.POWER, WATER, GAS	117.0	415.7	145.8	86.0	821.2	63.2	46.0		332.5	101.0
5 DISTRIBUTION	8769.7	2295.9	72.8	130.7	339.8	***	323.0		186.4	145.9
AUTO OPERATION	2305.0	7397.7	36.2	20.0	54053	2202.2	3.0	400 6	106.8	153.0
Prinance, R.E	9535.0	6848.1	111.5	99.5	5605.3	3392.2	3744.7	498.6	945.5	929.0
		3073.0			45.					
POTELS, REST PERSONAL SERVICES	62.0	248.6	15.0	6.5	287.6		33.7		333.3	125.0
BUSINESS SERVICES		968.9	300.3	35.0	2568.3	126.4	476.5		596.0	77.0
32 TOTAL INTER,INPUT		41935.6	2208.1	3747.1	25150.1	4213.2	8573.1	10998,6	6850.5	2759.5
33 TAXES	5845.1	3314.7	244.3	431.9	466.7	3834.8	3409.7	1575.0	798.4	80.0
34 SUBSIDIES		-12350.0	- 17	(55)	753	**		22		**
35 NON-COMP. IMPORTS	17879.5	1099.5	671.8	184.7	1244.2	8535.0	3080.0		472.5	533.5
36 WAGES & SALARIES	58852.0	54512.8	9716.9	3903.0	45780.5	9219.3	9387.8	**	2680.2	8353.2
7 UNINCORP.BUS.INC	3100.0	4353.6		125110	14767.4	3500.0	12275 2	14061.0	1676.5	4000.0
PROFIT, RENT, INT.		12361.2	-1498.3	12544.0	11806.9	3637.8	12265.2	14861.9	819.0	3405.8
B9 DEPRECIATION		12835.7	1358.0	5437.0	2261.1	1264.5	2254,4	11883.2 12161.1	837.9 4863.7	830.0 15203.5
40 HOUSEHOLD INCOME 41 EDUCATION & HOSP		59867.4	9574.9	4558.2	65084.3	14352.6	11635.3	12101.1	4003.7	13203.3
II EDUCATION & HOSP PROVINCIAL REVENUE		4559.1	75.0	1043.5	1513.5	4213.3	2341.7		389.9	190.0
3 MUNICIPAL REVENUE		283.6	162.7	11.0	156.7	7215.5	1078.7	1575.0	431.5	20.0
44 FEDERAL REVENUE		-6788.0	156.6	2634.9	3707.0	1237.0	2924.0	257510	75.8	425.5
5 IMPORT LEAKAGE		5369.7	-834.5	8816.0	3604.2	8924.0	10163.0	2700.8	685.7	533.5
6 TOTAL PRIMARY	98592.6	76127.4	10492.7	22500.6	76326.7	29991.4	30397.1	28320.1	7284.5	17202.5
FACTOR INCOMES	70918.0	71227.6	8218.6	16447.0	72354.8	16357.1	21653.0	14861.9	5175.7	15759.0
48 GROSS DOM. PROD		75027.9	9820.9	22315.9	75082.6	21456.4	27317.1	28320.1	6812.0	16669.0
19 EMPLOYMENT		12470.0	1755.0	836.0	17500.0	3000.0	1400.0	22	2000.0	7500.0

MODEL 1 P.E.I., 1965 - OUTPUT AND SUPPLY FLOWS J,M (\$'000)

		RADIO,TEL, TELEG.	ELEC,POWER WATER,GAS	DISTRIBUTN	AUTO OPERATION	FINANCE, R.E.	DWELLING SERVICES	HOTELS, REST.	PERSONAL SERVICES	BUSINESS SERVICES	TOTAL OUTPUT
		21	22	23	24	25	26	27	28	29	30
	AGRICULTURE						2731.0				42706.0
2	FORESTRY						220		22		100.0
3	PRIMARY FISHING								221		7083.0
4	NONMETAL, QUARRIES							-	22		632.8
5	MEAT, DAIRY, FRUIT						223	425	22		24822.4
6	SECONDARY FISHING							2.	92		6817.0
7	MISC, FOODS, NES										2218.4
8	S.DRINK, DIST, BREW							**	**		867.2
9	TEXTILES, CLOTHING						**		77		1870.5
10	SAWMILLS, WOOD PR								77		630.1
11	PULP-PAPER,PRINT										1672.2
12	TODI TA DIGI RECTAMENT						***		***		.07.212
13	METAL, MACH, TRANSP						**		**		2461.1
14	WE THE HALL STATE OF THE STATE								**		
15							**:	**	***		**
16	NONMET MIN, MSC. MFG						***				307.9
17	FERT, PAINT, SOAP						861				2828.4
18	1 21(1): / 11: (1): 0 / 11 11: 11: 11: 11: 11: 11: 11: 11: 11						**	##:	**		
19	CONSTRUCTION						**		**		39160.0
20	TRANSP.TRAVEL.ENT						**				19099.4
21	RADIO.TEL.TELEG	3670.8					**	**	**		3670.8
22	E.POWER, WATER, GAS		4247.9				**	44			4247.9
23	DISTRIBUTION			26019.3			260		***		26019.3
24	AUTO OPERATION			44	12258.9		***	22	**		12258.9
25	FINANCE, R.E.			44		11775.9		120	223		11775,9
26	DWELLING SERVICES					\$2501	10052.5		200		10052.5
27	HOTELS.REST			421			25	3710.0	22		3710.0
28	PERSONAL SERVICES			22				1225	7321.3		7321.3
29	BUSINESS SERVICES						<u> </u>	20	22	3776.9	3776.9
30	TOTAL OUTPUT	3670.8	4247.9	26019.3	12258.9	11775.9	12783.5	3710.0	7321.3	3776.9	236109.3
31	IMPORTS - NS					**:	***	**			4787.0
32	IMPORTS - NB	**:		**		**	582		**	1.2	7795.9
33	IMPORTS - PEL	**	****	***	***			210-2	***		
34	IMPORTS - NFLD	***	**		***			34555 			22.7
35	IMPORTS - RES			**	**	•••		***	***		54493.6
36	TOTAL IMPORTS	**				-		**	####	: ***	67099.2
37	TOTAL SUPPLY	3670.8	4247.9	26019.3	12258.9	11775.9	12783.5	3710.0	7321.3	3776.9	303208.3
10	TOTAL INTER.DEM	1782.6	1656.2	6259.3	4134.7	10763.4		723.0	384.4	2989.1	96735.4
38		1888.2	2591.3	19760.0	8124.2	1012.5	12783.5	2987.0	6936.9	430.6	158255.6
39	TOTAL EXPORTS	1000.2	2391.3	19700.0	0124.2	1012.3	12763.3	2707.0	0730.7	357.2	48209.5
4 0	TOTAL EXPORTS									331.2	40207.3
41	TOTAL DEMAND	3670.8	4247.5	26019.3	12258.9	11775.9	12783.5	3710.0	7321.3	3776.9	303200.4

MODEL 1 P.E.I., 1965 - INPUTS AND DEMAND FLOWS B, D, E (\$'000)

		RADIO,TEL, TELEG.	ELEC.POWER WATER,GAS	DISTRIBUTN	AUTO OPERATION	FINANCE, R.E.	DWELLING SERVICES	HOTELS. REST.	PERSONAL SERVICES	BUSINESS SERVICES	PERSONAL CONS,
		21	22	23	24	25	26	27	28	29	30
1	AGRIC. PRODUCTS	***	**	0.8		,	3 44				6790.4
2	FORESTRY PRODUCTS	**	**:								500.0
3	PRIMARY FISH			**					**		489.0
4 5	NONMETAL, QUARRIES MEAT, DAIRY, FRUIT	(11)	***						32.0		50.7 11866.9
6	SEC. FISH PRODUCTS								52.0		1322.4
7	MISC. FOOD PROD	222	441						4.0		5470.8
8	S.DRINK,DIST,BREW	-	220				-		**		2948.1
9	TEXTILES, CLOTHING	3.9		178.5			0.44	4.3	4.8		5584.9
10	SAWMILL, WOOD PROD	10.4		27.0		10.0		100.0	32.0	051.2	702.5
11	PULP-PAPER,PRINT	49.6	2.7	85.1		59.6	725 544	16.1	14.3	951.3	1052.2
12 13	METAL,MACH,TRANSP	8.8	50.0	298.7	82.0	365.4	622	65.0	29.0	16.0	5331.5
14	WE TAL, WACH, TRANSF	0.0	30.0	290.7	62.0	303.4		03.0	29.0	10.0	
15		155550	9390 77						22	22	
16	NONMET MIN, MSC. MFG	(177)	77.0			-			57.2	47.0	238.3
17	FERT, PAINT, SOAP	0.2	0.8	3.7	18.4			11.0	32.3	10.5	500.0
18		167.6	70.00		125.5	200.7	1000 0	10.0		**	**
19	CONSTRUCTION	157.5 217.6	306.0 144.1	133.7 2595.8	125.5 503.3	280.7 170.2	1800.0	10.0 247.9	60.0 202.2	138.0	3519.0
20 21	TRANSP,TRAVEL,ENT		11.4	305.1	60.6	86.6		71.8	64.1	571.4	1624.6
22	E.POWER, WATER, GAS	79.8	36.1	338.9	25.1	18.4		204.7	65.3	38.0	1739.3
23	DISTRIBUTION	11.8	33.5	368.3		42.5		80.5	77.4	54.0	19033.9
24	AUTO OPERATION	7.7	5.0			1.0		20.7	1.0	551	7911.3
25	FINANCE,R.E	210.1	55.0	1093.6	1013.9	1004.2	177.7	73.5	390.7	181.0	613.5
26	DWELLING SERVICES	0.00	**			2.59		300	**	***	12783.5
27	HOTELS, REST	10.0	3.0	71.0		0.1		108.1	51.0	20.0	2952.0 6779.3
28 29	PERSONAL SERVICES BUSINESS SERVICES	10.0 64.4	2.0 18.0	71.8 738.4	133,9	8.2 96.2	***	121.4	28.5	42.0	78.9
30	TOTAL INTER.INPUT	846.4	664.6	6239.4	1962.7	2143.0	1977.7	1135.0	1145.8	2069.2	99882.8
		70.2		371.7	1235.7	847.7	1808.0	117.1	60.0	68.0	18890.6
31 32	TAXESSUBSIDIES	70.2	16.7	3/1./	1233.7	047.7	1000.0	117.1	00.0	-52.0	10090.0
33	NON-COMP. IMPORTS	294.5	728,4	860.4	4195.0	555.1	944	128.4	206.2	144.0	10551.8
34	WAGES & SALARIES	1340.4	1003.3	8125.3	1227.9	2934.0	144	929.7	2083.3	445.0	
35	UNINCORP.BUS.INC	-	#	5497.2	2000.0		22	935.4	2400.0	650.0	
36	PROFIT,RENT,INT	537.5	1194.9	3507.4	975.6	4141.0	3334.0	321.6	1291.0	414.7	<u> </u>
37	DEPRECIATION	581.8	640.0	1417.9	662.0	1155.1	2932.8	142.8	135.0	38.0	•
38	HOUSEHOLD INCOME	1461.5	1448.4	14904.8	3512.9	3439.2	2425.0	2084.5	5686.8	1289.4	829.9
39 40	PROVINCIAL REVENUE	31.0	56.0	315.5	1160.6	327.2	277	63.2	18.5	15.9	8829.4
41	MUNICIPAL REVENUE	61.8	16.0	320.2	123.1	519.1	1808.0	57.5	40.0	2.0	458.7
42	FEDERAL REVENUE	93.4	263.5	977.6	297.0	748.4	S 22	28.4	89.0	26.3	8772.6
43	IMPORT LEAKAGE	594.9	1159.4	1843.9	4540.6	3443.9	909.0	198.6	206.2	336.1	10551.8
44	TOTAL PRIMARY	2824.4	3583.3	19779.9	10296.2	9632.9	8074.8	2575.0	6175.5	1707.7	29442.4
45	FACTOR INCOMES	1877.9	2198.2	17129.9	4203.5	7075.0	3334.0	2186.7	5774.3	1509.7	
46	GROSS DOM. PROD	2529.9	2854.9	18919.5	6101.2	9077.8	8074.8	2446.6	5969.3	1563.7	18890.6
47	EMPLOYMENT	470.0	204.0	4400.0	1000.0	600.0	7 44	700.0	2500.0	700.0	**
48	TOTAL OUTPUT	3670.8	4247.9	26019.3	12258.9	11775.9	10052.5	3710.0	7321.3	3776.9	129325.1

MODEL 1 P.E.I., 1965 - INPUTS AND DEMAND FLOWS B, D, E (\$'000)

	EXPORTS- CANADA	EXPORTS- N.S.	EXPORTS- N.B.	EXPORTS- P.E.I.	EXPORTS- NFLD.	TOTAL EXPORTS	TOTAL INTER.DEM.	TOTAL DEMAND
	41	42	43	44	45	46	47	48
1 AGRIC. PRODUCTS	11278.2	5912.0	773.0		1721.3	25275.5	13017.5	42544.7
2 FORESTRY PRODUCTS	225		12		7.5	570.3	82.7	1158.0
3 PRIMARY FISH		222.0	2569.0			2791.0	3803.0	7083.0
4 NONMETAL, QUARRIES			**		**	##.i	933.4	1074.1
MEAT, DAIRY, FRUIT	2226.9	5577.1	1230.3		3202.3	12301.6	3304.6	28240.2
SEC. FISH PRODUCTS		440.0	127.0		0.5	5133.0	299.9	6878.0
MISC. FOOD PROD							3984.1	9541.7
S.DRINK,DIST,BREW					**		92.2	3038.9
TEXTILES, CLOTHING		120.5	704.7		157.7	982.9	750.5	7463.9
SAWMILL, WOOD PROD					**		5033.6	5966.5
PULP-PAPER,PRINT					***		2521.7	3971.9
METAL MACH TRANSP		06.6	 (7.6				00067	22000.2
METAL,MACH,TRANSP		96.6	67.6		50.5	214.7	9336.7	32880.3
4 5	 				**			
NONMET MIN,MSC.MFG		8.4	 		W		2000.2	4155.0
FERT, PAINT, SOAP	200.0	143.8	231.1		22	8.4 574.9	3880.3	4155.8
3	200.0	145.0	231.1		400	3/4.9	4270.2	5388.0
CONSTRUCTION					220		4467.4	39160.0
TRANSP,TRAVEL,ENT							12271.4	19098.9
RADIO, TEL, TELEG.					22		1782.6	3670.8
E.POWER, WATER, GAS							1656.2	4247.5
DISTRIBUTION							6259.3	26019.3
AUTO OPERATION					120		4134.7	12258.9
FINANCE,R.E							10763.4	11775.9
HOTELS, REST							**	12783.5
HOTELS, REST							723.0	3710.0
PERSONAL SERVICES							384.4	7321.3
BUSINESS SERVICES	357.2				77.5	357.2	2989.1	3776.9
TOTAL INTER.INPUT	14627.3	12520.4	5702.7		5132.3	48209.5	96741.4	303206.9
TAXES							8345.1	27235.7
SUBSIDIES							-3679.5	-3679.5
NON-COMP. IMPORTS							19466.9	33440.0
WAGES & SALARIES							44859.0	72835.9
UNINCORP.BUS.INC							33176.2	33176.2
6 PROFIT, RENT, INT.							20537.5	25003.5
7 DEPRECIATION 8 HOUSEHOLD INCOME							16662.7	16662.7
EDUCATION & HOSP				~~			88634.9	117610.9
PROVINCIAL REVENUE							4505.5	829.9
							4505.5	13334.9
							3847.3 739.9	4306.0 9512.5
							739.9 24977.3	9512.5 42417.4
FEDERAL REVENUE							139367.5	204674.1
FEDERAL REVENUE								/uan /4
FEDERAL REVENUEIMPORT LEAKAGE								
FEDERAL REVENUE							98572.4	131015.4
FEDERAL REVENUE	 			 	 		98572.4 119900.6	131015.4 171234.2
FEDERAL REVENUE IMPORT LEAKAGE TOTAL PRIMARY FACTOR INCOMES							98572.4	131015.4

-	Y Commence of the commence of	AGRIC. PRODUCTS	FORESTRY PRODUCTS	PRIMARY FISH	COAL	NONMETALS, QUARRIES	MEAT,DAIRY & FRUIT	SEC. FISH PRODUCTS	MISC, FOOD PRODUCTS	S.DRINKS, DIST,BREW	TEXTILES, CLOTHING
		1	2	3	4	5	6	7	8	9	10
1	AGRICULTURE	54108.0	3174.0	22	223		228	22)	423		-
2	FORESTRY		17312.0	926	225						
3	PRIMARY FISHING			49822.0	123	••	420	200	-		
4	COAL MINING				45486.8		777	227	223		27.5
5	NONMETAL, QUARRIES					23608.4	10015				177
6	MEAT, DAIRY, FRUIT						49947.4	0.40000	5.5		
7	SECONDARY FISHING						15.8	86389.2	2.40.00.0		
8	MISC. FOODS,NES								34869.0	17202.0	
9	S.DRINK,DIST,BREW									17382.8	2/2/01
10	TEXTILES, CLOTHING		206.8								26249.1
11 12	SAWMILLS, WOOD PR		296.8								
	PULP-PAPER & PRPRINTING										
13 14	IRON-STEEL MILLS										
15	METAL FABRIC										
16	MACH. & EQUIPT.										
17	TRANSP. EQUIPT.										
18	ELECTRICAL EQ										
19	NONMET.MINERAL PR										
20	PETROLEUM REF										
21	FERT, PAINT, SOAP										
22	MISC. MANUF										
23	CONSTRUCTION										
24	TRANSP,TRAVEL,ENT		•-								
25	RADIO,TEL,TELEG										
26	E.POWER,WATER,GAS										
27	DISTRIBUTION										
28	AUTO OPERATION										
29	FINANCE,R.E										
30	DWELLING SERVICES										
31	HOTELS,REST										
32	PERSONAL SERVICES										
33	BUSINESS SERVICES										
34	TOTAL OUTPUT	54108.0	20782.8	49822.0	45486.8	23608.4	49963.2	86389.2	34874.5	17382.8	26249.1
35	IMPORTS - NS	Tees.	55%	100		855		S. ***	0	***	
36	IMPORTS - NB	1633.9	35.0	85.0	9.4	135.7	5089.6	533.0	9030.5	124.4	1000.0
37	IMPORTS - PEI	5912.0	***	222.0	1990	177	5577.1	440.0	(1999	**	120.5
38	IMPORTS - NFLD	70.0	**	6,000		200	***	300.0	1 70	***	440
39	IMPORTS - RES	16826.0	70.8	(3990)	5630.4	5**	29938.0	15.8	20821.0	8856.3	48209.4
40	TOTAL IMPORTS	24441.9	105.8	6307.0	5639.8	135.7	40604.7	1288.8	29851.5	8980.7	49329.9
41	TOTAL SUPPLY	78549.9	20888.6	56129.0	51126.6	23744.1	90567.8	87677.9	64726.0	26363.5	75578.9
40	TOTAL INTER DEM	22.450.0	141510	40010.0	120267	9300.0	50245	1205.0	1.4022.5	245.2	
42	TOTAL INTER.DEM	22458.8	14151.0	48919.0	13836.7	8200.0	5934.5	1295.9	14822.5	245.3	7759.3
43	TOTAL EVROPTS	48314.8	374.1 6363.5	1724.0	11289.7	1387.5	78939.7 5604.3	9381.1	41387.6	24756.1	48162.0
44	TOTAL EXPORTS	7775.7	6363.5	5486.0	26000.2	14156.0	5694.3	77001.0	8515.9	1362.0	19657.6
45	TOTAL DEMAND	78549.3	20888.6	56129.0	51126.6	23743.5	90568.4	87677.9	64725.9	26363.4	75578.8

-	A-177	SAWMILLS, WOOD PR	PULP-PAPER & PROD,	PRINTING	IRON-STEEL PRODUCTS	FABRIC. METAL PROD	MACH. & EQUIPT.	TRANSP. EQUIPT.	ELECTRICAL EQUIPT,	NONMET. MINERAL PR	PETROLEUM PRODUCTS
		11	12	13	14	15	16	17	18	19	20
1	AGRICULTURE	8									
2	FORESTRY	732.0									
3	PRIMARY FISHING										
4	COAL MINING										
5	NONMETAL, QUARRIES										
6	MEAT,DAIRY,FRUIT										
7	SECONDARY FISHING										
8	MISC. FOODS, NES										
9	S.DRINK, DIST, BREW										
10	TEXTILES, CLOTHING										
11	SAWMILLS, WOOD PR		4444								
12	PULP-PAPER & PR		46615.3	15072.5							
13	PRINTING			15072.5							
14	IRON-STEEL MILLS				65849.6	252240	(7.6				172.5
15	METAL FABRIC					25224.0	67.6				
16 17	MACH. & EQUIPTTRANSP. EQUIPT					91.5	6711.9 55.1	70962.1			
18	ELECTRICAL EQ						JJ.1 	70902.1	10515.8		
19	NONMET.MINERAL PR								10313.6	8268.4	
20	PETROLEUM REF									0200.4	76051.2
21	FERT, PAINT, SOAP										70031.2
22	MISC. MANUF.									 	
23	CONSTRUCTION										
24	TRANSP,TRAVEL,ENT			••							
25	RADIO, TEL, TELEG										
26	E.POWER, WATER, GAS										
27	DISTRIBUTION	**									
28	AUTO OPERATION										
29	FINANCE, R.E										
30	DWELLING SERVICES										
31	HOTELS,REST							•			
32	PERSONAL SERVICES										
33	BUSINESS SERVICES				~~						
34	TOTAL OUTPUT	26255.4	46615.3	15072.5	65849.6	25315.5	6834.6	70962.1	10515.8	8268.4	76223.7
35	IMPORTS - NS	222	22	722	-	-		192			
36	IMPORTS - NB	497.2	1562.3	253.3		1784.7	707.3	2317.3	533.9	1209.3	1550
37	IMPORTS - PEI				**	61.6		35.0	**	8.4	
38	IMPORTS - NFLD	3.8	125.6	**	-75			34	-	785.4	
39	IMPORTS - RES	26871.8	6365.0	5114.8	10300.7	11373.2	99884.2	53022.2	18173.0	13516.2	(.**)
40	TOTAL IMPORTS	27372.8	8052.9	5368.1	10300.7	13219.5	100591.4	55374.5	18706.9	15519.3	
41	TOTAL SUPPLY	53628.2	54668.2	20440.6	76150.3	38535.0	107426.1	126336.5	29222.7	23787.7	76223.7
42	TOTAL INTER.DEM	32019.1	14681.2	9904.5	16463.1	31284.6	23608.4	19608.0	7984.1	21000 4	240002
42 43	TOTAL DOM.FIN.DEM	11099.1	1727.4	9636.1	-527.1	3066.0	82767.8	70875.2	13678.6	21888.6 619.7	24088.3 34883.5
43	TOTAL EXPORTS	10509.5	38259.6	900.0	60214.5	4184.2	1050.0	35853.3	7560.0	1279.1	17252.0
7*	TOTAL EXPORTS	10307.3	30437.0	900.0	00214.3	7104.2	1030.0	5,055.5	0.0007	12/7.1	1/232.0
45	TOTAL DEMAND	53627.6	54668.2	20440.6	76150.4	38534.8	107426.1	126336.4	29222.7	23787.4	76223.8

		AGRI- CULTURE	FORESTRY	PRIMARY FISHING	COAL MINING	NONMETALS, QUARRIES	MEAT, DAIRY & FRUIT	SECONDARY FISHING	MISC, FOODS,NES	S.DRINKS, DIST,BREW	TEXTILES, CLOTHING
		1	2	3	4	5	6	7	8	9	10
1	AGRIC. PRODUCTS	305.0	21.4	**	5446	5+F	21192:0	37	853.7		
2	FORESTRY PRODUCTS	660.8		13-2	839.5	200	1.2	7.0		198	
3	PRIMARY FISH	**		**	i e e	07.0	22.5	48919.0		344	
4	COAL	4660		147.1	200	87.9 1.1	23,5 7,7	26.8 138.4	1.6	4.3 1.4	
5	NONMETAL, QUARRIES MEAT, DAIRY, FRUIT	466.0		147.1		1.1	4497.8	103.5	24.4 1098.5	130.6	
7	SEC. FISH PRODUCTS			940.5			7.1	103.3	331.3	150.0	
8	MISC. FOOD PROD	11286.2		144	**	500	486.0	213.0	1729.7	1091.6	
9	S.DRINK,DIST,BREW	144		-	1	**	6.9	544	27.2	211.2	
10	TEXTILES,CLOTHING	172.0	13.4	1684.0	0.44	15.2	46.5	67.1	29.2	10.5	4621.6
11	SAWMILL, WOOD PROD	50.0 134.0	5.5	1215.0	846.0 0.1	15.3 893.9	210.6 2244.0	1152.6 1786.0	1572.8	69.5 632.9	8.3
12	PULP-PAPER & PROD PRINTING	134.0		-	26.6	15.0	175.0	173.5	148.0	124.0	237.7 24.1
14	IRON-STEEL PROD.	-	**	12.0	1530.8	13.0	175.0	175.5	0.7	124.0	24.1
15	FABRIC. METAL PROD	1016.0	208.6	978.2	764.7	261.6	416.3	388.6	25.4	786.4	42.0
16	MACH. & EQUIPT	77	310.8	2556.4	3058.0	1127.7	607.0	564.5	548.9	234.0	903.2
17	TRANSP. EQUIPT.	***	12.2	900.0	200.0	12.4		177	-33		
18	ELECTRICAL EQNONMET.MINERAL PR	408.0	13.2	125.7	390.0 11.3	13.6	-	177		0.2	
20	PETROLEUM PROD	1169.0	326.4	2774.1	269.6	332.2	257.7	377.2	210.0	126.7	89.7
21	FERT, PAINT, SOAP	2546.0	**	33,9	31.0	44.7	0.4	1.6	170.6	92.6	291.0
22	MISC. MFG. PROD		***	4!7.0		100	17.7	189.5		655	
23	CONSTRUCTION	1790.0	230.0	230.0	874.0	146.0	325.6	589.0	157.7	68.4	188.3
24	TRANSP,TRAVEL,ENT	1438.0	314.8	1992.1	824.3	1019.9	2882.8	3331.6	1460.7	924.4	1466.6
25 26	RADIO, TEL, TELEG E.POWER, WATER, GAS	203.0 379.0	226.0 37.0	165.0	55.0 1812.4	118.3 493.6	163.6 483.6	400.0 821.0	132.3 296.2	104.4 264.0	425.1 318.8
27	DISTRIBUTION	1460.0	180.0	1019.7	455.8	125.4	1905:3	430.1	1078.3	309.1	884.6
28	AUTO OPERATION	3102.0	142.8		92,1	321.3	***	15011	1070.5	307.1	004.0
29	FINANCE,R.E	2745.0	196.1	2400.0	550.0	269.5	465.6	639.0	350.0	382.6	269.2
30	DWELLING SERVICES	**	-		**	344	**	**	(**	***	100
31	HOTELS, REST	5.0	0.0		5440	9.0	20.6	(0.0	240	22.5	2//
32 33	PERSONAL SERVICES BUSINESS SERVICES	5.0 709.0	8.0 35.0	70.0	415.3	8.0 494.8	29.6 372.4	60.0 514.0	24.0 1119.7	32.5 649.2	26.6 420.0
34	TOTAL INTER.INPUT	30044.0	2269.0	17660.7	12846.5	5789.8	36825.8	60893.0	11390.8	6240.0	10216.7
35	TAXES	2306.0	900.9	1372.4	620.0	925.4	534.6	779.4	388.6	450.5	209.6
36	SUBSIDIES	-2377.0		-205.0		**		**	**	135	.75
37	NON-COMP. IMPORTS	300.0	22.4	300.0	332.3	661.6	1025.9	672.1	11144.9	1926.2	5352.7
38	WAGES & SALARIES	6299.0	5601.5	11250.0	30488.0	5316.2	8104.7	15635.0	7334.0	3575.1	7435.2
39 4 0	UNINCORP.BUS.INC PROFIT,RENT,INT	19789.0 875.0	5144.8 2351.7	13892.3 2359.6	-970.0	3000.0 6272.4	129.9 2504.2	1822.0 5036.5	769.4 2986.2	5.4 4488.7	218.9 2184.4
40 41	DEPRECIATION	5003.0	1753.7	3192.0	2170.0	1643.0	827.6	1567.0	855.0	696.8	631.4
	HOUSEHOLD INCOME	26926.5	12845.6	27321.4	29418.0	9983.1	9696.8	21226.5	9795.3	5846.1	8027.1
			**	(25)	588	300	200	100	1.55	177	9.0
42 43	EDUCATION & HOSP	5.240			400.0	743.7	386.2	441.9	294.8	319.4	108.1
42 43 44	PROVINCIAL REVENUE	-37.5	931.8	1381.9		400 5					
42 43 44 45	PROVINCIAL REVENUE MUNICIPAL REVENUE	2250.0	11.5	20.0	180.0	409.5	222.6	580.0	181.1	261.3	176.6
42 43 44 45 46	PROVINCIAL REVENUE MUNICIPAL REVENUE FEDERAL REVENUE	2250.0 -2247.0	11.5 210.0	20.0 -54.0	180.0 40.0	1400.0	531.8	1024.5	659.0	998.9	469.4
42 43 44 45 46 47	PROVINCIAL REVENUE MUNICIPAL REVENUE	2250.0	11.5	20.0	180.0						469,4 6619.6
42 43 44 45 46 47 48	PROVINCIAL REVENUE MUNICIPAL REVENUE FEDERAL REVENUE IMPORT LEAKAGE TOTAL PRIMARY	2250.0 -2247.0 300.0 32195.0	11.5 210.0 22.4 15775.0	20.0 -54.0 300.0 32161. 3	180.0 40.0 432.3 32640.3	1400.0 3639.3 17818.6	531.8 1461.9 13126.9	1024.5 672.1 25512.0	659.0 11692.9 23478.1	998.9 3020.2 11142.7	469,4 6619.6 16032.2
42 43 44 45 46 47 48 49	PROVINCIAL REVENUE MUNICIPAL REVENUE FEDERAL REVENUE IMPORT LEAKAGE TOTAL PRIMARY FACTOR INCOMES	2250.0 -2247.0 300.0 32195.0 26963.0	11.5 210.0 22.4 15775.0 13098.0	20.0 -54.0 300.0 32161. 3 27501.9	180.0 40.0 432.3 32640. 3 29518.0	1400.0 3639.3 17818.6 14588.6	531.8 1461.9 13126.9 10738.8	1024.5 672.1 25512.0 22493.5	659.0 11692.9 23478.1 11089.6	998.9 3020.2 11142.7 8069.2	469.4 6619.6 16032.2 9838.5
42 43 44 45 46 47 48 49 50	PROVINCIAL REVENUE MUNICIPAL REVENUE FEDERAL REVENUE IMPORT LEAKAGE TOTAL PRIMARY	2250.0 -2247.0 300.0 32195.0	11.5 210.0 22.4 15775.0	20.0 -54.0 300.0 32161. 3	180.0 40.0 432.3 32640.3	1400.0 3639.3 17818.6	531.8 1461.9 13126.9	1024.5 672.1 25512.0	659.0 11692.9 23478.1	998.9 3020.2 11142.7	469.4 6619.6 16032.2 9838.5 10679.5
42 43 44 45 46 47 48 49 50 51	PROVINCIAL REVENUE MUNICIPAL REVENUE FEDERAL REVENUE IMPORT LEAKAGE TOTAL PRIMARY FACTOR INCOMES GROSS DOM. PROD	2250.0 -2247.0 300.0 32195.0 26963.0 31895.0	11.5 210.0 22.4 15775.0 13098.0 15752.6	20.0 -54.0 300.0 32161.3 27501.9 31861.3	180.0 40.0 432.3 32640.3 29518.0 32308.0	1400.0 3639.3 17818.6 14588.6 17157.0	531.8 1461.9 13126.9 10738.8 12101.0	1024.5 672.1 25512.0 22493.5 24839.9	659.0 11692.9 23478.1 11089.6 12333.2	998.9 3020.2 11142.7 8069.2 9216.5	469.4 6619.6

		FERT,PAINT & SOAP	MISC. MANUF	CON- STRUCTION	TRANSP, TRAVEL,ENT	RADIO,TEL, TELEG.	ELEC.POWER WATER,GAS	DISTRIBUTN	AUTO OPERATION	FINANCE, R.E.	DWELLING SERVICES
		21	22	23	24	25	26	27	28	29	30
I AGRIC. PRODUC	TS		.55	83.1				3.6		1,77	
2 FORESTRY PROD	OUCTS		075	135	(55)		355	177		197	
3 PRIMARY FISH		100	555	(22)			177	155		855	
4 COAL		1.0	155	5003.4	24.0		7674.9	177		3.55	
5 NONMETAL, QUA		15.3	1.3	5803.4	4.3		555	133		5 51	
6 MEAT, DAIRY, FRU 7 SEC. FISH PRODU		0.1 17.0	155				225	675 686		5 57	
8 MISC. FOOD PRO		17.0	77	185	:55		195	255 246		057	
9 S.DRINK,DIST,BR		**	**	· **			0-5 	:		199	
10 TEXTILES, CLOTH		(##	2.9	328.0	32.8	36.9	4.0	276.0		**	
11 SAWMILL, WOOD		2.4	11.7	22266.6	10.0	7.4		187.9		166.4	
12 PULP-PAPER & P		221.9	54.0	1226.8	208.0	**	19.0	478.7		7 44	
13 PRINTING		1.6	0.4	4000	38.8	299.1	20.7	199		417.4	
14 IRON-STEEL PRO		457.3	21.1	6889.1	772.5	1.2	272.0	10.0	42.0	024	
15 FABRIC, METAL		108.2 154.2	21.1	15418.7 3755.0	772.5 4.2	4.2	273.0 164.0	18.8	42.9	1042.4	
16 MACH. & EQUIPT 17 TRANSP. EQUIPT		134.2		3133.0	5170.6	44	104.0	2162.1	386.0	1042.4	
18 ELECTRICAL EQ.				5365,3	47.3	314.4	41.5	144		194	
19 NONMET.MINER		22	122	18548.9	120	52	122	-	142	-	
20 PETROLEUM PRO		96.4	8.6	144	9965.9	0.5	2263.7	850.2	(22)	24,6	
21 FERT, PAINT, SOA		375.2	16.5	3926.4	180.2	0.4	17.0	15.1	143.0	1622	
22 MISC. MFG. PRO		(22)	720	100	72.1	123	**	1	022	722	
23 CONSTRUCTION		48.3	10.0	211.0	4153.2	668.3	1739.0	594.7	601.8	688.8	14200.0
24 TRANSP,TRAVEL		315.0	75.7	22467.5	12725.3	1636.9	3141.3	14720.7	3021.4	1228.6	177
25 RADIO, TEL, TELE		49.5	45.8	243.0	2681.2	321.8	131.5	3638.5	441.9	862.0	(50)
26 E.POWER, WATER		128.6	133.3	128.0 13674.0	833.7 4112.6	475.0 111.7	135.0 364.3	1994.2 919.4	722.9	140.5 327.5	323
27 DISTRIBUTION 28 AUTO OPERATIO	NI	164.2	31.2	1560.0	12696.7	40.0	304.3	919.4		321.3	1977/
29 FINANCE.R.E	11	74.7	23.4	12335.0	9685.6	2031.0	470.5	10030.7	6966.3	2880.8	1378.1
30 DWELLING SERV) /	23.4	12555.0	7005.0	2031.0	170.5	10050.7	0700.5	2000.0	1370.1
31 HOTELS, REST		(55		-77	3666.1	-	155	355		577	**
32 PERSONAL SERV		1.8	1.3	87.0	766.0	75.0	36.5	442.8	:##	62.0	(**)
33 BUSINESS SERVI	CES	105.7	77.5	3289.0	1327.0	863.9	258.0	6038.0	714.5	963.3	() (
34 TOTAL INTER.	INPUT	2338.4	514.7	137605.6	69178.1	6886.5	16753.9	42371.4	13040.7	8804.3	15578.1
35 TAXES		75.1	40.6	2365.0	9561.8	944.8	1916.9	2713.0	8329.6	11629.4	25400.0
36 SUBSIDIES		1.602.0	257.2	10505.2	-6814.0	(52.7	-3866.3	2477.1	20070 7	12000	244
37 NON-COMP. IMPO		1602.8 1180.3	257.2 953.3	10595.2 84823.0	859.9 69462.2	652.7 18699.6	280.0 9262.0	2677.1 79988.8	20978.7 19513.4	1798.8	1722
38 WAGES & SALAF 39 UNINCORP.BUS.I		1.5	72.3	8000.0	8500.0	10099.0	9202.0	16830.0	7800.0	24750.0 3400.0	722
40 PROFIT, RENT, IN		1167.4	540.4	9067.0	8723.7	1209.7	12742.4	39742,4	7018.7	18000.3	35858.7
41 DEPRECIATION		131.3	62.5	3900.0	23892.7	6008.0	7366.0	11654.3	2839.4	5667.8	23626.7
42 HOUSEHOLD INC		1251.8	1431.0	97459.2	79386.1	18224.7	13659.4	120066.1	29153.4	30577.8	35858.7
43 EDUCATION & H		1925	530	52	722	(22)	122	199	922		2202017
44 PROVINCIAL RE	VENUE	64.4	37.4	313.2	9317.7	506.0	686.0	2401.7	8386.4	3219.0	1175
45 MUNICIPAL REV		35.2	5.2	1130.0	653.2	878.6	1876.0	1851.3	285.9	8503.8	25400.0
46 FEDERAL REVEN		267.0	133.0	2565.0	-4363.I	1296.2	-1007.4	6555.0	1457.0	5406.1	S 75
47 IMPORT LEAKAC		2408.7	257.2	13382.8	5299.7	601.3	5121.0	11077.1	24357.7	11871.8	0.400.5.4
48 TOTAL PRIMA		4158.4	1926.3	118750.1	114186.2	27514.8	27701.0	153605.4	66479.8	65246.3	84885.4
49 FACTOR INCOME	:S	2349.2	1566,0	101889.9	86685.8	19909.3	22004.4	136561.1	34332.1	46150.3	35858.7
50 GROSS DOM. PR		2555.6	1669.1	108154.9	113326.3 16900.0	26862.1	27421.0	150928.3	45501.I	63447.5	84885.4
51 EMPLOYMENT		233.0	248.0	21000.0		4055.0	1882.0	29925.0	7250.0	5600.0	
52 TOTAL OUTPU	Т	6496.8	2441.0	256355.6	183364.2	34401.3	44454.9	195976.8	79520.4	74050.5	100463.4

		HOTELS, REST.	PERSONAL SERVICES	BUSINESS SERVICES	PERSONAL CONS.	CAPITAL FORMATION	INVENTORY CHANGE	DEFENCE	CIVIL	PROVINCIAL GOVT.	MUNICIPAL GOVT.
		31	32	33	34	35	36	37	38	39	40
I	AGRIC. PRODUCTS	-	125		48396.0		-495.0	3 55	100.1	17.0	25.0
2	FORESTRY PRODUCTS				189.0		145.0		3.1	1946	37.0
3	PRIMARY FISH		0.77		1724.0				**	***	***
4	COAL	245.1	±22		6190.0		2483.0	2020.3	104.3	10.0	90.0
5	NONMETAL, QUARRIES	185	1040		370.0		457.5	10.0			550.0
6	MEAT, DAIRY, FRUIT	**	104.0		75901.4 9099.9		-108.2	871.5	177.3	33.0	55.0
8	SEC. FISH PRODUCTS MISC. FOOD PROD		16.0		41032.0		157.0 -39.4	162.0	63.9	5.0	20.0
Q	S.DRINK,DIST,BREW		10.0		24694.2		61.9	102.0	26.0	19.0	15.0
10	TEXTILES.CLOTHING	48.0	63.5		47543.8		222.3		109.0	1.0	85.0
11	SAWMILL, WOOD PROD	695.0	241.5		8863.0		563.6	614.6	294.1	20.0	105.0
12	PULP-PAPER & PROD	12.7	21.6	1.0	2000.0		-353.9		27111	20.0	103.0
13	PRINTING	166.1	102.9	7817.2	3998.5		3.9	50.0	17.8	2434.0	150.0
14	IRON-STEEL PROD			***	**		-527.1			64	
15	FABRIC. METAL PROD		210.6	117.3		2042.0	336.5	600.3	87.2	***	
16	MACH. & EQUIPT	200.0	**	4.0		75603.0	51.8	1070.0	405.0	1830.0	678.0
17	TRANSP. EQUIPT	**			43230.0	10332.0	173.2	13280.0	3629.0	208.0	
18	ELECTRICAL EQ		2100	50.0	7085.9	50.0	503.2	5607.0	131.5		
19 20	NONMET.MINERAL PR	747.1	219.0 84.0	510	20020 5		275.7	304.0	2.40.2	40.0	
21	PETROLEUM PRODFERT.PAINT.SOAP	115.6	249.9	51.8 46.0	30930.5 4000.0	 	1032.2 -242.2	1172.6 168.6	348.2	420.0	350.0
22	MISC. MFG. PROD	49.7	100.6	325.0	2405.0		11.8	108.0	157.2	9.0 16.0	80.08
23	CONSTRUCTION	700.0	422.0	323.0	2403.0	119642.0	11.0	10136.0	26361.0	33361.0	7811.0
24	TRANSP,TRAVEL,ENT	1518.7	1903.2	844.4	41249.1	117042.0		1431.5	2420.7	7890.0	3180.0
25	RADIO, TEL, TELEG.	866.6	401.5	5209.0	12861.0			431.4	156.7	485.0	220.0
26	E.POWER, WATER, GAS	1682.9	806.0	231.0	17483.8			3774.2	248.2	605.0	1763.0
27	DISTRIBUTION	396.2	473.8	219.0	131730.4			2799.9	1173.2	1750.0	500.0
28	AUTO OPERATION		15.0	15.6	60502.2			267.8	135.0	70.0	210.0
29	FINANCE, R.E.	1550.9	3459.0	975.0	4480.4			:52	364.8	2425.0	700.0
30	DWELLING SERVICES		-77	**	105420.5				***	**	
31	HOTELS, REST.	002.0	420.0	25.0	28843.0			2011		(111)	
32	PERSONAL SERVICES	993.8	420.0	35.0	58568.7			306.4	129.4	111.0	
33 34	TOTAL INTER.INPUT	1275.1 11263.5	293.0 9607.1	62.0	1900.0 820691.8	 207((0.0	4712.0	173.8	545.0	2985.0	370.0
-				16003.3		207669.0	4712.8	45251.9	37187.7	54744.0	16994.0
35	TAXES	2180.5	400.0	2586.2	124874.6			546	32		
36 37	SUBSIDIES NON-COMP. IMPORTS	555,3	1918.9	-341,0 340,0	90043.0			1450 1	616.2	1200.0	1000.0
38	WAGES & SALARIES	8710.2	25727.5	6528.9	90043.0			1459.1 87740.0	616.3	1398.0	1000.0
39	UNINCORP.BUS.INC	6931.1	17500.0	3800.0				87740.0	68303.0	20008.8	10085.0
40	PROFIT, RENT, INT.	1723.1	6641.0	2966.5						18231.0	3005.0
41	DEPRECIATION	1686.3	1000.0	475.0		**			120	10231.0	3003.0
42	HOUSEHOLD INCOME	17241.7	49148.5	12990.7	-			87740.0	68303.0	27239.8	11530.0
43	EDUCATION & HOSP	5-24	-12	122	8668.1			**		2123710	11330.0
44	PROVINCIAL REVENUE	966.5	140.0	1909.2	50439.3					(ee)	
45	MUNICIPAL REVENUE	1235.0	400.0	412.5	3295.5			27.			755
46	FEDERAL REVENUE	100.0	580.0	228.2	62471.8				274		
47	IMPORT LEAKAGE	557.0	1918.9	340.0	90043.0			1459.1	616.3	12398.0	2560.0
48	TOTAL PRIMARY	21786.5	53187.4	16355.6	214917.6			89199.1	68919.3	39637.8	14090.0
49	FACTOR INCOMES	17364.4	49868.5	13295.4	***			87740.0	68303.0	38239.8	13090.0
50	GROSS DOM. PROD	21231.2	51268.5	16015.6	124874.6		_1	87740.0	68303.0	38239.8	13090.0
51	EMPLOYMENT	5300.0	14500.0	2731.0				14500.0	13000.0	4500.0	2280.0
52	TOTAL OUTPUT	33050.0	62794.5	32358.9	1035609.3	207669.0	4712.8	134450.9	106106.9	94381.8	31084.0

TOTAL OUTPUT 1871589.0

52

4018441.0

MODEL 1 N.B., 1965 - OUTPUT AND SUPPLY FLOWS J,M (\$'000)

		AGRIC. PRODUCTS	FORESTRY PRODUCTS	PRIMARY FISH	METALS	COAL	NONMETALS, QUARRIES	MEAT.DAIRY & FRUIT	SEC. FISH PRODUCTS	MISC, FOOD PRODUCTS	S,DRINKS, DIST,BREW
		1	2	3	4	5	6	7	8	9	10
ı	AGRICULTURE	59750.0	2002.0	(144)	:**	-		3 .44);			12
2	FORESTRY	***	48670.0		:##	-		9 44 ((22
3	PRIMARY FISHING			10672.0	144	24		1.44			25
4	METAL MINING				34966.0			(interest			
5	COAL MINING					8748.2	0.422.1	\$ 22			22
6	NONMETAL, QUARRIES						8433.1	40433.0			
7	MEAT, DAIRY, FRUIT							48623.9	44602.0		
8	SECONDARY FISHING							383.0	44692.0	773///	
_	MISC. FOODS, NES									77266.6	374171.2
10 11	S.DRINK,DIST,BREW TEXTILES,CLOTHING			- -							14171.3
12	SAWMILLS, WOOD PR		711.2				- -			 	
13	PULP-PAPER & PR		711.2								
14	PRINTING										
15	METAL FABRIC										
16	MACH. & EQUIPT										
17	TRANSP.EQ.,PETR.PR										
18	ELECTRICAL EQ										
19	NONMET.MINERAL PR										
20											
21	FERT,PAINT,SOAP										
22	MISC. MANUF										
23	CONSTRUCTION										
24	TRANSP,TRAVEL,ENT										
25	RADIO,TEL,TELEG										
26	E.POWER, WATER, GAS										
27	DISTRIBUTION						*-				
28	AUTO OPERATION										
29	FINANCE, R.E.										
30	DWELLING SERVICES										
31	PERSONAL SERVICES										
32 33	BUSINESS SERVICES										
34	TOTAL OUTPUT	59750.0	51383.2	10672.0	34966.0	8748.2	8433.1	49006.9	44692.0	77266.6	14171.3
35	IMPORTS - NS	1013.0		5486.0		2487.4	620.0	769.3	2000.0	1598.2	283.0
36	IMPORTS - NB	10.13.0	01275 6200		1.55.	2.107.11			122	1370.2	200.0
37	IMPORTS - PEI	773.0	5.75	2569.0	525	200	100	1230.3	127.0	**	
38	IMPORTS - NFLD		**		-	-	**	888	155	16.5	
39	IMPORTS - RES	8347.3	2029.8	1605.0	F88		300	23253.3	383.0	10347.5	3648.7
10	TOTAL IMPORTS	10133.3	2029.8	9660.0	(at)	2487.4	620.0	25252.9	2510.0	11962.2	3931.7
4 1	TOTAL SUPPLY	69883.3	53413.0	20332.0	34966.0	11235.6	9053.1	74259.8	47202.0	89228.7	18103.0
12	TOTAL INTER.DEM	22559.4	45013.1	19188.0		6744.0	7052.7	7526.2	287.4	9571.0	363.4
13	TOTAL DOM.FIN.DEM	30816.0	-6055.1	1059.0	-485.1	3446.8	804.4	58465.4	8043.6	30806.4	17611.0
14	TOTAL EXPORTS	16507.9	14455.0	85.0	35451.1	1044.8	1196.0	8268.3	38871.0	48851.4	128.6

MODEL 1 N.B., 1965 - OUTPUT AND SUPPLY FLOWS J,M (\$'000)

	TEXTILES, CLOTHING	SAWMILLS, WOOD PR	PULP-PAPER & PROD	PRINTING	FABRIC; METAL PROD	MACH. & EQUIPT.	TRANSP,EQ. PETR.PROD.	ELECTRICAL EQUIPT.	NONMET: MINERAL PR	
	11	12	13	14	15	16	17	18	19	20
AGRICULTURE		***	**							
FORESTRY		207.0	99							
PRIMARY FISHING		***	-							
METAL MINING		**	**							
COAL MINING										
NONMETAL, QUARRIES										
MEAT, DAIRY, FRUIT		-	32							
SECONDARY FISHING		**								
MISC. FOODS, NES			25.0							
S.DRINK, DIST, BREW TEXTILES, CLOTHING			25.8			••				
SAWMILLS, WOOD PR		44730.3								
PULP-PAPER & PR		44730.3	148205.6							
PRINTING			146203.0	9873.4						
METAL FABRIC				70/3,4	15583.6	18.0				
MACH. & EQUIPT.		<u>.</u>			10000.0	6362.2				
TRANSP.EQ.,PETR.PR						0302.2	64714.1			
ELECTRICAL EQ						966.6	04/14.1	11645.6		
NONMET.MINERAL PR			5.9			700.0		11045.0	11814.4	
									11014.4	
FERT, PAINT, SOAP		**						••		
MISC. MANUF.										
CONSTRUCTION										
TRANSP,TRAVEL,ENT		**								
RADIO, TEL, TELEG										
E.POWER, WATER, GAS										
DISTRIBUTION		**								
AUTO OPERATION		**								
FINANCE,R.E		**								
DWELLING SERVICES										
HOTELS,REST		<u></u>								
PERSONAL SERVICES		===								
BUSINESS SERVICES		**								
TOTAL OUTPUT	8508.5	44937.3	148237.2	9873.4	15583.6	7346.8	64714.1	11645.6	11814.4	
IMPORTS - NS	770.2	356.0	474.0	330.0	1022.9	250.0	2498.9	162.0	602.1	
IMPORTS - NB		**		**	770	0.7%	753	775		
IMPORTS - PEI	704.7	**		55	61.6	777	6.0	***	55	
IMPORTS - NFLD	201771	105030	5155	277.77	10750 3	114110	358		6.1	
IMPORTS - RES	30177.1	18587.8	5175.3	2771.1	18759.9	116110.9	37528.4	7882.0	12248.1	
TOTAL IMPORTS	31652.0	18943.8	5649.3	3101.1	19844.4	116360.9	40033.3	8044.0	12856,3	
TOTAL SUPPLY	40160.5	63881.1	153886.4	12974.5	35428.0	123707.6	104747.3	19689.6	24670.7	
TOTAL INTER.DEM	2694.7	29118.2	23110.2	6775.8	28753.3	21641.6	25810.0	8277.5	22765.4	
TOTAL DOM.FIN.DEM	34440.6	10010.9	1428.6	5781.7	410.1	100383.8	62551.5	5987.7	202.8	
TOTAL EXPORTS	3025.0	24752.2	129347.6	417.0	6264.7	1682.2	16385.8	5424.4	1702.3	
	40.4 < 0. =									
TOTAL DEMAND	40160.3	63881.2	153886.4	12974.5	35428.1	123707.6	104747.2	19689.6	24670.5	

MODEL 1 N.B., 1965 - OUTPUT AND SUPPLY FLOWS J,M (\$'000)

,					
		HOTELS,	PERSONAL	BUSINESS	TOTAL
		REST.	SERVICES	SERVICES	OUTPUT
		31	32	33	34
- 1	AGRICULTURE	5.		***	66347.9
2	FORESTRY	1/ 10 /		**	48877.0
3	PRIMARY FISHING			13 0	10672.0
4	METAL MINING			***	34966.0
5	COAL MINING	5.57			8748.2
6	NONMETAL, QUARRIES				8433.1
7	MEAT,DAIRY,FRUIT			17440	48623.9
8	SECONDARY FISHING	355		44	45075.0
9	MISC. FOODS,NES			(22	77266.6
10	S.DRINK,DIST,BREW	177		10 111	14197.1
11	TEXTILES,CLOTHING	348		**	8482.7
12	SAWMILLS, WOOD PR	378		922	45441.5
13	PULP-PAPÉR & PR	**		822	148231.4
14	PRINTING	344		920	9873.4
15	METAL FABRIC	144		7.00	15601.6
16	MACH. & EQUIPT	- 		722	6362.2
17	TRANSP.EQ.,PETR.PR	(42		623	64800.8
18	ELECTRICAL EQ			**	12612.2
19	NONMET.MINERAL PR	522		**	11820.3
20		122		-	11020.5
21	FERT,PAINT,SOAP	122		1000	11056.0
22	MISC. MANUF			:25	6594.8
23	CONSTRUCTION				255314.0
24	TRANSP,TRAVEL,ENT				152603.8
25	RADIO, TEL, TELEG			2007	31023.3
26	E.POWER, WATER, GAS	1221			39627.0
27	DISTRIBUTION				135295.1
28	AUTO OPERATION			355	62422.1
29	FINANCE,R.E.	77		***	60854.6
30	DWELLING SERVICES	5000V			72131.5
31	HOTELS, REST.	20500.0			
32	PERSONAL SERVICES	20300.0	50432.8		20500.0
33	BUSINESS SERVICES		30432.8	24939.0	50432.8
				24737.U	24939.0
34	TOTAL OUTPUT	20500.0	50432.8	24939.0	1609223.0
35	IMPORTS - NS	**	9964	544	22470.0
36	IMPORTS - NB		22		22478.0
37	IMPORTS - PEI	200		2225	6700 -
38	IMPORTS - NFLD				5702.7
39	IMPORTS - RES	220	201	22	88.9
40	TOTAL IMPORTS			**	304136.6
				55	332406.2
41	TOTAL SUPPLY	20500.0	50432.8	24939.0	1941626.0
42	TOTAL INTER.DEM	1891.8	2419.6	19816.7	581182.3
43	TOTAL DOM.FIN.DEM	18608.2	48013.2	3222.0	976613.1
44	TOTAL EXPORTS	550	1001512	1900.3	383805.7
				.,00,5	303003.7
45	TOTAL DEMAND	20500.0	50432.8	24938.9	1941600.0

1				FISHING	MINING	MINING	QUARRIES	& FRUIT	SECONDARY FISHING	MISC. FOODS,NES	S.DRINKS, DIST,BREW
- 1		1	2	3	4	5	6	7	8	9	10
	AGRIC. PRODUCTS	1215.0	41.0			240	940	19388.3	303.4	1127.4	122
2	FORESTRY PRODUCTS	747.0	~					949	1.3	0.1	
3	PRIMARY FISH	440						-	19188.0		
4	METALS	120	220			220	0.3	9.0	1.5	0.3	26
5 6	NONMETAL OLIAPPIES	542.0	•• ••	6.6		200	0.2	8.9 2.9	1.5 83.4	0.3 29.1	1 1
7	NONMETAL, QUARRIES MEAT, DAIRY, FRUIT	342.0		0.0		223		6183.1	21.2	543.2	1.1 141.1
8	SEC. FISH PRODUCTS	920	225	156.4		220	227	24.4	21.2	106.6	141.1
9	MISC. FOOD PROD	5757.0	**	45		<u> 22</u> 5	9F	735.0	3.6	2318.2	530.6
10	S.DRINK, DIST, BREW	**				••		34.0		142.3	187.1
11	TEXTILES,CLOTHING	276.0	33.0	471.2			_+	62.8	21.5	403.5	875
12	SAWMILL, WOOD PROD	72.0	20.5	196.9	371.2	15.0	7.5	104.3	47.0	20040	57.1
13	PULP-PAPER & PROD	384.0	777	55	6.3	2.2	536.3	2033.0	716.1	3806.8	533.6
14 15	PRINTINGFABRIC. METAL PROD	1020.0	228.5	108.0	6.2 483.8	187.5	2.9 104.3	131.7 43.4	94.7 1245.8	209.3	60.1
16	MACH. & EQUIPT	1359.0	1772.0	542.7	403.0	1400.4	142.1	127.0	408.7	550.8	117.3 288.2
17	TRANSP.EO.,PETR.PR	1251.0	780.0	686.1	254.4	210.9	32.6	348.2	205.8	923.4	198.5
18	ELECTRICAL EQ	55	57.5	49.9	551	29.1	16.2	679.9	***	188.2	170.5
19	NONMET.MINERAL PR	402.0		***	3.8	**	**		200	4.3	**
20		350	(E)=3	***	**	##X	##3	**	380		**
21	FERT,PAINT,SOAP	4466,0		7.6	82.9	18.0	9.9		(e)	8.3	89.3
22	MISC. MFG. PROD	20.00.0	11000	77.6	240	13.0		58.0	32.5	211.6	52.4
23	CONSTRUCTION	2060.0	1108.0 729.0	65.0 589.0	24.0 756.8	12.0 558.6	6.0	299.3	655.0	311.5	52.4
24 25	TRANSP,TRAVEL,ENT RADIO,TEL,TELEG	1870.0 339.0	528.0	58.0	126.2	26.0	686.9 6.8	3261.8 287.4	3233.0 399.0	5081.8 600.2	629.9 244.4
26	E.POWER, WATER, GAS	351.0	51.0	20,0	1134.8	455.7	97.3	325.2	366.5	262.9	144.1
27	DISTRIBUTION	1443.0	343.2	275.8	265.0	221.0	88.1	1594.3	560.9	2335.1	252.0
28	AUTO OPERATION	3698.0	182.5	188.7	50.6	70. I	82.2	8.5	47.7	2.9	32.9
29	FINANCE,R.E	3234.0	797.0	526.0	268.8	20.0	21.4	682.2	445.0	969.1	179.8
30	DWELLING SERVICES	225	22				223	22	201		**
31	HOTELS, REST	5.0	20.0		3.0	221		21.7	40.0	(7.0	**
32	PERSONAL SERVICES	5.0 505.0	20.0 50.0	19.0	3.0 1493.9	60.5	8.6	21.7 459.0	60.0 670.0	67.2	13.5
33 34	TOTAL INTER.INPUT	30996.0	6741.2	4024.5	5325.4	3287.0	1849.3	36904.1	28811.6	426.3 20418.6	355.9 4108.9
35	TAXES	2482.0	4729.1	339.3	808.2	358.0	120.0	394.4	657.4	579.0	294.3
36 37	NON-COMP. IMPORTS	-1717.0 468.0	72.0	-25.8 53.2	2155.4	285.0	-96.9 143.4	1294.2	2206.5	32336.3	1971.0
38	WAGES & SALARIES	7400.0	19776.0	3615.0	4753.7	3744.2	1791.7	7424.0	8194.0	11385.5	3094.5
39	UNINCORP.BUS.INC	21220.0	10003.6	1305.0	***	****	2200.0	100.2	1010.0	1136.0	27.3
40	PROFIT, RENT, INT.	488.0	4438.7	630.8	9808.3	113.0	1725.2	1613.0	2940.5	9016.1	3538.1
41	DEPRECIATION	5011.0	3116.5	730.0	12115.0	961.0	700.4	893.9	1255.0	2394.9	1163.0
42	HOUSEHOLD INCOME	29093.0	32013.4	5499.8	4753.7	3744.2	5390.4	8370,6	11444.0	13694.3	4764.8
43	EDUCATION & HOSP	***	***		47.40	1000	440		RES	***	945
44	PROVINCIAL REVENUE	-372.0	4727.5	277.3	474.0	138.0	113.1	239.3	263.9	572.6	262.0
45 46	MUNICIPAL REVENUE FEDERAL REVENUE	2444.0 -1292.0	40.0 282.5	70.0 17.2	134.2 200.0	170.0 50.0	37.8 197.7	222.7 316.5	530.0 564.0	364.8 1649.2	129.3 740.9
46 47	IMPORT LEAKAGE	468.0	1956.0	53.2	11963.7	398.0	144.4	1676.7	2206.5	38172.0	3028.2
48	TOTAL PRIMARY	35352.0	42135.9	6647.5	29640.6	5461.2	6583.8	11719.7	16263.4	56847.7	10088.2
49	FACTOR INCOMES	29108.0	34218.3	5550.8	14562.0	3857.2	5716.9	9137.2	12144,5	21537.6	6659.9
50	GROSS DOM. PROD	34884.0	42063.9	6594.3	27485.2	5176.2	6440.4	10425.5	14056.9	24511.5	8117.2
51	EMPLOYMENT	10350.0	6000.0	3000.0	807.0	824.0	418.0	1986.0	3600.0	2884.0	648.0
52	TOTAL OUTPUT	66348.0	48877.1	10672.0	34966.0	8748.2	8433.1	48623.8	45075.0	77265.8	14197.1

		TEXTILES, CLOTHING	SAWMILLS, WOOD PR	PULP-PAPER & PROD	PRINTING	METAL FABRIC.	MACH. & EQUIPT.	TRANSP.EQ. PETR.REF.	ELECTRICAL EQUIPT.	NONMET, MINERAL PR	
		11	12	13	14	15	16	17	18	19	20
1 AGRI	IC. PRODUCTS	408.7	***	***		***		35	類結	***	
2 FORE	ESTRY PRODUCTS	त्र र े	15708.5	28534.0		**		0.1	0.2	21.0	
	JARY FISH	***		**:				***		77 2	
	ALS L		0.7	3270.2		758 **\		3.7	**		
6 NON	METAL,QUARRIES	**		0.3		19.7		75	**:	657.5	
7 MEA	T,DAIRY,FRUIT	**		**		***		***	***		
8 SEC.	FISH PRODUCTS					***		**	**:	**	
9 MISC	. FOOD PROD	×e ⁻		188.8				**	88	17.8	
10 S.DRI	INK,DIST,BREW	267.0	100.5	1517		0.2		1.0	***		
	TILES,CLOTHING MILL,WOOD PROD	257.8	199.5 2572.9	151.7 4640.8	1.0	0.2 14.5	7.1	1.0 115.9	17.4		
13 PULP	P-PAPER & PROD	58.4	22.1	11611.2	851.9	11.3	0.3	40.6	16.8	426.9	
14 PRIN	TING	1.9	22.4	22.2	524.9	11.0		21.2	10.0	1.0	
15 FABR	RIC. METAL PROD	0.9	132.5	1246.6	26.6	4130.2	31.8	944.6	23.0	6.4	
16 MAC	H. & EQUIPT	143.8	1065.8	625.4	113.2	528.8	63.8	293.5	969.2	552.9	
17 TRAN	NSP.EQ.,PETR.PR	49.9	254.4	3216.3	37.4	282.3	33.7	188. j	93.0	610.2	
18 ELEC	TRICAL EQ		<u> </u>	222.0	-	2.0	227	0.1	425.8	1150.2	
	MET.MINERAL PR		*	322.0	<u>.</u>	3.8	227			1158.3	
20 21 FERT	T,PAINT,SOAP	7.5	633,7		0.4	34.9	142.0	4.7	11.8	2.9	
22 MISC	. MFG. PROD	7,5	055.7	2000 2000	0.4	J (,)	1 12.0		11.0	0.9	
23 CONS	STRUCTION	38.3	86.4	395,4	23.3	122.2	12.0	27.7	62.4	20.6	
24 TRAN	NSP,TRAVEL,ENT	443.3	1800.1	7950.1	225.8	1126.2	379.6	5428.5	952.2	979.3	
25 RADI	IO,TEL,TELEG.	21.3	130.8	696.5	348.2	77.2	161.2	235.3	101.0	156.8	
26 E.POV	WER, WATER, GAS	108.4	662.0	6114.4	81.0	116.3	63.0	457.8	98.0	384.6	
27 DIST	RIBUTIONO OPERATION	202.5 2.0	756.3 7.3	5657.8 21.2	101.5 8.7	515.7 0.9	140.4 21.1	1902.2 16.0	408.0 13.6	450.2 27.0	
28 AUTO 29 FINA	NCE,R.E	131.8	1044.9	484.1	119.2	396.5	184.0	483.5	308.1	107.7	
30 DWE	LLING SERVICES	151.0	1044.7	404.1	117.2	370.5	***	103.3	50011	**:	
31 HOTE	ELS, REST	993	**	***	***	**	**	***	***	**	
	SONAL SERVICES	1.7	11.5	4.2	4.3	7.2	1.7	6.3	8.9	1.6	
33 BUSI	NESS SERVICES	77.6	97.4	2805.1	46.4	60.0	66.0	142.9	208.3	95.8	
34 TO	OTAL INTER.INPUT	1955.8	25209.1	77957.8	2513.8	7458.8	1307.7	10314.5	3717.7	5679.4	
35 TAXE	ES	100.5	686.5	1951.9	42.9	171.4	99.1	240.8	115.2	129.1	
36 SUBS	-COMP. IMPORTS	2386.5	197.0	11805.4	838.2	1137.0	1182.0	38605.2	1924.0	172.0	
38 WAG	SES & SALARIES	2928.3	11646.8	30780.8	4541.1	4870.0	2506.9	8592.8	3596.0	3156.6	
39 UNIN	NCORP.BUS.INC	14.2	1866.2	20,000.0	1035.0	91.2	53.5	19.5	5570.0	38.7	
40 PROF	FIT,RENT,INT	825.2	4243.7	17988.1	600.3	944.6	947.8	4610.1	2617.7	1400.1	
41 DEPR	RECIATION	272.2	1592.3	7747.1	302.1	928.5	265.2	2417.8	641.6	1244.2	
	SEHOLD INCOME	3116.7	15660.8	33670.1	6033.4	5715.7	3282.4	12004.8	4011.0	4000.8	
43 EDUC	CATION & HOSP	40.4	4441	11241	41.1	64.4	51.6	2247	161.6	02.2	
44 PROV 45 MUN	VINCIAL REVENUEICIPAL REVENUE	40.4 92.1	444.1 415.4	1124.1 1085.8	41.1 25.8	64.4 142.1	51.6 91.5	224.7 209.1	162.6 41.3	93.3 97.5	
46 FEDE	ERAL REVENUE	163.3	839.0	3770.8	119.0	155.0	181.8	899.6	535.2	272.2	
47 IMPO	ORT LEAKAGE	2842.2	1280.9	22875.4	838.2	1137.0	1182.0	38730.2	3502.8	432.7	
48 ,TO	OTAL PRIMARY	6526.9	20232.5	70273.2	7359.6	8142.7	5054.5	54486.2	8894.5	6140.7	
49 FACT	OR INCOMES	3767.7	17756.7	48768.9	6176.4	5905.8	3508.2	13222.4	6213.7	4595.4	
50 GROS	SS DOM. PROD	4140.4	20035.5	58467.9	6521.4	7005.7	3872.5	15881.0	6970.5	5968 /	
51 EMPI	LOYMENT	1047.0	3473.0	4990.0	994.0	953.0	498.0	1856.0	774.0	670.0	
	OTAL OUTPUT	8482.6	45441.6	148230.7	9873.4	15601.5	6362.2	64800.7	12612.2	11870.0	

		HOTELS, REST	PERSONAL SERVICES	BUSINESS SERVICES	PERSONAL CONS	CAPITAL FORMATION	INVENTORY CHANGE	FED. GOVT	FED. GOVT.	PROVINCIAL GOVT.	MUNICIPAL GOVT
		31	32	33	34	35	36	37	38	39	40
- 1	AGRIC. PRODUCTS				32025.5		-1987.0	81.1	72.1	85.0	16.0
2	FORESTRY PRODUCTS				652.0		-6752.0	22)	**		36.0
3	PRIMARY FISH		~~		1059.0		150	***	22	養養	**
4	METALS						-485.1		550	200	310
5	COAL	128.2			2723.3		22.9	45.3	**	30.0	15.0
6	NONMETAL QUARRIES	3.55	112.0		283.5		-29.1 368.3	382.9	90.3	103.0	447.0
8	MEAT, DAIRY, FRUIT SEC. FISH PRODUCTS		a,0		56343.6 7658.1		138.0	133,3	6.6	66.0	67.0 12.0
9	MISC. FOOD PROD	277	20.0		30627-1		-269.1	135.8	20.4	16.0	20.0
10	S.DRINK,DIST,BREW				17544.0		67.0	155.0	20.4	10.0	20.0
11	TEXTILES.CLOTHING	29.0	25.6		33998.4		18.6	50.4	105.3	45.0	83.0
12	SAWMILL, WOOD PROD	500.0	154.0		8078.5		837.0	348.3	88.4	50.0	85.0
13	PULP-PAPER & PROD	9.5	16.0	1.0	1500.0		-89.4	880		H-0	44
14	PRINTING	93.8	78.2	4854.0	3210.3		56.1	***	17.6	850.0	122.0
15	FABRIC. METAL PROD	5 .23	218.0	93.3	9.0	70.0	179.1	67.7	5.3	70.0	**
16	MACH. & EQUIPT.	460.0	75.0	5.6		91764.0	68.8	200.0	800.0	2375.0	1137.0
17	TRANSP.EQ.,PETR.PR	500.6	75.0	43.1	57232.3	1000.0	≈1133.7	2259.0	453.7	1021.0	650.0
18	ELECTRICAL EQ	16 44	180.0	42.0	4281.8	500.0	-628.7 90.0	923.0 99.3	706.6	60.0	
19	NONMET.MINERAL PR	**				722	90.0	99.3	**		22
20 21	FERT,PAINT,SOAP	75.4	194.9	36.7	3400.0	22	-347.9	23.7	31.2	80.0	
22	MISC. MFG. PROD	29.5	84.1	246.0	2054.3	(22	-158.2	23,1	31,2	5.0	50.0
23	CONSTRUCTION	200.0	399.0	240.0	2054.5	149241.6		4045.0	9692.0	44984.0	5306.0
24	TRANSP,TRAVEL,ENT	1948.4	1820.7	674.6	33832.0			153.8	1410.8	4342.0	2320.0
25	RADIO.TEL.TELEG.	568.0	353.0	4647.0	12471.0			156.7	100.8	519.0	251.0
26	E.POWER, WATER, GAS	1165.6	761.0	194.0	14756.4			1683.8	232.7	521.0	1382.0
27	DISTRIBUTION	292.2	299.5	176.5	95110.6			213.2	146.3	426.0	180.0
28	AUTO OPERATION	, T	10.0	6.7	45907.1			55	192.3	150.0	360.0
29	FINANCE,R.E	1298.6	2728.0	767.0	3619.3			T.	279.4	578.0	515.0
30	DWELLING SERVICES				76727.5			550	**	770	fit
31	HOTELS, REST.	527.1	286.0	20.0	18493.2 47701.6			551	34.4	29.0	**
32	PERSONAL SERVICESBUSINESS SERVICES	771.3	135.0	20.0 48.0	1280.2			550	34.4 376.4	918.0	215.0
33		8597.2	7950.0								_
34	TOTAL INTER.INPUT		320.0	11855.5	612569.8	242575.6	-10034.3	11002.3	14862.6	57323.0	13269.0
35	TAXES	1383.0	320.0	1993,9	96768.3			**	***	**	441
36	SUBSIDIES	457.5	1503.0	-54.0	577040			2.47.7	437.4	445.0	10050
37	NON-COMP. IMPORTS	456.5 5643.9	22008.1	353.2 6619.0	57704.0			347.7 38160.0	426.4 35198.0	665.0 20852.0	1085.0
38 39	WAGES & SALARIES UNINCORP.BUS.INC	2259.3	14271.0	1567.0	22			36100.0	33196.0	20032.0	8762.0
40	PROFIT.RENT.INT.	1364.1	3380.7	2187.4						14349.0	2865.0
41	DEPRECIATION	796.0	0.0001	417.0				_	-	14347.0	2603.0
42	HOUSEHOLD INCOME	8663.5	39198.8	9356.0	:44			38160.0	35198.0	26601.0	9827.0
43	EDUCATION & HOSP	344	***	722	5660.9			F4.		40	4.
44	PROVINCIAL REVENUE	569.9	90.0	1660.5	40265.4			-	**	127	**
45	MUNICIPAL REVENUE	840.1	320.0	365.3	4142.0					2	7.5
46	FEDERAL REVENUE	111.0	371.0	213.2	46700.0				- 2	**	75
47	IMPORT LEAKAGE	922.3	1503.0	1071.5	57704.0			347.7	426.4	9265.0	2885.0
48	TOTAL PRIMARY	11902.8	42482.8	13083.5	154472.3			38507.7	35624.4	35866.0	12712.0
49	FACTOR INCOMES	9267.3	39659.8	10373.4	7.66			38160.0	35198.0	35201.0	11627.0
50	GROSS DOM, PROD	11446.3	40979.8	12730.3	96768.3			38160.0	35198.0	35201.0	11627:0
51	EMPLOYMENT	3500.0	11100.0	2374.0				6400.0	7000.0	4000.0	1710 0
52	TOTAL OUTPUT	20500.0	50432.8	24939.0	767042.1	242575.6	-10034.3	49510.0	50487.0	93189.0	25981.0

MODEL 1 ATLANTIC PROV., 1965 - OUTPUT AND SUPPLY FLOWS J,M (\$'000)

		AGRIC. PRODUCTS	FORESTRY PRODUCTS	PRIMARY FISH	METALS	COAL	NONMETALS, QUARRIES	MEAT, DAIRY & FRUIT	SEC. FISH PRODUCTS	MISC, FOOD PRODUCTS	S.DRINKS, DIST,BREW
		1	2	3	4	5	6	7	8	9	10
1	AGRICULTURE	162834.8	6289.0	622	5 <u>4.5</u>	222		G-W		34	
ż	FORESTRY		91716.0	44			•	44	822		
3	PRIMARY FISHING			96275.0	744	•-		522	152	1	
4	METAL MINING				188077.3				742	722	
5	COAL MINING					54235.0		722	122	22	
6	NONMETAL, QUARRIES						48988.5		122	**	
7	MEAT, DAIRY, FRUIT							127555.6	72	11.7	
8	SECONDARY FISHING				••			1200.0	180745.9		
9	MISC. FOODS, NES									124424.6	
10	S.DRINK, DIST, BREW					•-		117.3			43245.6
11	TEXTILES, CLOTHING										
12	SAWMILLS, WOOD PR		1425.8								
13	PULP-PAPER & PR						•-				
14	PRINTING										
15	IRON-STEEL MILLS										
16	METAL FABRIC										
17	MACH. & EQUIPT				\ 		••				
18	TRANSP. EQUIPT										
19	ELECTRICAL EQ										
20	NONMET.MINERAL PR										
21	PETROLEUM REF				·		•				
22	FERT,PAINT,SOAP										
23	MISC. MANUF										
24	CONSTRUCTION										
25	TRANSP,TRAVEL,ENT										
26	RADIO,TEL,TELEG										
27	E.POWER, WATER, GAS										
28	DISTRIBUTION										
29	AUTO OPERATION										
30	FINANCE,R.E.										
31	DWELLING SERVICES									••	
32	HOTELS, REST.				10:32						
33	PERSONAL SERVICES				=						
34	BUSINESS SERVICES	1/20240		06375.0	188077.3	54235.0	48988.5	128872.9	180745.9	124436,3	422.45.6
35	TOTAL OUTPUT	162834.8	99430.7	96275.0							43245.6
36	TOTAL IMPORTS	33139.3	2583.6	1605.0	6962.5	6946.0	-	89338.3	1200.0	41774.9	16195.7
37	TOTAL SUPPLY	195974.0	102014.3	97880.0	195039.8	61181.0	48988.5	218211.1	181945.8	166211.1	59441.3
38	TOTAL INTER.DEM	59420.5	81242.4	92311.0	8824.6	20783.5	20362.3	17903.1	2201.0	32555.7	770.2
39	TOTAL DOM.FIN.DEM	98633.3	-5222.2	5569.0	4981.4	17271.2	2507.8	195001.2	22329.5	97050.8	58631.8
40	TOTAL EXPORTS	37919.7	25994.0	3307.0	181233.7	23126.3	26117.8	5307.3	157415.5	36604.6	39.2
41	TOTAL DEMAND	195973.4	102014.1	97880.0	195039.6	61181.0	48987.9	218211.5	181945.9	166211.0	59441.2

MODEL 1 ATLANTIC PROV., 1965 - OUTPUT AND SUPPLY FLOWS J,M (\$'000)

		TEXTILES, CLOTHING	SAWMILLS, WOOD PR	PULP-PAPER & PROD,	PRINTING	IRON-STEEL PRODUCTS	FABRIC, METAL PROD	MACH, & EQUIPT.	TRANSP, EQUIPT,	ELECTRICAL EQUIPT.	NONMET: MINERAL PR
		11	12	13	14	15	16	17	18	19	20
ı	AGRICULTURE			(66)							
2	FORESTRY		960.0							927	***
3	PRIMARY FISHING			See							
4	METAL MINING		1.44	**							
5	COAL MINING									1,550	**
6	NONMETAL, QUARRIES			244							
7	MEAT, DAIRY, FRUIT		522	**						3.70	
8	SECONDARY FISHING			722							
9	MISC. FOODS, NES										
10	S.DRINK, DIST, BREW		122	25.8							
11	TEXTILES, CLOTHING	37792.6								- 	
12	SAWMILLS, WOOD PR		75042.1								
13	PULP-PAPER & PR	25.8		270114.3							
14	PRINTING				30530.0						122
15	IRON-STEEL MILLS					65849.6				144	922
16	METAL FABRIC						45925.2	141.4			
17	MACH. & EQUIPT						91.5	15011.0			522
18	TRANSP. EQUIPT							55.1	91807,3	**	
19	ELECTRICAL EQ							966.6		22161.4	7.00
20	NONMET.MINERAL PR			5.9						20.0	27089.9
21	PETROLEUM REF									341	27007.7
22	FERT,PAINT,SOAP									344	
23	MISC. MANUF										
24	CONSTRUCTION									22	3.53
25	TRANSP,TRAVEL,ENT										-
26	RADIO, TEL, TELEG										
27	E.POWER, WATER, GAS									**	
28	DISTRIBUTION										
29	AUTO OPERATION									1.75	223
30	FINANCE,R.E									**	
31	DWELLING SERVICES										
32	HOTELS,REST										
33	PERSONAL SERVICES						2-				
34	BUSINESS SERVICES			-			**			-	
35	TOTAL OUTPUT	37818.4	76002.1	270145.9	30530.0	65849.6	46016.7	16174.1	91807.3	22161.4	27089.9
36	TOTAL IMPORTS	113683.4	69915.2	16922.9	10597.8	20734.0	45825.6	305010.6	131733.4	37517.3	37730.8
37	TOTAL SUPPLY	151501.7	145917.3	287068.8	41127.8	86583.5	91842.2	321184.7	223540.7	59678.7	64820.6
38	TOTAL INTER.DEM	13841.5	85983.0	44021.1	20645.6	35132.4	82625.2	77910.9	31365.9	22652.8	63668.7
39	TOTAL DOM.FIN.DEM	117524.0	27672.9	5089.2	20401.1	-527.1	3857.1	242319.2	148309.1	24847.2	
40	TOTAL EXPORTS	20135.8	32261.6	237958.8	81.1	51978.5	5359.7	954.4	43865.7	12178.7	726.7 424.9
41	TOTAL DEMAND	151501.2	145917.4	287069.1	41127.8	86583.8	91841.9	321184.4	223540.7	59678.7	64820.3

MODEL 1 ATLANTIC PROV., 1965 - OUTPUT AND SUPPLY FLOWS J,M (\$'000)

		PETROLEUM PRODUCTS	FERT,PAINT & SOAP PR.	MISC. MFG. PROD.	CON- STRUCTION	TRANSP, TRAVEL,ENT	RADIO, TEL, TELEG.	ELEC.POWER WATER,GAS	DISTRIBUTN	AUTO OPERATION	FINANCE, R.E.
		21	22	23	24	25	26	27	28	29	30
1	AGRICULTURE						**				
2	FORESTRY	44					440				
3	PRIMARY FISHING	2.2	44				¥#6				
4	METAL MINING	\$ <u>5</u> 9	44								
5	COAL MINING		92								
6	NONMETAL, QUARRIES	225	**				22				
7	MEAT, DAIRY, FRUIT	**				••					
8	SECONDARY FISHING	**	**				22				
9	MISC. FOODS, NES	**	**				123				
10	S.DRINK, DIST, BREW	77	5.6			••	**				
11	TEXTILES, CLOTHING	**									
12	SAWMILLS, WOOD PR	75					57				
13	PULP-PAPER & PR	**					77				
14	PRINTING	**									
15	IRON-STEEL MILLS	172.5	332.8			••	170				
16	METAL FABRIC	**:					575				
17	MACH. & EQUIPT	***					***				
18	TRANSP. EQUIPT	77.		86.7			55 :				
19	ELECTRICAL EQ	20 2					##-S				
20	NONMET.MINERAL PR			**			550				
21	PETROLEUM REF	129791.0		***		••	**				
22	FERT,PAINT,SOAP		22630.6				**				
23	MISC. MANUF			9741.2	75		***				
24	CONSTRUCTION				737136.0		**			5	
25	TRANSP,TRAVEL,ENT					473130.3	**				
26	RADIO,TEL,TELEG						81796.1	90907			
27	E.POWER,WATER,GAS						**	114577.4			
28	DISTRIBUTION						**		458768.2	555	
29	AUTO OPERATION						**		**	188406.0	
30	FINANCE,R.E						**		22		185651.2
31	DWELLING SERVICES						**		**		
32	HOTELS,REST								44	122	
33	PERSONAL SERVICES						227			122	
34	BUSINESS SERVICES			42			22			••	
35	TOTAL OUTPUT	129963.5	22969.0	9827.9	737136.0	473130.3	81796.1	114577.4	458768.2	188406.0	185651.2
36	TOTAL IMPORTS	16060.8	15664.5	1558.5	55	##S	āt.	547.0		:***	1561.0
37	TOTAL SUPPLY	146024.3	38633.5	11386.4	737136.0	473130.3	81796.1	115124.4	458768.2	188406.0	187212.2
38	TOTAL INTER.DEM		27707.5	2401.0	85776.8	257648.1	46661.7	53831.5	101183.6	49728.5	167073.6
39 40	TOTAL DOM.FIN.DEM TOTAL EXPORTS		10114.0 811.7	6240.9 2744.2	651359.2	1565 42.9 589 38.3	35134.4	59054.5 2238.0	342584.1 15000.0	138677.3	20138.5
			20/22	*****	#3#13# 0	452120.2	01507	115133.0	4505/5 -	100 10 5	10=0:0:0
41	TOTAL DEMAND	146024.2	38633.2	11386.1	737135.9	473129.3	81796.1	115123.9	458767.7	188405.8	187212.0

MODEL 1 ATLANTIC PROV., 1965 - OUTPUT AND SUPPLY FLOWS J,M (\$'000)

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		DWELLING	HOTELS,	PERSONAL	BUSINESS	TOTAL
		SERVICES	REST.	SERVICES	SERVICES	OUTPUT
		31	32	33	34	35
	ACDICIU TUDE					
2	AGRICULTURE	13014.0				182137.7
3	FORESTRYPRIMARY FISHING					92676.0
4	METAL MINING					96275.0 188077.3
5	COAL MINING					54235.0
6	NONMETAL, QUARRIES					48988.5
7	MEAT, DAIRY, FRUIT					127567.4
8	SECONDARY FISHING					181945.8
9	MISC. FOODS, NES					124424.6
10	S.DRINK, DIST, BREW					43394.3
1.1	TEXTILES, CLOTHING					37792.6
12	SAWMILLS, WOOD PR					76467.9
13	PULP-PAPER & PR					270140.1
14	PRINTING					30530.0
15	IRON-STEEL MILLS					66354.8
16	METAL FABRIC					46066.5
17	MACH. & EQUIPT					15102.5
18	TRANSP. EQUIPT.					91949.2
19	ELECTRICAL EQ					23128.0
20	NONMET.MINERAL PR					27095.8
21	PETROLEUM REF					129791.0
22	FERT, PAINT, SOAP					22630.6
23	MISC. MANUF					9741.2
24 25	CONSTRUCTIONTRANSP,TRAVEL,ENT					737136.0
26	RADIO, TEL, TELEG					473130.3
27	E.POWER, WATER, GAS					81796.1
28	DISTRIBUTION					114577.4
29	AUTO OPERATION					458768.2
30	FINANCE, R.E.					188406.0 185651.2
31	DWELLING SERVICES					221966.2
32	HOTELS, REST.	221700.2	71395.0			71395.0
33	PERSONAL SERVICES		71373.0	140510.4		140510.4
34	BUSINESS SERVICES	**		140510.4	75328.1	75328.1
35	TOTAL OUTPUT	234980.2	71395.0	140510.4	75328.1	4735166.0
36	TOTAL IMPORTS	44	**	 .		1024807.4
37	TOTAL SUPPLY	234980.2	71395.0	140510.4	75328.1	5759973.0
20	TOTAL INTER DEM		0000			
38	TOTAL INTER.DEM	224000 2	9353.9	7352.8	56313.9	1750287.0
39 40	TOTAL DOM.FIN.DEMTOTAL EXPORTS		62041.1	133157.6	13010.9	3023097.0
40	TOTAL EXPORTS	***	***:	**	6003.2	986440.8
41	'TOTAL DEMAND	234980.2	71394.9	140510.3	75328.0	5759824.0
						3.2.2 2.10

	AGRI- CULTURE	FORESTRY	PRIMARY FISHING	METAL MINING	COAL MINING	NONMETALS, QUARRIES	MEAT, DAIRY & FRUIT	SECONDARY FISHING	MISC, FOODS,NES	S.DRINKS, DIST,BREW
	1	2	3	4	5	6	7	8	9	10
1 AGRIC. PRODUCTS	2993.0	81.7	2.2	440			53051.7	303.4	2275.9	520
2 FORESTRY PRODUCTS	1407.8	01.7	-		839.5		1.2	8.7	0.1	525
3 PRIMARY FISH	=:	922		22		**	**	92311.0	7.00	
4 METALS						44	925	**	**	
5 COAL		21.1		42.8		88.2	32.4	30.7	2.1	4.3
6 NONMETAL, QUARRIES	1411.0	22	787.5	145		1.1	17.5	268.3	68.1	3.1
7 MEAT,DAIRY,FRUIT			1.600.5				14302.2	578.5	1846.1	271.7
8 SEC. FISH PRODUCTS	22270.2	100	1699.5	***			31.5 1398.3	216.6	449.0 4918.5	2489.5
9 MISC. FOOD PROD	23278.2	7.00	-		•-		40.9	210.0	199.4	529.9
0 S.DRINK,DIST,BREW	719.0	55.0	4028.2	-			163.8	136.3	513:3	329.9
1 TEXTILES, CLOTHING	168.0	36.6	2292.6	1004.3	861.0	124.4	349.7	1414.7	313.5	135.5
2 SAWMILL, WOOD PROD	680.0	30.0	2272.0	56.1	0.1	1639.5	4965.6	3747.5	5979.5	1427.2
3 PULP-PAPER & PROD	0.00.0	-		99.2	28.8	25.9	443.9	448.1	379.3	247.8
5 IRON-STEEL PROD	227	122	16.8	1087.1	1530.8	3.8	**	194	9.6	
6 FABRIC. METAL PROD	2905.0	698.2	1814.6	2913.7	952.2	1523.9	1007.7	1823.5	26.5	903.7
7 MACH. & EQUIPT	2663.0	2812.7	4538.5	17384.1	4458.4	1387.7	1022.5	1773.2	1216.8	727.3
8 TRANSP. EQUIPT.	227		1738.6	5.5			++		(44	(44)
9 ELECTRICAL EQ	221	102.6	236.0	**	419.1	41.8	679.9	**	188.2	**
0 NONMET.MINERAL PR	1208.0	44	22	64.5	11.3	**	200		4.3	0.2
1 PETROLEUM PROD	3424.0	1654.8	5189.9	6091.0	480.5	886.5	899.1	1042.3	1274.1	489.1
2 FERT,PAINT,SOAP	10766.0	64	60.4	202.3	49.0	63.7	0.4	1.6	178.9	285.7
3 MISC. MFG. PROD		1.50.50	690.6	40.40.0	0040	242.0	100.2	325.8	526.2	102.2
4 CONSTRUCTION	5247.0	1587.0	443.6	4068.0	886.0	242.0 2225.7	726.5 7695.0	1951.0 8840.7	526.2 7285.4	193.3 2024.4
5 TRANSP,TRAVEL,ENT	5210.0	1235.2	3649.2	9844.6 308.2	1382.9 81.0	140.7	498.1	1079.0	783.I	370.3
6 RADIO,TEL,TELEG.	766.0	1066.0 107.6	343.6	11498.1	2268.1	1055.0	1081.4	1708,5	657.5	553.0
7 E.POWER, WATER, GAS	1133.0 4333.0	636.2	1926.2	2406.9	676.8	388.0	4408.2	1276.8	3795.8	748.2
8 DISTRIBUTION	8876.0	559.3	515.7	985.4	162.2	573.1	26.9	117.6	42.7	40.0
9 AUTO OPERATION	8997.0	1742.5	3984.2	653.9	570.0	371.4	1476.0	1764.5	1488.0	817.8
DWELLING SERVICES	0777.0	1742.5	370 112	22	- 44		·	**		
2 HOTELS, REST		2.2	7.40	**		**	**	**	**	***
3 PERSONAL SERVICES	17.0	43.0		32.0	-	13.0	63.2	167.5	98.2	56.1
BUSINESS SERVICES	1683.0	145.0	125.0	3073.6	475.8	543.4	971.8	1804.7	1790.1	1325.6
5 TOTAL INTER.INPUT	87884.9	12584.5	34080.7	61821.3	16133.5	11338.8	95454.8	123139.8	35996.6	13643.7
6 TAXES	5506.0	6241.0	2773.2	6520.1	978.0	1266.6	1097.9	2074.4	1145.1	979.5
7 SUBSIDIES	-5900.0	220	-689.4		199	-96.9	2.475.0	2202.4	47004	4700.0
8 NON-COMP. IMPORTS	1358.0	124.5	540.3	11198.4	617.3	899.3	2475.0	3283.4	47236.4	4728.9
9 WAGES & SALARIES	18334.0	40794.5	26390.5	44546.4	34232.2	11228.0	19483.8	35550.0	21247.5	8820.0 33.9
0 UNINCORP.BUS.INC	57461.0	15979.8	20597.5	41691.4	-857.0	7677.4 13046.9	280.0 6651.0	3245.0 10660.7	2011.5 13209.5	12959.6
PROFIT, RENT, INT.	3428.9	10172.9	6732.5 5849.7	41681.4 22309.7	-857.0 3131.0	3628.4	2124.2	3992.0	3578.0	2228.6
DEPRECIATION	14065.0	6778.9 64226.0	53431.3	44881.3	33162.2	22818.2	22905.5	46686.1	26709.5	15943.6
HOUSEHOLD INCOME	79136.9	04220.0	23431.3	44001.5	33102.2	22010.2	22703.3	70000.1	20707.5	13713.0
14 EDUCATION & HOSP 15 PROVINCIAL REVENUE	-562.0	6241.2	2701.5	4658.1	538.0	1141.3	846.7	1056.6	979.9	943.4
6 MUNICIPAL REVENUE	5355.0	71.5	115.7	1774.0	350.0	464.0	551.6	1582.0	600.3	495.7
FEDERAL REVENUE	-5100.0	505.5	-444.2	3230.0	90.0	1996.0	1385.5	2205.4	2675.2	2892.6
8 IMPORT LEAKAGE	1358.0	2268.5	540.3	49402.9	830.3	7601.8	4298.4	3283.4	53885.1	7246.6
19 TOTAL PRIMARY	94252.9	80091.5	62194.3	126255.9	38101.5	37649.7	32111.9	58805.5	88427.8	29750.5
60 FACTOR INCOMES	79223.9	66947.1	53720.5	86227.7	33375.2	31952.3	26414.8	49455.7	36468.5	21813.5
GROSS DOM. PROD	92894.9	79967.1	61654.0	115057.6	37484.2	36750.4	29636.9	55522.1	41191.6	25021.6
2 EMPLOYMENT	29500.0	11700.0	29500.0	6650.0	7101.0	2302.0	5436.0	13815.0	5634.0	1945.0

		PETROLEUM REF.	FERT,PAINT & SOAP	MISC. MANUF.	CON- STRUCTION	TRANSP, TRAVEL,ENT	RADIO,TEL, TELEG.	ELEC.POWER WATER,GAS	DISTRIBUTN	AUTO OPERATION	FINANCE, R.E.
		21	22	23	24	25	26	27	28	29	30
1	AGRIC. PRODUCTS			57.2	215.8	550	-		10.2		-
2	FORESTRY PRODUCTS			577	250	7.70		**			
3	PRIMARY FISH			877	200	77.0	••	**	# <u>#</u>		(4)
4	METALS		2.0	100	100	174.1		10866.3	# *		
5	COAL		3.0 42.5	1.5	14956.7	93.0	•	10000.3	2		
6	NONMETAL, QUARRIES MEAT, DAIRY, FRUIT		0.1	525.6	14730.7	75,0		-	227		/ _
8	SEC. FISH PRODUCTS		17.0	323.0		TE-			227		1
9	MISC. FOOD PROD			5.00		**			100		77
10	S.DRINK,DIST,BREW		22.5	555		**			021		Y de
11	TEXTILES, CLOTHING		***	227.3	809.6	92.2	87.3	12.0	911.4		441.5
12	SAWMILL, WOOD PROD		2.4	480.7	61787.0	131.2	7.4	202.0	433.2	 	441.7
13	PULP-PAPER & PROD		681.0	196.5	2687.9	370.6 87.7	701.9	302.0 50.5	1211.8		1066.4
14	PRINTING		21.6 457.3	6.7 7.0	21380.7	1298.1	701.9	30.3			1000.4
15	IRON-STEEL PRODFABRIC. METAL PROD		213.1	80.6	45736.3	2783.4	26.5	989.0	54.4	93.6	7227
16 17	MACH. & EOUIPT		508.2	170.2	15650.4	147.9	101.6	605.3	4457.0	901.1	3515.9
18	TRANSP. EQUIPT.			9,550	155	15769.9	722	728		220	1227
19	ELECTRICAL EQ		7F.1	9,550	17777.4	85.0	779.2	144.3	8.8	22	122
20	NONMET.MINERAL PR			5557	57004.3	261244	7622	421.4	22/7.1	923	61.6
21	PETROLEUM PROD		156.0	24.2	02740	26124.4	1.5	6431.4	2267.1	204.2	61.5
22	FERT,PAINT,SOAP		1453.7	179.3	9374.0	573.1 149.0	1.3	36.7 5.2	40.7	304.2	201
23	MISC. MFG. PROD		123.2	57.0	496.0	9294.2	2294.2	5806.0	1696.8	1517.9	2781.0
24 25	CONSTRUCTIONTRANSP,TRAVEL,ENT		927.8	497.2	58755.4	28987.3	4104.7	5301.4	40103.5	6052.7	4266.9
26	RADIO.TEL.TELEG.		114.5	110.8	748.5	6230.1	907.5	311.3	8263.8	1093.3	1939.3
27	E.POWER, WATER, GAS		812.1	224.4	515.0	2041.2	1167.6	385.1	4626.2	1423.9	334.9
28	DISTRIBUTION		422.2	199.5	37109.4	10338.5	291.6	1081.2	3922.1	22	961.0
29	AUTO OPERATION		6.6	13.1	6596.0	30546.4	99.2	25.0	25020.2	15015.0	4.0
30	FINANCE,R.E		430.4	178.5	35612.0	23836.1	4023.0	1135.0	25038.2	15915.9	12849.9
31	DWELLING SERVICES		**	55%	**	9353.9	722		1000	224	507
32	HOTELS, REST.		5.4	5,3	218.0	1716.4	168.0	79.0	1190.6	1140	272.4
33 34	PERSONAL SERVICES BUSINESS SERVICES		279.7	151.8	8806.0	4304.4	1759.1	468.0	13221.7	1228.3	2807.0
35	TOTAL INTER.INPUT	14343.1	6677.8	3394.4	396236.1	174527.8	16521.6	34034.7	107457.4	28530.9	31301.9
36	TAXES	322.0	229.1	192.8	15874.0	22247.9	2061.3	2653.9	5792.1	20377.2	25099,5
37	SUBSIDIES		227.1	.,2.0		-24186.0		-4817.6	E	**	++0
38	NON-COMP. IMPORTS		6406.0	1136.3	31759.5	4116.6	1986.1	732.3	6464.1	50428.7	6963.9
39	WAGES & SALARIES	5096.1	3427.3	3438.9	231935.6	197980.4	44961.6	23320.3	195975.4	45582.4	54585.7
40	UNINCORP.BUS.INC		2.8	198.3	20900.0	19203.6	2750.0	27707.0	52894.6	17800.0	4900.0
41	PROFIT,RENT,INT.		5089.5	1105.4	26780.5	21722.6 57517.4	3750.8 12514.8	37797.9 20856.0	67516.6 22667.9	18055.0 7631.9	48799.1 14001.2
42	DEPRECIATION		798.1 4056.1	274.8 4331.0	13650.0 265902.8	220236.8	45770.8	31946.6	280679.4	69165.7	66747.9
43	HOUSEHOLD INCOME		4030.1	4551.0	203702.8	220230.6	45770.6	31740.0	2000/7.4	07103.7	00747.5
44 45	PROVINCIAL REVENUE		280.0	84.0	9521.9	22252.5	1000.0	2082.5	6161.0	20986.2	7302.3
46	MUNICIPAL REVENUE		124.9	119.2	4147.0	1677.5	1850.9	2078.0	4103.1	620.2	18243.4
47	FEDERAL REVENUE		1098.3	265.5	8875.5	-14770.4	3071.4	2184.1	17279.6	4896.0	13054.9
48	IMPORT LEAKAGE	100198.7	9595.4	1272.0	38802.4	11688.7	1066.7	21395.6	20419.6	56575.2	34999.6
49	TOTAL PRIMARY	115447.9	15952.8	6346.5	340899.4	298602.4	65274.6	80542.8	351310.6	159875.1	154349.3
50	FACTOR INCOMES		8519.6	4742.6	279615.9	238906.5	48712.4	61118.2	316386.5	81437.4	108284.6
51	GROSS DOM. PROD	22189.4	9546.8	5210.2	309139.9	294485.6	63288.5	79810.4	344846.3	109446.4	147385.4
52	EMPLOYMENT	693.0	643.0	0.088	56325.0	48240.0	9300.0	4472.0	73550.0	17300.0	11700.0
53	TOTAL OUTPUT	129791.1	22630.6	9740.9	737135.4	473130.1	81796.1	114577.4	458767.9	188405.9	185651.2

APPENDIX II

OUTPUT AND SUPPLY FLOWS AND INPUT AND DEMAND FLOWS, 1960

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MODEL 1 NFLD., 1960 - OUTPUT AND SUPPLY FLOWS J,M (\$'000)

		SAWMILLS, WOOD PR	PULP-PAPER & PROD.	PRINTING	FABRIC. METAL PROD	MACH, & EQUIPT,	TRANSP. EQUIPT.	ELECTRICAL EQUIPT,	NONMET. MINERAL PR	FERT,PAINT & SOAP PR.	MISC. MFG. PROD.
		11	12	13	14	15	16	17	18	19	20
1	AGRICULTURE										
2	FORESTRY							5*			
3	PRIMARY FISHING										
4	METAL MINING							**			
5	NONMETAL, QUARRIES							**			44
6	MEAT, DAIRY, FRUIT							**			
7	SECONDARY FISHING							**			**
8	MISC. FOODS, NES		••								
9	S.DRINK, DIST, BREW							**		9.3	1
10	TEXTILES, CLOTHING							les:			340
11	SAWMILLS, WOOD PR	5554.3									22
12	PULP-PAPER & PR	127	68315.7					441			22
13	PRINTING			3195.6				92			
14	METAL FABRIC			- 55 - 10	1842.1	148.0		22			
15	MACH. & EOUIPT.				1,075	538.8					
16	TRANSP. EQUIPT.					••	1985.4	12			
17	ELECTRICAL EQ							43.0			123
18	NONMET.MINERAL PR							22	4279.9		
19	FERT, PAINT, SOAP							221		1713.5	
20	MISC. MANUF.				86.0			227		1713.5	426.6
21	CONSTRUCTION							<u></u>			720.0
22	TRANSP,TRAVEL,ENT										
23	RADIO, TEL, TELEG										
			••					75			
24	E.POWER, WATER, GAS		••					550			
25	DISTRIBUTION							,75°			***
26	AUTO OPERATION							***			-
27	FINANCE,R.E							**			
28	DWELLING SERVICES							***			***
29	HOTELS, REST.							**			
30	PERSONAL SERVICES							***			**
31	BUSINESS SERVICES							125 .			
32	TOTAL OUTPUT	5554.3	68315.7	3195.6	1928.1	686.8	1985.4	43.0	4279.9	1722.8	426.6
33	IMPORTS - NS	2461.0	43.0	1000.0	843.0	233.0	1247.0	3.0	242.0	410.0	37.0
34	IMPORTS - NB	1129.0	2023.0	.000.0	134.0	233.0	20.0	166.0	14.0	135.0	65.0
35	IMPORTS - PEI	1127.0	2025.0	200	66.0	227	20.0	100.0	14.0	133.0	05.0
36	IMPORTS - NFLD	<u> 02</u> 3	44	22	20.0	220			223		2.2
30 37	IMPORTS - RES	6793.0	2868.1	354.4	7297.8	40603.5	3344.2	5467.4	6318.4	2200.2	80.9
3 <i>1</i>	TOTAL IMPORTS	10383.0	4934.1	1354.4	8340.8	40836.5	4611.2	5636.4	6574.4	2745.2	182.9
38	TOTAL IMPORTS	10363.0	4734.1	1334.4	0.040.0	40630,3	7011.2	7030. 4	0574.4	2143.2	162.9
39	TOTAL SUPPLY	15937.3	73249.8	4550.0	10268.9	41523.3	6596.6	5679.4	10854.3	4468.0	609.5
40	TOTAL INTER.DEM	12420.7	4941.9	1220.0	9012.5	12205.5	3952.6	2316.1	9802.0	3445.3	323.9
40 41	TOTAL DOM.FIN.DEM	3441.4	542.4	3330.0	1256.4	29317.9	2576.5	3363.3	-50.0	296.7	208.1
41	TOTAL EXPORTS	75.2	67765.4		1230.4	29317.9	67.5	3303.3	1102.3	726.0	77.5
42	IVIAL ENFORTS	13.2	0//05.4	77	75.	750	01.3	7.7	1102.3	720.0	11.3
									10854.3		

MODEL 1 NFLD., 1960 - OUTPUT AND SUPPLY FLOWS J,M (\$'000)

		CON- STRUCTION	TRANSP, TRAVEL,ENT	RADIO,TEL, TELEG	ELEC.POWER WATER,GAS	DISTRIBUTN	AUTO OPERATION	FINANCE, R.E.	DWELLING SERVICES	HOTELS, REST.	PERSONAL SERVICES
		21	22	23	24	25	26	27	28	29	30
1	AGRICULTURE		56						700.0		
ż	FORESTRY		22								
3	PRIMARY FISHING		44								
4	METAL MINING										
5	NONMETAL, QUARRIES										
6	MEAT, DAIRY, FRUIT		**								
7	SECONDARY FISHING		75								
8	MISC. FOODS,NES		55								
9	S.DRINK,DIST,BREW		772								
10	TEXTILES,CLOTHING										
11	SAWMILLS, WOOD PR		***								
12	PULP-PAPER & PR		### ##								
13	PRINTING		- 55 h								
14	METAL FABRIC		**								
15 16	MACH. & EQUIPT		25 3								
17	TRANSP. EQUIPT		***								
18	NONMET.MINERAL PR										
19	FERT, PAINT, SOAP										
20	MISC. MANUF.										
21	CONSTRUCTION	143340.1									
22	TRANSP,TRAVEL,ENT	1 133 10.1	84247.5								
23	RADIO, TEL, TELEG			8024.5							
24	E,POWER,WATER,GAS		223	(15)	11940.5						
25	DISTRIBÚTION				107. 107.	83828.3					
26	AUTO OPERATION	**					24291.6				
27	FINANCE, R.E	22	44					31225.2			
28	DWELLING SERVICES								32619.6		
29	HOTELS,REST		••						**	10216.5	
30	PERSONAL SERVICES	**							-		15375.1
31	BUSINESS SERVICES	T .	••						**		277
32	TOTAL OUTPUT	143340.1	84247.5	8024.5	11940.5	83828.3	24291.6	31225.2	33319.6	10216.5	15375.1
33	IMPORTS - NS		***	**	***			753		***	**
34	IMPORTS - NB	**	***	te:	***	***	**	***	***	**	
15	IMPORTS - PEI	**	***	***	***	(99)		***	**:	**	**
16	IMPORTS - NFLD	88 4	40.50.0	***	***	-	· ++	**	***	***	94
17	IMPORTS - RES	***	4059.8		***	**	-	**	**	***	
18	TOTAL IMPORTS	**:	4059.8	**	***	(C##):		**	tit i	**	**
19	TOTAL SUPPLY	143340.1	88307.3	8024.5	11940.5	83828.3	24291.6	31225.2	33319.6	10216.5	15375.1
4()	TOTAL INTER.DEM	15815.6	52836.3	5003.7	6220.3	13742.0	5310.8	27663.2	220	754.6	1731.0
41	TOTAL DOM.FIN.DEM	127524.4	34643.3	2346.9	5720.2	69646.1	18980.8	3562.0	33319.6	9461.9	13644.1
42	TOTAL EXPORTS	220	827.9	673.9		440.0	1		122.0	**	**
41	TOTAL DEMAND	143339.9	88307.5	8024.5	11940.5	83828.1	24291.6	31225.2			

MODEL/1 NEWFOUNDLAND, 1960 - INPUTS AND DEMAND FLOWS B, D, E (\$'000)

		CON- STRUCTION	TRANSP, TRAVEL,ENT	RADIO,TEL, TELEG,	ELEC.POWER WATER,GAS	DISTRIBUTN	AUTO OPERATION	FINANCE, R.E.	DWELLING SERVICES	HOTELS, REST.	PERSONAL SERVICES
		21	22	23	24	25	26	27	28	29	30
1	AGRIC. PRODUCTS	. 13.7				2.5					
2	FORESTRY PRODUCTS	. 122.4	980			500					
3	PRIMARY FISH		9 44 (-					
4	METAL OLIABBLES		2.5	9 99		:44					
6	NONMETAL, QUARRIES MEAT, DAIRY, FRUIT		3.5	192		344					
7	SEC. FISH PRODUCTS		(44	624		54.0					
8	MISC. FOOD PROD		144	**		344					
9	S.DRINK, DIST, BREW		22	944							
10	TEXTILES, CLOTHING		10.3	544		99.5				25.0	15.6
11	SAWMILL, WOOD PROD		29.7			70.6				169.0	167.9
12	PULP-PAPER & PROD		4.0	4.7	2.0	256.2				7.2 73.5	6.0
13 14	PRINTINGFABRIC. METAL PROD		6.0 50.2	6.7	13.0	13.5				/3.3	14.0
15	MACH, & EQUIPT		272.1	75.6	16.6	961.9	100.0	807.0		1	271.0
16	TRANSP. EQUIPT.		3354.2			**					77.10
17	ELECTRICAL EQ		80.0	1975	277	3-				200	
18	NONMET.MINERAL PR				. 25	.55				550	3.5
19	FERT,PAINT,SOAP		22.6	399	1.9	10.1	25.6			52.5	87.5
20	MISC. MFG. PROD		3.0	1940	9110	541.0	150.0	149.0	0400.0	21.7	130.0
21 22	CONSTRUCTIONTRANSP,TRAVEL,ENT		784.4 4073.3	184.0 102.5	822.0 174.3	8846.9	801.7	3.6	9600.0	15.0 783.2	559.0 225.8
23	RADIO, TEL, TELEG.		801.7	285.0	3.0	685.0	100.0	224.5	:557 :144	112.8	53.5
24	E.POWER, WATER, GAS		577.2	82.0	10.0	564.1	40.0	13.0	-	318.4	89.2
25	DISTRIBUTION		838.9	32.6	51.1	259.5	409.7	1.8	200	92.4	92.5
26	AUTO OPERATION		4261.8	**		399		398		102.3	
27	FINANCE, R.E.	. 7906.9	5294.9	146.0	24.0	4237.1	2240.0	686.0	429.7	905.6	502.1
28	DWELLING SERVICES		7546	C++	S 44	1000	E##			##X	##S
29 30	HOTELS, RESTPERSONAL SERVICES		754.6 169.6	7.5	147.5	233.1	1948		944	319.2	15.0
31	BUSINESS SERVICES		390.3	198.0	16.0	2003.1	80.0	130.0	244	570.7	20.0
32	TOTAL INTER.INPUT	71948.6	21778.3	1119.9	1281.4	18838.1	3947.0	2014.9	10029.7	3568.5	2252.6
33	TAXES	. 309.5	3495.8 -8420.9	140.9	187.5	688.7	1351.0	1039.5	1394.1	330.5	157.8
34 35	SUBSIDIES NON-COMP. IMPORTS		4903.4	288.6	228.8	1356.2	8125.0	5091.0	022	1357.8	468.8
36	WAGES & SALARIES		38779.3	3913.0	2550.0	40678.5	5200.0	4618.9	4	2567.0	6309.7
37	UNINCORP.BUS.INC		4130.7	(177)	0.77	12000.0	3000.0	500.0	1977	1126.8	3000.0
38	PROFIT, RENT, INT.		11371.1	1842.1	5440.8	6836.5	1868.6	14804.9	10959.9	559.2	2925.2
39	DEPRECIATION		8209.8	720.0	2252.0	3430.3	800.0	3156.0	10235.9	706.7	261.0
40	HOUSEHOLD INCOME		45281.1	4282.8	2848.0	56635.2	8994.4	8618.9	8959.9	3904.5	11582.0
41	EDUCATION & HOSP		2860.3	85.0	74.0	85.0	1351.0	737.0	3.55	179.0	155.3
42 43	PROVINCIAL REVENUE MUNICIPAL REVENUE		602.0	14.0	112.0	264.4	1331.0	300.0	1394.1	125.9	133.3
44	FEDERAL REVENUE		-8387.4	311.0	667.8	1210.8	172.0	1314.9	(99	74.1	525.0
45	IMPORT LEAKAGE		13903.4	1491.8	4705.3	3364.5	9027.2	15083.5	2000.0	1657.8	599.2
46	TOTAL PRIMARY	. 71391.3	62469.2	6904.6	10659.1	64990.2	20344.6	29210.3	22589.9	6648.0	13122.5
47	FACTOR INCOMES	. 53433.4	54281.1	5755.1	7990.8	59515.0	10068.6	19923.8	10959.9	4253.0	12234.9
48	GROSS DOM. PROD		57565.8	6616.0	10430.3	63634.0	12219.6	24119.3	22589.9	5290.2	12653.7
49	EMPLOYMENT	. 11100.0	10000.0	1400.0	700.0	12432.0	2425.0	1000.0	55.0	1420.0	4000.0
50	TOTAL OUTPUT	. 143339.9	84247.4	8024.5	11940.5	83828.2	24291.6	31225.2	32619.6	10216.5	15375.1

		BUSINESS SERVICES	PERSONAL CONS.	CAPITAL FORMATION	INVENTORY CHANGE	FED. GOVT. DEFENCE	FED, GOVT, CIVIL	PROVINCIAL GOVT.	MUNICIPAL GOVT.	EDUCATION	HOSPITAL
		31	32	33	34	35	36	37	38	39	40
- 1	AGRIC. PRODUCTS		10870.2	52.0		77.	12.3	26.8	6.0		206.8
2	FORESTRY PRODUCTS	(me)	2449.2	***	7456.1			-	11.8		·**
3	PRIMARY FISH			717.1	**	777		955			
4	METALS			717.1	-77.6	**			2.5		(***
5	NONMETAL, QUARRIES MEAT, DAIRY, FRUIT		34178.5		12.0	54.3	39.7	66,5	18.1		712.5
7	SEC. FISH PRODUCTS		4428.3		11.5	9.0	15.7	52.1			40.8
8	MISC. FOOD PROD		18098.3		-12.1	**	8.5	37.0	7.2		119.1
9	S.DRINK,DIST,BREW	44	10184.4		53.9	**	***		**		
10	TEXTILES,CLOTHING	2.0	20819.3		46.2	137.4	19.3	100.7	34.1	42.1	61.7
11	SAWMILL, WOOD PROD		3350.0		-124.9 537.4	7.9	47.5			42.1 5.0	118.8
12 13	PULP-PAPER & PROD PRINTING	820.0	2162.0	22	-9.2		7.6	579.8	43.1	405.1	141.6
14	FABRIC. METAL PROD	19.0	2102.0	5-4	134.2		17.3	1078.2	1311	4.0	22.7
15	MACH. & EQUIPT	122		28691.0	-1.9	35.7	276.5	245.0		54.8	16.8
16	TRANSP. EQUIPT		(35)	117.9	-6.7		2351.3	101.1		12.9	**
17	ELECTRICAL EQ	14.0	3270.0		1122		64.7	**	22	16.3	12.3
18	NONMET.MINERAL PR	12.9	**	==	-112.2 0.8		62.2 51.7	24.3	17.5	38.1	164.3
19	FERT,PAINT,SOAP MISC. MFG. PROD	102.0	193.5	-	-1.9		31.7	3.0	17.5	13.5	104.3
20 21	CONSTRUCTION	102.0	173.3	78536.4	-1.7	3772.0	13784.0	22329.0	2675.0	3133.0	3295.0
22	TRANSP,TRAVEL,ENT	319.9	30806.4			160.9	1103.9	1198.8	415.6	442.4	515.3
23	RADIO, TEL, TELEG.	1277.7	2072.0				96.0	99.0	20.3	27.2	32.4
24	E.POWER, WATER, GAS	10.0	4364.2			119.5	363.5	251.6	124.4	356.0	141.0
25	DISTRIBUTION	210.8	67484.2			78.7	642.2	627.3	81.6	275.1	457.2
26	AUTO OPERATION	2742	18493.9			141.6	206.2	154.6 864.4	89.0 59.1	101.7 193.0	157,3
27	FINANCE, R.E DWELLING SERVICES	374.3	2082.0 33319.6				200.2	004.4	37.1	193.0	137.3
28 29	HOTELS, REST.		9430.9		 		**	**	**	31.0	5777 5 44
30	PERSONAL SERVICES	**	12889.0			**	145.9	368.6		15.0	225.6
31	BUSINESS SERVICES		**			**	586.6	1173.4	94.1	61.4	60.6
32	TOTAL INTER.INPUT	3162.6	290945.6	108114.3	7905.6	4517.0	19902.6	29381.2	3699.4	5227.6	6501.8
33	TAXES	73.9	33020.0			22	13.0	129.4	8.1	11.1	5.0
34	SUBSIDIES	7017.4	50040.7	-1050.0	10.5	120.5	525.0	1225 /	201.5	625.2	1960.5
35 36	NON-COMP. IMPORTS WAGES & SALARIES	7917.4 1540.7	58940.7		49.5	129.5 5000.0	525.9 17711.0	1325.4 10160.0	201.5 1551.0	635.3 12876.0	1860.5 7559.5
30 37	UNINCORP.BUS.INC	700.0		2	2.2	3000.0	17711.0	10100.0	1551.0	12070.0	7557.5
38	PROFIT, RENT, INT.	431.3						3347.0	767.0	1717.0	138.8
39	DEPRECIATION	64.0			**	**		==		122	**
40	HOUSEHOLD INCOME	2451.5		120	3.5	5000.0	17711.0	11160.0	1551.0	12876.0	7559.5
41	EDUCATION & HOSP	70.0	2329.0	10500		*	**	-	***	**	.55
42 43	PROVINCIAL REVENUE MUNICIPAL REVENUE	70.9	20952.0 665.0	-1050.0						<u> </u>	4.77
43	FEDERAL REVENUE	23.0	9074.0			160	13.0	129.4	8.1	11.1	5.0
45	IMPORT LEAKAGE	8117.9	58940.7	55	49.5	129.5	525.9	3672.4	968.5	2352.3	1999.3
46	TOTAL PRIMARY	10727.3	91960.6	-1050.0	49.5	5129.5	18249.9	14961.8	2527.6	15239.4	9563.8
47	FACTOR INCOMES	2672.0	See	5##	166	5000.0	17711.0	13507.0	2318.0	14593.0	7698.3
48	GROSS DOM. PROD	2809.9	33020.0	-1050.0	9	5000.0	17724.0	13636.4	2326.1	14604.1	7703.3
49	EMPLOYMENT	500.0	**	**		1100.0	4200.0	2500.0	600.0	3500.0	2000.0
	TOTAL OUTPUT	13889.9	382906.3	107064.3	7955.1	9646.5	38152.5	44343.0	6227.0	20467.0	16065.6

MODEL 1 P.E.I., 1960 - OUTPUT AND SUPPLY FLOWS J,M (\$'000)

_		AGRIC. PRODUCTS	FORESTRY PRODUCTS	PRIMARY FISH	NONMETALS, QUARRIES	MEAT,DAIRY & FRUIT	SEC. FISH PRODUCTS	MISC. FOOD PRODUCTS	S,DRINKS, DIST,BREW	TEXTILES, CLOTHING	SAWMILLS, WOOD PR
		1	2	3	4	5	6	7	8	9	10
1	AGRICULTURE	31013.7	989.5								
2	FORESTRY		721.5	-		358	-	077	177		
3	PRIMARY FISHING			4639.5		0.50	27.	222	253		
4	NONMETAL, QUARRIES		7283		116.7		0906 4 95		270		
5	MEAT, DAIRY, FRUIT					17193.2		1000	50-50 50 -84		
6	SECONDARY FISHING					31.9	7319.0	2000 2000			
7	MISC. FOODS, NES					044		1630.0			
8	S.DRINK, DIST, BREW								527.1		
9	TEXTILES, CLOTHING									1295.2	
10	SAWMILLS, WOOD PR						196				1538.7
11	PULP-PAPER & PR									244	1556.7
12	PRINTING									200	
13	METAL FABRIC									122	
14	MACH. & EOUIPT									-	
15	TRANSP. EQUIPT						544			7/227	
16	NONMET.MINERAL PR						122			742	
17	FERT,PAINT,SOAP						222			742	
18	MISC. MANUF						124			322	
19	CONSTRUCTION									1	
20	TRANSP, TRAVEL, ENT						122			2333 23 	
21	RADIO,TEL,TELEG						722			927	
22	E.POWER, WATER, GAS									200	
23	DISTRIBUTION									1277 1277	
24	AUTO OPERATION						1			5.00	
25	FINANCE,R.E.									S957	
26	DWELLING SERVICES									1088 1 244	
27	HOTELS,REST						100			:	
28	PERSONAL SERVICES										
29	BUSINESS SERVICES				***					3. 84	
30	TOTAL OUTPUT	31013.7	1711.0	4639.5	116.7	17225.1	7319.0	1630.0	527.1	1295.2	1538.7
31	IMPORTS - NS	136.0	200		19.0	99.0	335.0	477.0	4910	271.0	(72.0
32	IMPORTS - NB	20.0	:		19.0	317.0	135.0		481.0	271.0	673.0
33	IMPORTS - PEI	20.0				317.0	133.0	4306.0	450.0	5.0	507.0
34	IMPORTS - NFLD						264.0			4.0	122
35	IMPORTS - RES	1426.7	173.8	0.1	67.4	5002.4	266.7	1395.3	827.7		1120.0
36	TOTAL IMPORTS	1582.7	173.8	0.1	86.4	5418.4	1000.7	6178.3	1758.7	4406.8	1139.8
50	TOTAL IMI OKTS	1504.7	173.0	0.1	00.4	3410.4	1000.7	01/6.3	1/36./	4686.8	2319.8
37	TOTAL SUPPLY	32596.4	1884.8	4639.6	203.1	22643.5	8319.7	7808.3	2285.8	5982.0	3858.5
38	TOTAL INTER.DEM	9677.7	784.4	3956.6	203.1	2513.4	590.0	1922.7	60.6	572.9	2603.2
39	TOTAL DOM.FIN.DEM	6278.7	194.8		20311	10749.7	961.1	5885.6	2225.2	4448.1	773.2
40	TOTAL EXPORTS	16640.0	906.0	683.0	888	9380.3	6768.6	3003.0	2223.2	961.0	482.1
41	TOTAL DEMAND	32596.4	1885.2	4639.6	203.1	22643.4	8319.7	7808.3	2285.8		

MODEL 1 P.E.I., 1960 - OUTPUT AND SUPPLY FLOWS J,M (\$'000)

		PULP-PAPER & PROD.	PRINTING	FABRIC. METAL PROD	MACH. & EQUIPT.	TRANSP. EQUIPT.	NONMET. MINERAL PR	FERT, PAINT & SOAP PR.	MISC. MFG. PROD.	CON- STRUCTION	TRANSP, TRAVEL,ENT
		11	12	13	14	15	16	17	18	19	20
1	AGRICULTURE				**					**	
2	FORESTRY				**						
3	PRIMARY FISHING			**	**						
4	NONMETAL, QUARRIES			223						**	
5	MEAT, DAIRY, FRUIT									***	
6	SECONDARY FISHING			22	**					**	
7	MISC. FOODS, NES			22	**						
8	S.DRINK, DIST, BREW			<u>₹</u> 7							
9	TEXTILES, CLOTHING			**	**					144	
10	SAWMILLS, WOOD PR			**	**						
11	PULP-PAPER & PR			**							
12	PRINTING		1142.2	7.7	**						
13	METAL FABRIC			104.8	77.1						
14	MACH. & EQUIPT			_ 754	164.0					-	
15	TRANSP. EQUIPT			78.0	55 9	157.7				**	
16	NONMET.MINERAL PR			***	**		187.6	2010.2		**	
17	FERT,PAINT,SOAP			7.5	**			2018.3	120.5	**	
18	MISC. MANUF				77				129.5	22001.0	
19	CONSTRUCTION			77	**					32991.0	15472.4
20	TRANSP,TRAVEL,ENT			***	***						15473.4
21	RADIO,TEL,TELEG			**	**	**					
22	E.POWER, WATER, GAS			***	**	**				-	
23	DISTRIBUTION			240	**:					**	
24	AUTO OPERATION		••	**	**	**					
25	FINANCE,R.E				**	***				••	
26	DWELLING SERVICES			¥#1							
27	HOTELS, REST.			42 0	**	22-	 				
28	PERSONAL SERVICES		••	1243 1040	**	220					
29	BUSINESS SERVICES			22		•••				-	
30	TOTAL OUTPUT	63.7	1142.2	182.8	164.0	157.7	187.6	2018.3	129.5	32991.0	15473.4
31	IMPORTS - NS	180.0		453.0	28.0	1960.0	86.0	355.0	12.0		
32	IMPORTS - NB	413.0	350.0	168.0	1.0	11.0	411.0	886.0	100.0		122
33	IMPORTS - PEI		32010			**	**		227		
34	IMPORTS - NFLD		**				10.0	163.0	42		
35	IMPORTS - RES		80.8	2126.6	12065.6	799.9	1752.0	644.6			
36	TOTAL IMPORTS		430.8	2747.6	12094.6	2770.9	2259.0	2048.6	112.0	**	**
37	TOTAL SUPPLY	1077.5	1573.0	2930.4	12258.6	2928.6	2446.6	4066.9	241.5	32991.0	15473.4
			. .		1000 5	10/3	24155	3//3 4	171 4	2/2/ 5	0030.0
38	TOTAL INTER.DEM.		697.3	2782.5	1893.7	1062.1	2415.5	3663.4	171.4	3626.5	9028.0
39	TOTAL DOM.FIN.DEM		875.7	81.9	10364.9	1866.5	31.1	150.8	71.1	29364.5	4674.6
40	TOTAL EXPORTS	58.0	**	66.0	3-20		***	252.7			1770.8
	TOTAL DEMAND	1077.5	1573.0	2930.4	12258.6	2928.6	2446.6	4066.9	242.5	32991.0	15473.4

MODEL 1 P.E.I., 1960 - INPUTS AND DEMAND FLOWS B, D, E (\$'000)

) ()))))))))) 		AGRI- CULTURE	FORESTRY	PRIMARY FISHING	NONMETALS, QUARRIES	MEAT,DAIRY & FRUIT	SECONDARY FISHING	MISC. FOODS,NES	S.DRINKS, DIST,BREW	TEXTILES, CLOTHING	SAWMILLS, WOOD PR
		1	2	3	4	5	6	7	8	9	10
1	AGRIC. PRODUCTS	1141.4	14.6			8262.5	68.8	128.2		25.7	122
2	FORESTRY PRODUCTS	85.8	***	368.2	**	**	3.9			524	302.3
3	PRIMARY FISH	-				2.7	3956.6			122 122	**
5	NONMETAL, QUARRIES MEAT, DAIRY, FRUIT	41.1			**	3.7 2413,3	12.1	3.8 59.0			
6	SEC. FISH PRODUCTS	1.0		521.5		56.9		39.0 7.4		72	2.5
7	MISC. FOOD PROD	1628.3		321.3		33.4		175.0	86.0		2.3
8	S.DRINK,DIST,BREW		**		-	**	22	17.7	42.9		<u> </u>
9	TEXTILES, CLOTHING	233.7		72.9		33.5	0.3	22.7		7.4	19.7
10	SAWMILL, WOOD PROD	90.0	2.4	-		26.7	23.7	**			206.0
11 12	PULP-PAPER & PROD			122 201		290.9	1.9	8.2		0.9	1.2
13	PRINTINGFABRIC. METAL PROD	205.8	0.2	37.5		80.2 337,6	3.5 175.9	1.5 0.2		0.3	12.2
14	MACH. & EQUIPT	300.0	60.2	49.0	5.0	334.0	40.9	24.9	7.2	1.8 3.1	13.2 7.2
15	TRANSP. EQUIPT.		00.2	51.5	3.0	354.0	40.5	24.7	7.2	3.1	1.2
16	NONMET.MÎNERAL PR	152.9		••			To the second				
17	FERT,PAINT,SOAP	2640.0	**	27.0	3.7	-			7.3		105.3
18	MISC. MFG. PROD.	020.0	20.0		•	9.2				(##)	
19 20	CONSTRUCTIONTRANSP,TRAVEL,ENT	930.0 1178.3	39.0 9.6	10.3	4.2	45.8	55.1	7.6	2.3	7.0	10.0
21	RADIO,TEL,TELEG.	100.0	2.5	135.3	4.6 1.0	637.1 23.7	476.8 106.8	103.8	21.8	77.8	75.6
22	E.POWER, WATER, GAS	206.0	2.3		5.8	130.5	34.4	3.7 18.8	1.1 3.3	2.0 5.9	5.8 10.9
23	DISTRIBUTION	1295.0	5.5	148.6	4.0	535.7	113.4	88.5	18.6	67.9	60.0
24	AUTO OPERATION	1715.0		**		9.4		0.7	1.2	2.6	3.6
25	FINANCE,R.E	597.0	19.6	96.5	6.0	163.9	174.5	17.0	11.8	16.9	34.5
26 27	DWELLING SERVICES	575		2.00	**	***	***		**		G-44
28	HOTELS, RESTPERSONAL SERVICES		0.6	**	:::::::::::::::::::::::::::::::::::::::	7.6		0.4		0.0	
29	BUSINESS SERVICES	250.0	7.4		1.5	7.6 66.3	5.4 106.7	0.4 22.0	0.5 16.7	0.2 1 4. 1	0. l 9.7
30	TOTAL INTER.INPUT	12791.3	161.6	1518.3	31.6	13501.9	5360.7	711.1	220.7	233.6	867.6
31	TAXES	505.0	3.8	16.7	1.0	67.3	104.0	11.3	9.3	7.9	18.8
32	SUBSIDIES	-144.0		-63.4		11.	220				
33 34	NON-COMP. IMPORTS	1197.3	11.4	145.3	8.8	149.3	569.2	548.2	25.4	647.8	46.2
35	WAGES & SALARIESUNINCORP.BUS.INC.	2760.0 13855.0	422.9 38.6	764.7 1673.3	43.1	1912.3 300.0	795.1	191.3	92,6	155.2	384.8
36	PROFIT, RENT, INT.	13633.0	17.6	300.6	29.2	1085.0	200.0 132.0	110.0 10.3	157.8	1267	100.0
3 7	DEPRECIATION	2478.0	65.6	284.0	3.0	177.4	189.9	47.8	21.3	236.7 14.0	83.5 37.8
38	HOUSEHOLD INCOME	16615.0	479.1	2738.6	66.7	2535.8	1100.6	301.1	149.6	344.5	511.0
39	EDUCATION & HOSP	122					**	**	**	275	
40	PROVINCIAL REVENUE	37.0				24.3	570	4.2	4.0	4.3	4.9
41 42	MUNICIPAL REVENUE	455.0	3.5	16.7	1.0	39.8	84.6	6.4	5.1	3.3	12.8
43	FEDERAL REVENUEIMPORT LEAKAGE	-131.0 1197.3	0.3 11.4	-63.4 145,3	5.6 8.8	201.6 712.4	45.9 569.2	0.7 558.7	51.0 75.4	47.7 647.8	15.4 89.2
44	TOTAL PRIMARY	20651.3	559.9	3121.2	85.1	3691.3	1990.2	918.9	306.4	1061.6	671.1
45	FACTOR INCOMES	16615.0	479.1	2738.6	72.3	3297.3	1127.1	311.6	250.4	391.9	568.3
46	GROSS DOM. PROD	19454.0	548.5	2975.9	76.3	3542.0	1421.0	370.7	281.0	413.8	624.9
47	EMPLOYMENT	1100.0	70.0	800.0	21.0	608.0	443.0	133.0	35.0	154.0	197.0

MODEL 1 P.E.I., 1960 - INPUTS AND DEMAND FLOWS B, D, E (\$'000)

		TELEG.	ELEC.POWER WATER,GAS	DISTRIBUTN	AUTO OPERATION	FINANCE, R.E.	DWELLING SERVICES	HOTELS, REST.	PERSONAL SERVICES	BUSINESS SERVICES	PERSONAL CONS.
		21	22	23	24	25	26	27	28	29	30
1 2	AGRIC. PRODUCTS			0.7	22						5103.3
3	LOKESTRA BRODUCTS									144	135.0
4	PRIMARY FISHNONMETAL, QUARRIES				240						22
5	MEAT, DAIRY, FRUIT				##3 ##3					944 144	0205.4
6	SEC. FISH PRODUCTS			0.7							9305.4 947.6
7	MISC. FOOD PROD				44						5755.2
8	3.DKINK DIST RREW				427						2225.4
10	TEATILES CLOTHING			164.5				4.3	7.8	**	4460.6
iĭ	SAWMILL, WOOD PROD			19.9	44			32.6	61.0		600.0
iż	PULP-PAPER & PRODPRINTING.	510		71.6	•			0.6	3.5	620.0	
13	LABRIC. METAL PROD	51.0	1.0 4.3	2.7	••			15.6	9.0	530.0	650.0
14	MACH. & FOURT		4.5	77.1	45.0	200.0		77.0 77.0	230.0	4.0	
15	TRANSP, FOURT			,,,,,		200.0		550 	230.0	55.	
16	NUNMET MINERAL PR			550 5100	##.1 ##.2			**		**	
17 18	FER LPAINT SOAP		3.1	2.7	9.8			11.1	64.0	4.6	
19	MISC. MFG. PROD.		10.55	30.6	_ 5F6		77	5 753	130.8		56.4
2ó	CONSTRUCTIONTRANSP,TRAVEL,ENT	81.0	186.0	302.4	75.0	142.0	1400.0	14.0	93.0	**	
21	RADIO, TEL, TELEG.	39.1 36.0	104.6 12.0	1947.1 164.2	320.7 35.0	0.7 86. 0		209.8 67.2	75.8 61.5	76.3	2162.8
22	E.FUWER WATER GAS	27.5	5.0	194.2	15.0	4.5	 	105.7	49.5	207.3 5.0	664.0 1249.8
23	DISTRIBUTION	21.8	86.7	907.5	283.3	0.6		81.2	61.2	81.2	14120.5
24	AUTO OPERATION	550		***				20.9			5920.4
25 26	TINANCE R F	41.0	12.0	1126.4	685.0	209.0	131.2	175.1	353.1	109.2	468.0
27	DWELLING SERVICES	**		***				***			10132.1
28	PERSONAL SERVICES	2.0		***				1001			2404.8
29	BUSINESS SERVICES	3.0 45.5	7.0	60.3 614.3	80.0	93.0		109.1	56.0		5428.8
30	TOTAL INTER.INPUT	345.9	426.2	5692.6	1548.8	735.8	1531.2	122.5 969.7	5.0	1017.6	71700.0
31									1261.2	1017.6	71790.0
32	TAXES SUBSIDIES	230.7	136.5	273.8	517.0	457.1	660.5	113.2	196.5	51.0	12844.9
	THORSE COMP IMPORTS	137.6	290.2	603.9	3503.2	2241.2	 	129.6	273.0	2616.4	16579.5
	WAGES & SALARIES	754.9	635.7	7524.2	830.0	1632.8		786.7	1243.8	199.1	10377.3
1.1	UNINCORPRISING	Y		3500.0	1600.0	(4+		439.3	1800.0	HT-	
	PROFILE FOT INT	237.9	927.1	2754.3	723.9	2654.3	3068.8	324.6	979.8	272.3	**
1	DEFRECIATION	286.0	378.0	1160.5	300.0	500.6	3432.6	144.1	96.8	8.0	**
	HOUSEHOLD INCOMEEDUCATION & HOSP	827.3	1084.7	12399.1	2661.9	2435.1	2568.8	1428.9	3807.5	316.5	#E
10	PROVINCIAL REVENUE		772		517.0	252.1	100	50.0	105.0	50.0	633.0
	MUNICIPAL REVENUE	220.8	136.0	184.4	317.0	204.0	660.5	58.0	195.0	50.0	6273.9 406.0
1.	CEDEKAL REVENUE	79.9	300.5	461.1	73.1	1.0	000.3	56.I	193.1	55.6	5532.0
0.	IMPORT LEAKAGE	233.1	468.3	1611.6	3922.1	4093.2	500.0	200.4	297.5	2716.7	16579.5
(d	TOTAL PRIMARY	1647.1	2367.5	15816.7	7474.1	7486.0	7161.9	1937.5	4589.9	3146.8	29424.4
11	FACTOR INCOMES	992.8	1562.8	13778.5	3153.9	4287.1	3068.8	1550.6	4023.6	471.4	tie-
,	OKOSS DOM DDAN	1509.5	2077.3	15212.8	3970.9	5244.8	7161.9	1807.9	4316.9	530.4	12844.9
17	EMPLOYMENT	300.0	200.0	3322.0	1011.0	500.0	25.0	460.0	1500.0	150.0	12077.7
IR	TOTAL OUTPUT	1993.0	2793.7	21509.3	9022.9	8221.8	8693.1	2907.2			

CIVIL

DEFENCE

CAPITAL

FORMATION

46

48

EMPLOYMENT....

TOTAL OUTPUT

24385.9

CHANGE

INVENTORY FED. GOVT. FED. GOVT. PROVINCIAL MUNICIPAL EDUCATION HOSPITAL

GOVT.

GOVT.

1000.0

11277.9

700.0

13308.3

250.0

1974.7

700.0

5487.2

500.0

4154.3

3950.0

6692.6

172486.4

800.0

8987.9

1696.1

TOTAL DOM.

FINAL DEM.

EXPORTS-

FOREIGN

MODEL 1 NOVA SCOTIA, 1960 - OUTPUT AND SUPPLY FLOWS J,M (\$'000)

		SAWMILLS, WOOD PR	PULP-PAPER & PROD.	PRINTING	IRON-STEEL PRODUCTS	FABRIC. METAL PROD	MACH, & EQUIPT,	TRANSP. EQUIPT.	ELECTRICAL EQUIPT.	NONMET. MINERAL PR	PETROLEUM PRODUCTS
		11	12	13	14	15	16	17	18	19	20
1	AGRICULTURE				3 72 3			**			
2	FORESTRY				1.50			**			
3	PRIMARY FISHING				**			(++			
4	COAL MINING				***			**			
5	NONMETAL, QUARRIES				**						
6	MEAT, DAIRY, FRUIT							***			
/	SECONDARY FISHING										
8	MISC. FOODS,NES				940			54 <u>0</u> 5			
9	S.DRINK,DIST,BREW		13.8								
10	TEXTILES, CLOTHING	20501.4						\$25			
11	SAWMILLS, WOOD PR	28581.4	257660	12.5				22	••		
12 13	PULP-PAPER & PR		25766.9	12.5							
14	PRINTING			11629.7	(5750.2						
15	METAL FABRIC		22		65750.3	16100 0	466 A	221			
16	MACH. & EQUIPT		20			16108.8	466.4 5293.1				
17	TRANSP. EQUIPT				<u></u>	89.8	425.0	28482.5			
18	ELECTRICAL EQ		52		-	07.0	423.0		3015.0		
19	NONMET.MINERAL PR				-					 	
20	PETROLEUM REF				1-1-	55. 				6047.4	45275 A
21	FERT,PAINT,SOAP		25		55.						65275.0
22	MISC. MANUF.					4.0					
23	CONSTRUCTION										
24	TRANSP,TRAVEL,ENT		:331 : 33 1	•-	(A)			100°.			
25	RADIO,TEL,TELEG		(2000) (200 0)								
26	E.POWER, WATER, GAS										
27	DISTRIBUTION		340		***						
28	AUTO OPERATION				**						
29	FINANCE,R.E							99	•-		
30	DWELLING SERVICES										
31	HOTELS,REST		**		**			99 1			
32	PERSONAL SERVICES		***		940			¥#:			
33	BUSINESS SERVICES		; = ;		22 1			**			
34	TOTAL OUTPUT	28581.4	25780.7	11642.2	65750.3	16202.6	6184.5	28482.5	3015.0	6047.4	65275.0
35	IMPORTS - NS		≅	120	221	-+		20%	220	1_	
36	IMPORTS - NB	771.0	3935.0		220	909.0	87.0	30.0	1480.0	1538.0	7776.0
37	IMPORTS - PEI	44	58.0	22	22			30.0	1-100.0	1550,0	7770.0
38	IMPORTS - NFLD	28.29	(22)	222	#6			200-1	## ·	640.0	
39	IMPORTS - RES	12709.2	2595.6	396.4	3512.9	10759.1	76977.0	5144.4	11049.2	10715.3	12596.6
40	TOTAL IMPORTS	13480.2	6588.6	396.4	3512.9	11668.1	77063.9	5174.4	12529.2	12893.3	20372.6
41	TOTAL SUPPLY	42061.6	32369.2	12038.6	69263.1	27870.7	83248.4	33656.9	15544.2	18940.7	85647.5
42	TOTAL INTER.DEM	27315.1	11439.9	4813.0	10320.4	21430.0	23401.9	8095.9	4301.2	174073	10000
43	TOTAL DOM.FIN.DEM	7602.7	970.5	6125.6	41.8	843.4			4281.3	17487.3	18023.1
44	TOTAL EXPORTS	7143.8	19958.9	1100.0			58560.4	13760.4	8892.7	255.8	29675.1
77	TOTAL LATOR 13	/143.8	17730.7	1100.0	58901.2	5597.4	1286.8	11800.6	2370.2	1197.6	37949.6

MODEL 1 NOVA SCOTIA, 1960 - OUTPUT AND SUPPLY FLOWS J.M (\$'000)

		& SOAP PR	MFG. PROD.	CON- STRUCTION	TRANSP, TRAVEL,ENT	RADIO,TEL, TELEG.	WATER,GAS	DISTRIBUTN	AUTO OPERATION	FINANCE, R.E.	DWELLING SERVICES
		21	22	23	24	25	26	27	28	29	30
1	AGRICULTURE		-		**						4222.0
2	FORESTRY										
3	PRIMARY FISHING		***								
4	COAL MINING										
5 6	NONMETAL, QUARRIES MEAT, DAIRY, FRUIT		224		••						***
7	SECONDARY FISHING		**						••		
8	MISC, FOODS, NES										**
9	S.DRINK,DIST,BREW		57E5								: 33
1Ó	TEXTILES, CLOTHING		555								**
ii	SAWMILLS, WOOD PR										***
12	PULP-PAPER & PR										-
13	PRINTING										
14	IRON-STEEL MILLS	750.5							••		
15	METAL FABRIC		28.2								
16	MACH. & EQUIPT		**								22
17	TRANSP. EQUIPT		**								-
18	ELECTRICAL EQ		**:								-
19	NONMET.MINERAL PR		**								-
20	PETROLEUM REF		**								
21	FERT,PAINT,SOAP	5768.2								••	
22	MISC. MANUF.		1665.9								
23	CONSTRUCTION		***	232762.5							
24	TRANSP,TRAVEL,ENT		940		145218.6						-
25	RADIO,TEL,TELEG		***	••	· · · · · · · · · · · · · · · · · · ·	22846.3					
26	E.POWER,WATER,GAS		**				32554.3				***
27	DISTRIBUTION		-					158693.8			
28	AUTO OPERATION		24				7. <u>22</u> 8	••	63684,6		**
29	FINANCE,R.E		**				*		350	59125.8	**
30	DWELLING SERVICES			••				57.0	27.		84456.6
31	HOTELS, REST.		**				(50)	**	**		
32	PERSONAL SERVICES		••					•	553		**
33	BUSINESS SERVICES		**	••			-	***	***		
34	TOTAL OUTPUT	6518.7	1694.1	232762.5	145218.6	22846.3	32554.3	158693.8	63684.6	59125.8	88678,6
35	IMPORTS - NS	7.5	5 50	**			(94)	***	+60	481	**
36	IMPORTS - NB	771.0	180.0	550		399	6.0	***	11 1	**	
37	IMPORTS - PEI	***	**	***			**	**	***		**
38	IMPORTS - NFLD	## FO 4 O A	124	**		**		**	(44)	***	GE:
39	IMPORTS - RES	5968.1	114.7	***	•-	**	(194	100 0	440		22
4 0	TOTAL IMPORTS	6739.1	294.7	100 0		**	6.0	**	\$2.5	**	420
41	TOTAL SUPPLY	13257.8	1988.8	232762.5	145218.6	22846.3	32560.3	158693.8	63684.6	59125.8	88678.6
42	TOTAL INTER.DEM	7508.2	1027.8	35081.0	70560.0	12704.4	13347.0	33532.6	13050.1	53678.2	
43	TOTAL DOM.FIN.DEM	956.5	637.5	197681.3	43610.8	8568.1	18431.3	123148.8	50634.5	5447.6	88678.6
44	TOTAL EXPORTS	4793.1	323.5	223	31047.6	1573.8	782.0	2012.1	50054.5	2447.0	00070.0
45	TOTAL DEMAND	13257.8	1988.8	232762.2	145218.3	22846.3	32560.3	158693.4	63684.6	59125.7	88678.6

MODEL 1 NOVA SCOTIA, 1960 - OUTPUT AND SUPPLY FLOWS J,M (\$'000)

				= 51 = 1	
		HOTELS,	PERSONAL	BUSINESS	TOTAL
		REST.	SERVICES	SERVICES	OUTPUT
		REST,	SER. ICES	551	
		31	32	33	34
		31	34	55	٠.
- 1	AGRICULTURE				53863.9
2	FORESTRY				16434.2
3	PRIMARY FISHING				27094.4
4	COAL MINING				43333.5
5	NONMETAL, QUARRIES				14106.4
6	MEAT, DAIRY, FRUIT				33316.2
7	SECONDARY FISHING				56938.3
8	MISC, FOODS, NES				28792.0
9	S.DRINK,DIST,BREW				12527.5
1Ó	TEXTILES.CLOTHING				16804.7
11	SAWMILLS, WOOD PR				28581.4
12	PULP-PAPER & PR				25779.4
13	PRINTING				11629.7
14	IRON-STEEL MILLS				66500.8
15	METAL FABRIC				16603.4
16	MACH. & EQUIPT				5293.1
17	TRANSP. EQUIPT				28997.3
18	ELECTRICAL EQ				3015.0
19	NONMET.MINERAL PR				6047.4
20	PETROLEUM REF				65275.0
21	FERT,PAINT,SOAP				5768.2
22	MISC. MANUF				1669.9
23	CONSTRUCTION				232762.5
24	TRANSP,TRAVEL,ENT				145218.6
25	RADIO, TEL, TELEG				22846.3
26	E.POWER, WATER, GAS				32554.3
27	DISTRIBUTION				158693.8
28	AUTO OPERATION				63684.6
29	FINANCE, R.E.				59125.8
30	DWELLING SERVICES	2 (100 (84456.6
31	HOTELS,REST	26409.6	47356.4		26409.6
32	PERSONAL SERVICES	663	47356.4	225040	47356.4
33	BUSINESS SERVICES	**	**	22586.0	22586.0
34	TOTAL OUTPUT	26409.6	47356.4	22586.0	1464062.0
JT		20.000			
35	IMPORTS - NS	122	927	200	**:
36	IMPORTS - NB		**	923	34319.0
37	IMPORTS - PEI	128	44	**	7445.0
38	IMPORTS - NFLD	22	***	40	10864.0
39	IMPORTS - RES				252535.8
40	TOTAL IMPORTS	2.2		424	305163.7
41	TOTAL SUPPLY	26409.6	47356.4	22586.0	1769222.0
		1010 "	2015 5	10/07.2	510702.0
42	TOTAL INTER.DEM	1919.0	2815.7	19607.2	510702.8
43	TOTAL DOM.FIN.DEM	24490.6	44540.7	2978.8	942858.7
44	TOTAL EXPORTS	753	53	4.0	315649.0
45	TOTAL DEMAND	26409.6	47356.4	22586.0	1769210.0
19.3	E V A /NE LAETANTATA	20707.0	-11/2/49-74	22500.0	1,02=10.0

	SAWMILLS, WOOD PR	PULP-PAPER & PROD	PRINTING	IRON-STEEL MILLS	METAL FABRIC	MACH. & EQUIPT.	TRANSP. EQUIPT.	ELECTRICAL EQUIPT	NONMET. MINERAL PR	PETROLEUM REF.
	11	12	13	14	15	16	17	18	19	20
I AGRIC. PRODUCTS	-	-		4			-			
2 FORESTRY PRODUCTS	9444.8	4067.4		1.55	0.2	0.1	20.9	**	0.2	
3 PRIMARY FISH	23.6	64.0	2.9	8648.8	71.7	5.8	144.0	**	92.6	
4 COAL 5 NONMETAL,QUARRIES		21.6	2.9	802.4	11.4	5.6	6.7	977	83.6 701.5	
6 MEAT, DAIRY, FRUIT		21.0	1,77	002.4	525	/75	0.7	:555 :**	701.5	
7 SEC. FISH PRODUCTS	7.4	20.5	3.5	**		**	**			
8 MISC. FOOD PROD		2.9	1.77		125	377	5.00	555	552	
9 S.DRINK,DIST,BREW			286	2 10	6 78	1375	255	5 111		
10 TEXTILES, CLOTHING	311.9	2.8	5.6		135	10.6	0.1		**	
11 SAWMILL,WOOD PROD	4126.9 30.5	110.6	0.8 1361.2	288.3	41.4 44.4	10.5 3.1	312.6	0.7	06.0	
12 PULP-PAPER & PROD 13 PRINTING	1.3	2416.6 0.4	235.6	200.3	44.4	0.3	**	0.7	96.8 1.0	
14 IRON-STEEL PROD	1.5	0.4	255.0	11.9	2751.9	280.5	676.5	0.3	71.3	646.7
15 FABRIC, METAL PROD	251.1	268.6	13.5	581.6	1891.9	207.4	908.9	9.8	17.3	113.7
16 MACH. & EQUIPT	530.9	1114.0	123.0	2759.6	690.1	266.1	2786.4	36.0	301.5	698.0
17 TRANSP. EQUIPT	***		100	100	373.9		1462,6	44	225	**
18 ELECTRICAL EQ	122	10.4.1	144	1007.0	2.0	34	478.2	302.1	4=0.4	44
19 NONMET.MINERAL PR	1647	104.1	20.6	1337.2	2.0	12.7	2.7 133.1		673.6	1745.5
20 PETROLEUM PROD 21 FERT,PAINT,SOAP	164.7 596.5	297.5	20.6	1174.8 29.7	88.0 70.6	13.7 91.8	411.0	1.1 1.2	160.8	1745.5 59.3
22 MISC. MFG. PROD	390.3		0.3	27.1	70.0	21.0	411.0	0.1	220	39.3
23 CONSTRUCTION	149.0	102.0	76.0	1515.0	4.0	144	322.0	10.0	36.8	1227.1
24 TRANSP,TRAVEL,ENT	932.2	1862.7	291.3	4501.6	1226.9	361.8	1739.2	114.2	447.6	666.2
25 RADIO,TEL,TELEG	92.2	126.0	487.3	379.3	160.7	23.3	539.4	23.6	17.4	326.5
26 E.POWER, WATER, GAS	180.6	709.2	102.3	675.6	128.7	56.7	211.1	14.2	83.4	387.2
27 DISTRIBUTION	497.3	1124.1	116.0	2635.3	710.3	185.8	1029.3	40.6	252.6	409.8
28 AUTO OPERATION 29 FINANCE.R.E	115.6 740.4	30.9 1524.7	9.9 177.4	52.3 348.2	29.5 323.5	15.8 135.2	24.4 392.6	4.7 108.1	17.2 60.7	1731.6
30 DWELLING SERVICES		1324.7	177.4	340,2	323.3	133.2	372.0	106.1	50.7	1/31,0
31 HOTELS, REST.	200		4.55	255	100	1.77	1120		583 783	200
32 PERSONAL SERVICES	18.4	21.3	6.8	34.2	25.0	7.1	16.3	1.7	0.6	19.3
33 BUSINESS SERVICES	97.1	513.3	75.4	465.7	77.2	58.4	140.3	23.5	34.8	29.3
34 TOTAL INTER.INPUT	18312.4	14505.2	3109.4	26241.5	8723.3	1723.4	11758.3	691.9	3058.7	8060.2
35 TAXES		294.4	376.9	1010.1	232.9	47.5	213.6	8.2	58.2	406.4
36 SUBSIDIES		700.0	0.44.5	-314.4	1227.7	446.0	1/2/4/4	50.0	40.4	420.40.4
37 NON-COMP. IMPORTS 38 WAGES & SALARIES	188.0 6783.0	789.9 6363.3	844.5 4722.8	10901.0 22297.2	1327.7 4908.7	646.0 2176.6	1624.4 14043.6	59.9 1345.3	69.4 1384.1	43848.4 2635.3
39 UNINCORP.BUS.INC		6.6060	1000.0	22271.2	4700.7	2170.0	14043.0	1545.5	1304.1	2033,3
40 PROFIT, RENT, INT.		2215.9	1418.8	5408.9	979.4	599.0	1174.9	866.0	1174.1	6885.6
41 DEPRECIATION		1610.7	157.3	956.5	431.4	100.6	182.5	43.7	302.9	3439.1
42 HOUSEHOLD INCOME		6742.8	6322.8	22697.2	5196.8	2475.6	14227.3	1345.3	2307.3	3635.3
43 EDUCATION & HOSP		- 22		722	24	100	722	22	220	
44 PROVINCIAL REVENUE	78.6	0.3	10.0	21.9	10.9	15.6	20.3	0.1	20.4	400 =
45 MUNICIPAL REVENUE		290.4 806.8	228.3 538.6	963.5 866.1	214.4 71.1	27.7 4.2	180.5 227.5	5.9 2.2	35.6 253.1	402.7
46 FEDERAL REVENUE 47 IMPORT LEAKAGE		1823.2	1263.3	14754.1	1955.5	946.0	2400.9	925.9	69.4	1111.8 48625.9
48 TOTAL PRIMARY	10269.0	11274.2	8520.3	40259.3	7880.1	3569.7	17239.0	2323.1	2988.7	57214.8
49 FACTOR INCOMES	9293.6	8579.2	7141.6	27706.1	5888.1	2775.6	15218.5	2211.3	2558.2	9520.9
50 GROSS DOM. PROD	10081.0	10484.3	7675.8	29358.3	6552.4	2923.7	15614.6	2263.2	2919.3	13366.4
51 EMPLOYMENT		1567.0	1319.0	4364.0	1228.0	590.0	3716.0	315.0	448.0	411.0
52 TOTAL OUTPUT	28581.4	25779.4	11629.7	66500.8	16603.4	5293.1	28997.3	3015.0	6047.4	65275.0

		FERT,PAINT & SOAP	MISC. MANUF.	CON- STRUCTION	TRANSP, TRAVEL,ENT	RADIO, TEL, TELEG	ELEC.POWER WATER,GAS	DISTRIBUTN	AUTO OPERATION	FINANCE, R.E.	DWELLING SERVICES
		21	22	23	24	25	26	27	28	29	30
	AGRIC. PRODUCTS		440	38.6				3.4	1766	88 6	
2	FORESTRY PRODUCTS		220	212.6	-		5 74 5		(See	88 .5	
3	PRIMARY FISH	44		124					· ++	**	
4	COAL	1248	0.9	1.7	284.9	-	3000.0	-	244	***	
5	NONMETAL, QUARRIES		0.6	1137.1	3.0		344			***	
6	MEAT, DAIRY, FRUIT			## S	2,000	(1944		118.2	244	##:	
7	SEC. FISH PRODUCTS		100	220	-	725	-	110.2	192	100	
-	MISC. FOOD PROD			727					_		
9	S.DRINK, DIST, BREW TEXTILES, CLOTHING		1.6	255	8.0	174	**	204.4			
	SAWMILL, WOOD PROD		26.6	18866.0	166.3	722		155.1	Text	223	
	PULP-PAPER & PROD		25.6	1806.9	9.0	1722	22	421.9	24	22	
3	PRINTING		0.2		21.1	109.8	10.0	220			
	IRON-STEEL PROD		70.3	3089.3	556.0	(**		228	227	45	
5	FABRIC, METAL PROD		19.0	12573.0	344.5	-	4.1	15.5	22	**	
6	MACH. & EQUIPT		10.0	2570.0	1041.3	206.0	215.0	1820.3	270.0	830.0	
7	TRANSP. EQUIPT	***	**		5166.5		977	450.0			
8	ELECTRICAL EQ		***	2915.9	58.5	1.77	29.1	**	177	55.	
9	NONMET.MINERAL PR		**	15072.7	***	100		550	7.57	***	
0:	PETROLEUM PROD		7.6	1522.2	7337.0		499.1	775.6		50%	
1	FERT, PAINT, SOAP		32.8	3427.3	57.8	3.55	12.9	77	89.6	550	•
2	MISC. MFG. PROD		**	**	9.4	***	0.000			***	
3	CONSTRUCTION		4.4	189.0	4509.0	1043.0	2132.0	840.0	421.0	364.0	16500.0
4	TRANSP,TRAVEL,ENT		66.9	19932.0	5991.6	137.5	1796.6	14018.3	2493.1	9.3	
.5	RADIO,TEL,TELEG.	13.1	9.0	700.4	1844.1	405.0	11.0	1698.1	300.0	480.0	
6	E.POWER, WATER, GAS		54.9	599.3	1593.3	290.0	101.0	1581.7	505.7	91.0	
7	DISTRIBUTION		29.1	12362.4	2128.6	32.5	975.4	794.9	1538.3	5.7	
8	AUTO OPERATION		3.9	100.0	8717.5	25(0	230.0	00052	1075 ()	11720	1150.1
9	FINANCE, R.E.		35.0	9638.8	8661.8	256.0	165.2	8985.3	4875.0	1173.0	1159.1
0	DWELLING SERVICES			221	1919.0					**	
1	HOTELS, REST.		1.6	77.3	464.4	30.0	479.0	396.7	227	-	
2	PERSONAL SERVICES		33.6	7194.8	1154.6	340.0	100.0	4749.5	220.0	340.0	
33 34	TOTAL INTER.INPUT		433.6	114026.9	52047.1	2849.8	9760.4	37028.9	10712.7	3293.0	17659.1
						585.0	1810.0	2734.5	4170.0	6981.1	13790.9
35	TAXES		35.3	774.0	9202.7 -11270.9	2020	-1102.8	2734.3	4170.0	0701.1	13770,3
16 17	SUBSIDIES	1088.0	209.4	15766.1	4316:1	580.2	95.2	2271.3	22254.3	7468.0	27
	WAGES & SALARIES		670.4	80568.1	53604.0	9826.4	7411.4	75457.2	14000.0	18204.9	
38 39	UNINCORP.BUS.INC		070.4	13000.0	8129.0	701017	/ - 1 1 1	14000.0	6000.0	3000.0	
0	PROFIT, RENT, INT.		287.5	5937.4	13543.7	5698.9	10674.9	18718.9	4881.5	15620.8	25202.8
H	DEPRECIATION		33.7	2689.7	15646.8	3306.0	3905.1	8483.0	1666.1	4558.0	2780348
12	HOUSEHOLD INCOME		896.5	96776.3	62276.7	12402.8	12570.5	99624.6	21108.0	24704.9	20202.8
13	EDUCATION & HOSP		0,70%	445	44	***	**	***	#88	***	77
4	PROVINCIAL REVENUE		7.8	451.0	8287.9	317.0	56.0	338.0	3970.0	4162.9	-
51	MUNICIPAL REVENUE		24.6	300.0	844,8	180.0	1751.0	1719.8	200.0	2808.2	13790.9
6	FEDERAL REVENUE		64.3	951.4	-11200.9	1288.0	247.8	3983.4	500.0	510.0	-
17	IMPORT LEAKAGE	2335.2	209.4	17566.9	17316.1	2502.7	4263.4	7516:1	25527.8	19088.8	5000.0
8	TOTAL PRIMARY	3617.6	1236.3	118735.2	93171.3	19996.5	22793.8	121664.8	52971.9	55832.8	66797.4
9	FACTOR INCOMES		957.9	99505.5	75276.7	15525.3	18086,3	108176.1	24881.5	36825.7	25202.8
0	GROSS DOM. PROD		1026.9	102969.1	88855.3	19416.3	22698.6	119393.6	30717.6	48364.8	66797.4
1	EMPLOYMENT	250.0	182.0	24600.0	15000.0	3100.0	1800.0	24350.0	6926.0	4000.0	206.0
52	TOTAL OUTPUT	5768.2	1669.9	232762.1	145218.4	22846.3	32554.2	158693.7	63684.6	59125.8	84456.6

	EDUCATION	HOSPITAL	TOTAL DOM. FINAL DEM.	EXPORTS- FOREIGN	EXPORTS- CANADA	EXPORTS- N.S.	EXPORTS- N.B.	EXPORTS- P.E.I.	EXPORTS- NFLD,	TOTAL EXPORTS
	41	42	43	44	45	46	47	48	49	50
1 AGRIC. PRODUCTS		206.5	39096.1	1613.5	252.0		2080.0	136.0	1068.0	5149.5
2 FORESTRY PRODUCTS		**	3306.0	2546.0	253.0		2026.0	45	122	2799.0
3 PRIMARY FISH		269.1	5594.1	280.0	20012.4		3036.0 2287.0	363.0	1499.0	3036.0
4 COAL 5 NONMETAL,QUARRIES		207.1	92.1	8197.0	2323.4		312.0	19.0	427.0	24441.4 11278.4
6 MEAT, DAIRY, FRUIT		1527.5	68404.4	1354.5	928.7		1566.0	99.0	1289.0	5237.2
7 SEC. FISH PRODUCTS		26.8	6337.6	42753.2	8107.5		1009.0	335.0	422.0	52626.7
8 MISC. FOOD PROD		131.5	33707.9	92.4	4476.2		1523.0	477.0	1143.0	7711.6
9 S.DRINK, DIST, BREW		1.52.7	16029.8	26.7	488.3		823.0	481.0	1,0	1820.0
10 TEXTILES, CLOTHING		152.7	33760.7 7602.7	16.1	11618.8		1016.0	271.0	792.0	13713.9
SAWMILL,WOOD PROD 2 PULP-PAPER & PROD		71.3 42.8	970.5	2677.6 18373.8	292.2 339.1		1040.0 1023.0	673.0 180.0	2461.0	7143.8
PRINTING		503.8	6125.6	10373.0	100.0		1023.0	100.0	43.0 1000.0	19958.9 1100.0
4 IRON-STEEL PROD		30310	41.8	19282.8	36347.4		1963.0	45.0	1263.0	58901.2
5 FABRIC, METAL PROD			843.4	11.3	3416.1		874.0	453.0	843.0	5597.4
16 MACH. & EQUIPT		***	58560.4	371.7	462.1		192.0	28.0	233.0	1286.8
7 TRANSP. EQUIPT		**	13760.4	3895.5	3638.1		1060.0	1960.0	1247.0	11800.6
8 ELECTRICAL EQ		115.5	8892.7	10.5	2347.7		7.0	2.0	3.0	2370.2
19 NONMET.MINERAL PR 20 PETROLEUM PROD		98.8	255.8 29675.1	22.5 665.9	553.1 8620.7		294.0 15532.0	86.0 3221.0	242.0	1197.6
FERT,PAINT,SOAP		253.1	956.5	766.2	1669.9		1592.0	355.0	9910.0 410.0	37949.6 4793.1
22 MISC. MFG. PROD		90.0	637.5	700.2	233.5		41.0	12.0	37.0	323.5
23 CONSTRUCTION		7389.0	197681.3	441	255.5		**		37.0	223,5
24 TRANSP,TRAVEL,ENT		1179.2	43610.8	3666.1	27381.5					31047.6
25 RADIO,TEL,TELEG		45.7	8568.1	¥¥3	1573.8		44			1573.8
26 E.POWER, WATER, GAS		489.2	18431.3	1000	10101		782.0			782.0
27 DISTRIBUTION		1169.3	123148.8	1000.0	1012.1		**			2012.1
28 AUTO OPERATION 29 FINANCE.R.E		226.1	50634.5 5447.6				***			**
9 FINANCE, R.E 30 DWELLING SERVICES	302.2	220.1	88678.6							:77
HOTELS, REST		145.1	24490.6	221	229		220			
PERSONAL SERVICES		156.6	44540.7		22		**			**
BUSINESS SERVICES	268.9	246.2	2978.8		#		#			-72
34 TOTAL INTER.INPUT	20339.1	14535.8	942861.6	107623.1	136447.2		38052.0	9196.0	24332.9	315651.0
35 TAXES	30.2	7.0	102116.8		550					
36 SUBSIDIES		**	0.000.00		-8864.8					-8864.8
NON-COMP, IMPORTS		4188.2	87272.5							
88 WAGES & SALARIES 89 UNINCORP.BUS.INC		19203.0	183973.3							
PROFIT, RENT, INT.		775.0	19290.0							
DEPRECIATION		775.0	17270.0							
HOUSEHOLD INCOME		19603.0	193973.3							
3 EDUCATION & HOSP		240	5063.0							
14 PROVINCIAL REVENUE		**	33144.0							
5 MUNICIPAL REVENUE		7.0	5924.0		20110					· · ·
6 FEDERAL REVENUE 17 IMPORT LEAKAGE		7.0 4563.2	57985.8 96562.5		-8864.8					-8864.8
8 TOTAL PRIMARY		24173.2	392652.5	 	-8864.8					-8864.8
										30040
9 FACTOR INCOMES		19978.0	203263.3		00/40					
GROSS DOM. PROD		19985.0 4500.0	305380.0 45000.0		-8864.8					-8864.8
					1055					***
TOTAL OUTPUT	56269.0	38709.0	1335510.0	107623.1	127582.4		38052.0	9196.0	24332.9	306786.2

_			
		TOTAL	TOTAL
		INTER DEM.	DEMAND
=		INTER DEM.	DEMAND
		51	52
	ACDIC DRODUCTS	157(0.6	(00143
2	AGRIC. PRODUCTS	15768.6	60014.2
3	FORESTRY PRODUCTS	15127.7	21232.7
4	PRIMARY FISH	33115.2	36151.2
5	COAL	13297.8	43333.3
6	NONMETAL, QUARRIES		14599.5
7	MEAT, DAIRY, FRUIT		76534.1
8	SEC. FISH PRODUCTS MISC. FOOD PROD		60401.8
9	S.DRINK,DIST,BREW	. 7040.7	51268.4
10	TEXTILES, CLOTHING	. 220.7	18070.4
11	SAWMILL, WOOD PROD		51814.8 42061.5
12	PULP-PAPER & PROD		
13	PRINTING		32369.2
14	IRON-STEEL PROD		12038.6
15	FABRIC. METAL PROD		69263.3 27870.8
16	MACH. & EQUIPT	23401.9	
17	TRANSP. EQUIPT	8095.9	83248.8 33656.9
18	ELECTRICAL EQ	4281.3	15544.2
19	NONMET.MINERAL PR.	17487.3	18940.7
20	PETROLEUM PROD		85647.6
21	FERT, PAINT, SOAP		13257.8
22	MISC. MFG. PROD.	1027.8	1988.8
23	CONSTRUCTION	35081.0	232762,2
24	TRANSP,TRAVEL,ENT	70560.0	145218.3
25	RADIO, TEL, TELEG.		22846.3
26	E.POWER, WATER, GAS		32560.3
27	DISTRIBUTION	33532.6	158693.4
28	AUTO OPERATION	13050.1	63684.6
29	FINANCE, R.E.		59125.7
30	DWELLING SERVICES		88678.6
31	HOTELS, REST.		26409.6
32	PERSONAL SERVICES	2815.7	47356.4
33	BUSINESS SERVICES		22586.0
34	TOTAL INTER.INPUT	510716.0	1769222.0
2.5	TAVEC	550(47	157001 4
35	TAXES		157981.4
36 37	SUBSIDIES		-24392.8
38	NON-COMP. IMPORTS		224812.7
39	WAGES & SALARIES	431261.6	615234.9
40	UNINCORP.BUS.INCPROFIT,RENT,INT.	104204.3	104204.3
41			166575.9
42	DEPRECIATIONHOUSEHOLD INCOME		92718.8
43	EDUCATION & HOSP		790302.4 5063.0
44	PROVINCIAL REVENUE		53615.0
45	MUNICIPAL REVENUE		39668.0
46	FEDERAL REVENUE		52950.I
47	IMPORT LEAKAGE		302818.0
48	TOTAL PRIMARY	953347.6	1337131.0
49	FACTOR INCOMES		886015.3
50	GROSS DOM. PROD		1112321.0
51	EMPLOYMENT	144236.0	189236.0
52	TOTAL OUTPUT	1464060.0	3106351.0

		FERT, PAINT & SOAP PR.	MISC. MFG. PROD.	CON- STRUCTION	TRANSP, TRAVEL,ENT	RADIO,TEL, TELEG.	ELEC.POWER WATER,GAS	DISTRIBUTN	AUTO OPERATION	FINANCE, R.E.	DWELLING SERVICES
	,	21	22	23	24	25	26	27	28	29	30
1	AGRICULTURE										4105.0
2	FORESTRY	•-									**
3	PRIMARY FISHING										**
4	METAL MINING										-
5	COAL MINING										**
6	NONMETAL, QUARRIES										
7	MEAT, DAIRY, FRUIT										**
8	SECONDARY FISHING										
9	MISC. FOODS, NES				••						
10	S.DRINK, DIST, BREW										
11	TEXTILES, CLOTHING										720
12	SAWMILLS, WOOD PR										
13	PULP-PAPER & PR			 							
14	PRINTING										
15	METAL FABRIC										:
16	MACH. & EQUIPT										7
17	TRANSP. EQUIPT			 							
18	ELECTRICAL EQ										(37)
19 20	NONMET.MINERAL PR PETROLEUM REF										27
21	FERT,PAINT,SOAP										**
22	MISC. MANUF.		3373.9								131
23	CONSTRUCTION		3313.7	156308.0	-						**
24	TRANSP,TRAVEL,ENT			150500.0	114491.0						
25	RADIO, TEL, TELEG					20235.7		••			
26	E.POWER, WATER, GAS						24396.8				**
27	DISTRIBUTION							119913.2			277
28	AUTO OPERATION								51294.2		
29	FINANCE, R.E.								••	46247.0	
30	DWELLING SERVICES									**	64659.7
31	HOTELS, REST.									**	***
32	PERSONAL SERVICES				***					**	
33	BUSINESS SERVICES									344	342
34	TOTAL OUTPUT	4914.5	3373.9	156308.0	114491.0	20235.7	24396.8	119913.2	51294.2	46247.0	68764.7
35	IMPORTS - NS	1592.0	41.0		**	220	782.0	122	22	- 25	20
36	IMPORTS - NB				**		321			F26	**
37	IMPORTS - PEI		3.5				**		44	**	
38	IMPORTS - NFLD	237.0			**			-			-57
39	IMPORTS - RES		1.0	17.5		***		-			
40	TOTAL IMPORTS		42.0		-		782.0		277	***	
41	TOTAL SUPPLY	10147.6	3415.9	156308.0	114491.0	20235.7	25178.8	119913.2	51294.2	46247.0	68764.7
42	TOTAL INTER.DEM	6578.6	633.5	23952.5	61769.5	11070.1	10430.0	32772.9	12042.5	41456.9	3 48
43	TOTAL DOM.FIN.DEM		401.6	132355.5	28523.8	7336.9	13703.0	85539.3	39251.7	4790.1	68764.7
44	TOTAL EXPORTS		2380.8	132333.5	24197.8	1828.7	1045.8	1600.9	350	-	**
			3415.9	156307.9	114491.1	20235.7	25178.8	119913.0	51294.2	46247.0	68764.7

MODEL 1 NEW BRUNSWICK, 1960 - OUTPUT AND SUPPLY FLOWS J.M (\$'000)

-					
		HOTELS,	PERSONAL	BUSINESS	TOTAL
		REST	SERVICES	SERVICES	OUTPUT
-			20111100		
		31	32	33	34
,	ACRICITY				
2	AGRICULTURE			***	61259.0
3	FORESTRY PRIMARY FISHING			**	37659.4
4	METAL MINING			**	9357.6
5	COAL MINING				5 44.7 8663.4
6	NONMETAL, QUARRIES				2822.2
7	MEAT, DAIRY, FRUIT				31540.4
8	SECONDARY FISHING				33369.8
9	MISC, FOODS NES			22	69668.5
10	S.DRINK, DIST, BREW			122	9449.6
11	TEXTILES, CLOTHING			**	6887.6
12	SAWMILLS, WOOD PR.				33907.2
13	PULP-PAPER & PR			155	112943.2
14 15	PRINTING		**	978	7856.3
16	METAL FABRIC			575	8917.2
17	MACH. & EQUIPT. Transp. Equipt.			2.22	2564.0
18	ELECTRICAL EQ			25	21080.2 7034.1
19	NONMET.MINERAL PR				7034.1
20	PETROLEUM REF	 			34456.1
2 I	FERT.PAINT SOAP				4914.5
22	MISC. MANUF				3373.9
23	CONSTRUCTION			144	156308.0
24	TRANSP.TRAVEL.ENT				114491.0
25	RADIO,TEL,TELEG				20235.7
26	E.POWER, WATER, GAS			**	24396.8
27 28	DISTRIBUTION			3-6	119913.2
29	AUTO OPERATION			199	51294.2
30	FINANCE, R.E.			**	46247.0
31	DWELLING SERVICESHOTELS, REST.	14242.2			64659.7
32	PERSONAL SERVICES	16363.3	20720.4	192	16363.3
33	BUSINESS SERVICES		38729.4	15998.9	38729.4 15998.9
			***	13770.7	12770.7
34	TOTAL OUTPUT	16363.3	38729.4	15998.9	1183950.0
35	IMPORTS NO				3 (2 2 2 2 2
36	IMPORTS - NSIMPORTS - NB	-55			36089.0
37	IMPORTS - PEI	:52	155	1775	2400.0
38	IMPORTS - NFLD	***	(37)	1.55	3600.0 902.0
39	IMPORTS - RES	1.00	:55	155. 155.	193789.5
40	TOTAL IMPORTS	355			234380.4
41					
41	TOTAL SUPPLY	16363.3	38729.4	15998.9	1418328.0
42	TOTAL INTER.DEM	1353.0	2165.6	14079.8	415742.7
43	TOTAL DOM.FIN.DEM	15010.3	36563.8	1919.1	681262.0
44	TOTAL EXPORTS	13010.3	30303.6	1919.1	321311:3
45					
45	TOTAL DEMAND	16363.3	38729.4	15998.9	1418315.0

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MODEL 1 ATLANTIC PROV., 1960 - OUTPUT AND SUPPLY FLOWS J,M (\$'000)

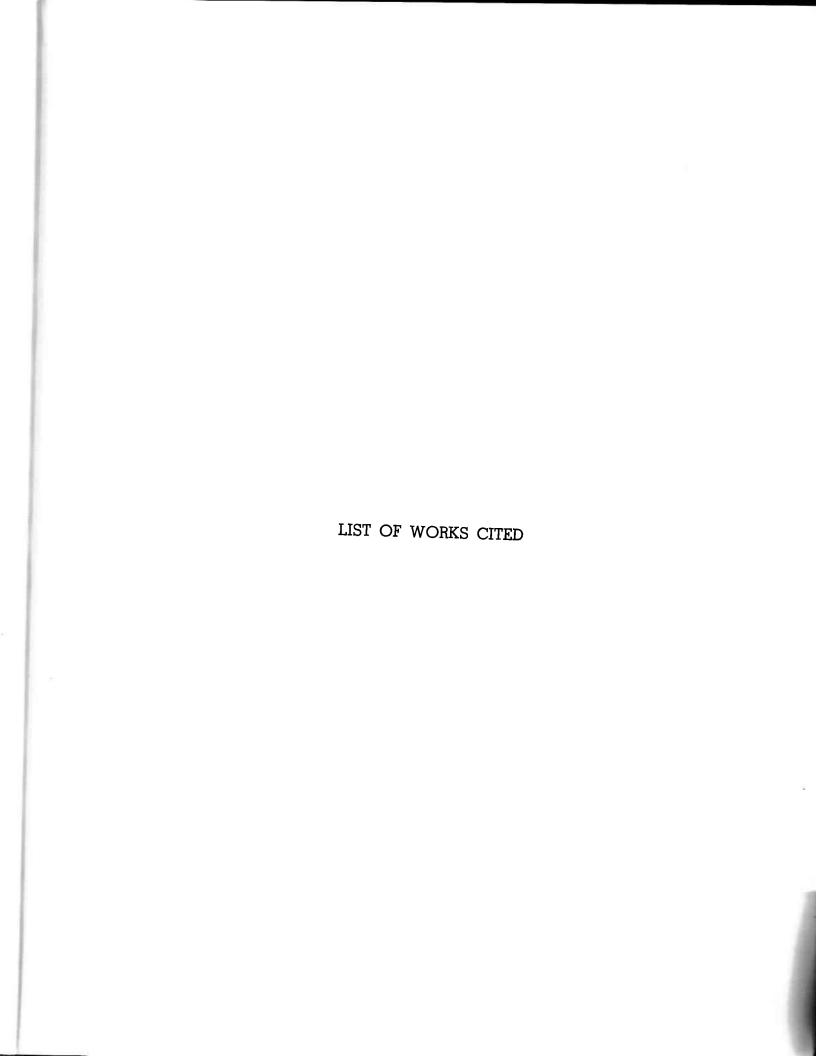
	-	TEXTILES, CLOTHING	SAWMILLS, WOOD PR	PULP-PAPER & PROD.	PRINTING	IRON-STEEL PRODUCTS	FABRIC. METAL PROD	MACH. & EQUIPT.	TRANSP. EQUIPT.	ELECTRICAL EQUIPT.	NONMET. MINERAL PR
		11	12	13	14	15	16	17	18	19	20
1	AGRICULTURE										
2	FORESTRY										
3	PRIMARY FISHING										
4	METAL MINING										
5	COAL MINING										
6	NONMETAL, QUARRIES			:00:						-	
7	MEAT, DAIRY, FRUIT										
8	SECONDARY FISHING			.000 (##)							
9	MISC. FOODS,NES										
10	S.DRINK, DIST, BREW			13.8						348 200	
11	TEXTILES, CLOTHING	26878,5		13.6						3 24	
12	SAWMILLS, WOOD PR		69575.7							22	
-	PULP-PAPER & PR			207000.4	12.5						
13				207089.4	12.5					44	
14	PRINTING				23823.8	(5750.3					
15	IRON-STEEL MILLS					65750,3	2 (0 7 2 0			526	
16	METAL FABRIC						26972.9	614.4		**	
17	MACH. & EQUIPT							8559.9		**	
18	TRANSP. EQUIPT						167.8	425.0	51705.8	53	
19	ELECTRICAL EQ						25	556.6		9535.5	
20	NONMET.MINERAL PR			159.0			**				17402.2
21	PETROLEUM REF									553	
22	FERT,PAINT,SOAP						550			3.5	
23	MISC. MANÚF						90.0				
24	CONSTRUCTION						220			22	
25	TRANSP,TRAVEL,ENT						55			222	
26	RADIO,TEL,TELEG						**3				
27	E.POWER,WATER,GAS						555			**	
28	DISTRIBUTION						553				
29	AUTO OPERATION						558				
30	FINANCE,R.E						***			(44)	
31	DWELLING SERVICES						***			200	
32	HOTELS, REST.						EEG			94	
33	PERSONAL SERVICES						***			44	92
34	BUSINESS SERVICES						HH2			200	22
35	TOTAL OUTPUT	26878.5	69575.7	207262.3	23836.3	65750.3	27230.7	10155.9	51705.8	9535.5	17402.2
36	TOTAL IMPORTS	81512.4	30780.8	11442.6	935.3	14066.9	26925.1	202574.1	10757.9	21463.2	25783.8
37	TOTAL SUPPLY	108390.9	100356.5	218704.9	24771.6	79817.1	54155.8	212729.9	62463.7	30998.7	43186.0
18	TOTAL INTER.DEM	8497.7	620941	20542.2	0776 (241454	45705 2	(27(1.0	10/31/	10357	41770 2
10			62984.1	30542.3	9776.6	24145.4	45705.3	62761.0	18621.6	10256.1	41779.3
	TOTAL DOM.FIN.DEM	85209.4	20315.1	3300.1	14795.0	41.8	2196.1	149070.9	21809.2	17620.9	403.3
40	TOTAL EXPORTS	14683.6	17057.3	184862.7	200.0	55630,2	6254.4	898.7	22032.9	3121,7	1003.4
41	TOTAL DEMAND	108390.6	100356.4	218705.1	24771.6	79817.3	54155.8	212730.6	62463.6	30998.7	43186.0

MODEL 1 ATLANTIC PROV., 1960 - OUTPUT AND SUPPLY FLOWS J,M (\$'000)

		DWELLING SERVICES	HOTELS, REST,	PERSONAL SERVICES	BUSINESS SERVICES	TOTAL OUTPUT
		31	32	33	34	35
1	AGRICULTURE	10466.0				155526.1
2	FORESTRY	10466.0				86928.6
3	PRIMARY FISHING			••		62627.2
4	METAL MINING					80187.4
5	COAL MINING					51996.9
6	NONMETAL, QUARRIES					20960.6
7	MEAT, DAIRY, FRUIT					85385.4
8	SECONDARY FISHING					122704.7
9	MISC. FOODS, NES					108022.2
10	S.DRINK, DIST, BREW					31294.8
ΙĬ	TEXTILES, CLOTHING					26878.5
12	SAWMILLS, WOOD PR.					69594.2
13	PULP-PAPER & PR					207101.9
14	PRINTING					23823.8
15	IRON-STEEL MILLS					66500.8
16	METAL FABRIC					27615.5
17	MACH. & EQUIPT.					8559.9
18	TRANSP. EQUIPT.					52298.6
19	ELECTRICAL EQ.					10092.1
20	NONMET.MINERAL PR					17561.2
21	PETROLEUM REF					99731.1
22	FERT, PAINT, SOAP					14414.5
23	MISC. MANUF.					5685.9
24	CONSTRUCTION					565401.6
25	TRANSP,TRAVEL,ENT					359430.4
26	RADIO, TEL, TELEG					53099.5
27	E.POWER, WATER, GAS					71685.3
28	DISTRIBUTION					383944.4
29	AUTO OPERATION					148293.2
30	FINANCE, R.E.					144819.7
31	DWELLING SERVICES	190428.9				190428.9
32	HOTELS, REST.	190420.9	55896.6			55896.6
33	PERSONAL SERVICES			107311.9		107311.9
34	BUSINESS SERVICES	·		10/511.5	56639.2	56639.2
35	TOTAL OUTPUT	200894.9	55896.6	107311.9	56639.2	3572435.0
36	TOTAL IMPORTS	- 20	्रा	: 77		639679.8
37	TOTAL SUPPLY	200894.9	55896.6	107311.9	56639.2	4212114.0
38	TOTAL INTER.DEM.					
39	TOTAL DOM.FIN.DEM	2000040	4510.0	7036.0	49347.2	1278877.0
40	TOTAL EXPORTS		51386.6	100275.7	7291.9	2236517.0
70	TOTAL LAFOR 19	**	524	1		696616.1
41	TOTAL DEMAND	200894.9	55896.6	107311.6	56639.1	4212010.0
		2000/4.7	55670.0	10/3/11.0	30037.1	1212010.0

MODEL 1 ATLANTIC PROV., 1960 - INPUTS AND DEMAND FLOWS B, D, E (\$'000)

	TEXTILES, CLOTHING	SAWMILLS, WOOD PR	PULP-PAPER & PROD	PRINTING	IRON-STEEL MILLS	METAL FABRIC	MACH. & EQUIPT.	TRANSP, EQUIPT.	ELECTRICAL EQUIPT.	NONMET, MINERAL PR
	11	12	13	14	15	16	17	18	19	20
I AGRIC. PRODUCTS	372.6			-	427					
2 FORESTRY PRODUCTS		21842.1	44638.7		-	0.2	0.1	33.1	0.2	64.2
3 PRIMARY FISH				144 144	8252,5			-		
4 METALS 5 COAL		55.3	4186.4	4.8	8648.8	98.4	9.3	225.7	14.3	377.9
6 NONMETAL, QUARRIES		33.3	150.3	4.0	802.4	25.5	7.5	6.7	14.5	1259.2
7 MEAT, DAIRY, FRUIT		22	322				-	227	- 4	1237.2
8 SEC. FISH PRODUCTS		43.9	130.0	5.5			-			16.5
9 MISC. FOOD PROD		22	101.7							16.2
0 S.DRINK,DIST,BREW 1 TEXTILES,CLOTHING		435.8	352.2	8.9		0.2	22°	12.0		••
2 SAWMILL, WOOD PROD	47.3	11538.5	2027.4	0.8		63.0	20,6	822.7	17.8	
3 PULP-PAPER & PROD		49.3	8146.1	2378.7	288.3	104.2	3.5	022.7	14.9	1022.3
4 PRINTING		1.4	71.8	818.7		0.2	0.3	44	(1997)	1.0
5 IRON-STEEL PROD		<u> </u>			11.9	3690.0	468.9	3045.3	4.0	111.9
6 FABRIC. METAL PROD		355.3	1821.4	40.5	581.6	2636.3	245.0	1703.7	27.8	19.3
7 MACH. & EQUIPT		1290.7	14259.6	281.5	2759.6	1066.9	428.8	6457.9	1079.3	991.4
8 TRANSP. EQUIPT 9 ELECTRICAL EQ		***	5 22	34. 34.	(144)	552.5		2617.7 5 4 7.7	461.1	722
0 NONMET.MINERAL PR			834.9		1337.2	4.4	-	7.9	401.1	1313.3
PETROLEUM PROD	80.6	352.7	3724.6	61.6	1174.8	143.3	29.3	199.7	39.3	538.9
2 FERT, PAINT, SOAP	213.6	1154.5	105.4	24	29.7	148.5	138.7	704.7	10.6	0.9
3 MISC. MFG. PROD	44		144	0.3	1 **		••		0.1	0.3
4 CONSTRUCTION	155.0	280.0	1164.0	101.0	1515.0	59.3	5.1	646.1	49.0	165.8
5 TRANSP,TRAVEL,ENT	1499.4	2879.0	10150.7	576.8	4501.6	2859.5	525.0	2932.2	645.9	1231.5
6 RADIO, TEL, TELEG		192.8 482.0	876.1 5929.8	546.8 219.8	379.3 675.6	192.9 215.3	38.8 89.9	563.8	42.1	42.1
7 E.POWER, WATER, GAS 8 DISTRIBUTION	831.9	1437.7	6580.3	238.5	2635.3	1501.0	249.6	385.6 1589.5	59.2 274.2	505.6 616.7
9 AUTO OPERATION	6.9	224.3	69.6	24.1	52.3	38.7	35.3	33.3	8.1	41.0
0 FINANCE,R.E		1427.8	4175.7	344.5	348.2	514.4	213.2	684.0	240.2	186.3
1 DWELLING SERVICES	**	940		**	199		944	**	-	
2 HOTELS, REST		**3	34	**	1044		**	**	24	
3 PERSONAL SERVICES	19.3	43.5	79.6	12.5	34.2	31.7	8.0	20.1	6.9	2.5
4 BUSINESS SERVICES		200.9	1631.9	151.5	465.7	134.4	86.9	217.2	151.2	121.0
5 TOTAL INTER.INPUT	9555.4	44287.4	111207.7	5816.8	34494.0	14080.8	2596.3	23456.6	3146.2	8645.8
6 TAXES	250.5	593.1	1617.0	499.0	1010.1	338.5	106.3	325.1	59.2	181.3
7 SUBSIDIES 8 NON-COMP. IMPORTS	6323.9	478.4	8628.5	1855.5	-314.4 2648.5	2556.2	926.3	3003.3	1129.2	137.2
9 WAGES & SALARIES		16070.4	46810.4	10237.0	22297.2	8316.9	3674.7	24863.8	3424,9	4574.0
UNINCORP.BUS.INC		3001.8	40010.4	2500.0	2227712	0510.5	2074.7	24005.6	3727.7	4574.0
PROFIT, RENT, INT.	2875.3	4097.4	21043.3	2543.9	5408.9	1531.3	1079.9	-442.3	2136.4	2228,4
2 DEPRECIATION	663.9	1065.6	17794.7	371.6	956.5	792.0	176.4	1092.1	196.2	1794.5
3 HOUSEHOLD INCOME,		21429.6	49849.5	14127.9	22697.2	9044.9	4390.7	24511.8	3639.5	6033.1
4 EDUCATION & HOSP		1121	0.2	21.0	21.0	10.4	242	22.0	22.4	5.4.0
5 PROVINCIAL REVENUE 6 MUNICIPAL REVENUE	9.7 212.3	113.1 452.8	8.3 1593.2	31.0 295.1	21.9 963.5	18.4 308.4	24.2 75.4	23.8 283.0	33.4 12.5	54.9 119.7
7 FEDERAL REVENUE	441.5	861.1	5663.3	819.2	866.1	157.2	73. 4 70.6	233.0	220.6	119.7 396.6
8 IMPORT LEAKAGE		1384.5	20984.9	2362.2	6501.6	3214.0	1226.3	2698.3	2843.7	516.6
9 TOTAL PRIMARY	17323.1	25306.7	95893.8	18007.0	32006.8	13534.9	5963.6	28842.0	6945.9	8915.4
0 FACTOR INCOMES	10084.8	23169.6	67853.7	15280.9	27706.1	9848.2	4754.6	24421.5	5561,3	6802.4
1 GROSS DOM. PROD	10999.2	24828.3	87265.4	16151.5	29358.3	10978.7	5037.3	25838.7	5816.7	8778.2
2 EMPLOYMENT	3504.0	7323.0	9160.0	2974.0	4364.0	2073.0	985.0	6639.0	927.0	1339.0
3 TOTAL OUTPUT	26878.4	69594.1	207101.4	23823.8	66500.8	27615.6	8559.9	52298.5	10092.1	17561.1



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