SYSTEM OF NATIONAL ACCOUNTS
INPUT-OUTPUT TABLES

## The Input-OutputStructure of the Canadian Economy 1961



DOMINION BUREAU OF STATISTICS
Input-Output Research and Development Staff

```
STATVETICN ETATHINQUE
    JAN 202008
    L*S2R4Ag*
```



SYSTEM OF NATIONAL ACCOUNTS Input-Output Tables

# THE INPUT-OUTPUT STRUCTURE OF THE CANADIAN ECONOMY, 1961 

## VOLUME 1

Published by Authorily of
The Minister of Industry, Trade and Commerce

The preliminary 1961 Input-Output Tables published in this Volume and in Volume 2 ("The Input-Output Structure of the Canadian Economy, 1961 Volume $2^{\prime \prime}$, catalogue no. 15-502, forthcoming) include a set of Input-Output Accounts which form part of the System of National Accounts, and tables which can be used for a variety of analytical purposes. Volume 1 includes tables for two aggregations of the system - 16 industries by 40 commodities, and 65 industries by 65 commodities - while Volume 2 will consist of tables for a third aggregation - 110 industries by 197 commodities. The descriptive material and classification systems for all three aggregations are contained in Volume 1.

This is the second set of Canadian Input-Output Tables to be published by the Dominion Bureau of Statistics; the first was for the year 1949. In addition to being more detailed, the 1961 Tables have been constructed within a conceptual framework which differs considerably from that of the 1949 Tables.

The Input-Output Research and Development Staff is under the direction of Mr. T. Gigantes. Other Staff economists who have made substantial contributions to the studies are I.H. Midgley, P.R. Pitts, Mrs. S. Nijhowne, A.M. Friend, C. Gaston, R. Hoffman, K. Lal, S. O'Brien and Mrs. L. Emmerson. The text of this Volume was written by T. Gigantes and P.R. Pitts.

The Staff has benefitted from the assistance of many individuals in other Bureau divisions, and from consultation with outside researchers, particularly Professor T.I. Matuszewski of Université Lava1, Professor K. Levitt of McGill University, Professor G. Rosenbluth of the University of British Columbia, and Professor J.A. Sawyer of the University of Toronto.

WALTER E. DUFFETT, Dominion Statistician.


In Canada, the National Accounts have been developed since the close of the Second World War in a series of publications relating to their constituent parts. These have now reached a stage of evolution where they can be termed a "System of National Accounts". For purposes of identification, all publications (containing tables of statistics, descriptions of conceptual frameworks, and descriptions of sources and methods) which make up this System will now carry the term "System of National Accounts" as a general title.

The System of National Accounts in Canada consists of several parts. The annual and quarterlv Income and Expenditure Accounts (included with catelogue nos. carrying the prefix 13) were, historically speaking, the first set of statistics to be referred to with the title "National Accounts" (National Accounts, Income and Expenditure). The Balance of International Payments data, (catalogue nos. with prefix 67), in their more summary form, are also part of the System of National Accounts and they, in fact, pre-date the Income and Expenditure Accounts.

Greatly expanded structural detail on industries and on goods and services is portrayed in the Input-Output Tables of the System (catalogue nos. with prefix 15). The Indexes of Real Domestic Product by Industry (included with catalogue nos. carrying the prefix 61) provide "constant dollar" measures of the contribution of each industry to gross domestic product at factor cost. Inputs and outputs are related in Productivity Studies (catalogue nos. with prefix 14).

Both the Input-Output Tables and Indexes of Real Domestic Product by Industry use the establishment as the primary unit of industrial production. Measures of financial transactions are provided by the Financial Flow Accounts (catalogue nos. with prefix 13). Types of lenders and financial instruments are the primary detail in these statistics, and the legal entity is the main unit of classification of transactors. Also, provision is made in the System for incorporation of balance sheet (wealth) estimates when such data are sufficiently developed.

The System of National Accounts provides an overall conceptually integrated framework in which the various parts can be considered as interrelated subsystems. At present, direct comparisons amongst those parts which use the establishment as the basic unit and those which use the legal entity can be carried out only at highly aggregated levels of data. However, the Dominion Bureau of Statistics is continuing research on enterprise-company-establishment relationships; it may eventually be feasible to reclassify the data which are on one basis (say the establishment basis) to correspond to the units employed on another (the company or the enterprise basis).

In its broad outline, the Canadian System of National Accounts bears a close relationship to the international standard as described in the United Nations publication, "A System of National Accounts" (Studies in Methods, Series F., No. 2, Rev. 3, Statistical Office, Department of Economic and Social Affairs, United Nations, New York, 1968). In the future, a document on the conceptual framework of the Canadian System of National Accounts will be prepared for publication by the Dominion Bureau of Statistics. This document will furnish the broad theoretical outline of the System. The finer conceptual details, the statistical tables, and the descriptions of sources and methods as they pertain to the individual parts of the System, will appear in the various regular and occasional publications relating to those parts.

## TABLEOTONTENTS

## PAGE

Chapter 1. Introduction ..... 9
2. The Detailed Accounting Framework ..... 19
3. Analytical Uses ..... 34
4. Description of Published Tables ..... 97
5. Classification System and Selected Definitions ..... 113
Appendix A. Mathematical Treatment of Analytical Uses ..... 135
List of References ..... 165
Appendix B. Industry and Commodity Classifications ..... 167
List of Tables
Table A Industry Inputs and Final Expenditures, 1961 - Summary ..... 99
B Gross Domestic Expenditure and Gross Domestic Product Canada, 1961 ..... 102
1 Values of Industry Inputs and Final Expenditures, 1961 - Aggregation S ..... 262
2 Industry Input and Final Expenditure Coefficients - Aggregation $S$ ..... 268
3 Values of Industry Outputs, 1961 - Aggregation S ..... 274
4 Market Share Coefficients - Aggregation S ..... 279
5 Impact Table Without Import Leakages - Aggregation S ..... 284
6 Impact Table With Import Leakages - Aggregation S ..... 294
7 Valuation Conversion Coefficients - Aggregation S ..... 304
8 Values of Industry Inputs and Final Expenditures, 1961 - Aggregation M ..... 305
9 Industry Input and Final Expenditure Coefficients - Aggregation M ..... 332
10 Impact Table Without Import Leakages - Aggregation M ..... 359
11 Impact Table With Import Leakages - Aggregation M ..... 386
12 Valuation Conversion Coefficients - Aggregation M ..... 413

```
    List of Tables to appear in Volume 2 of
"The Input-Output Structure of the Canadian Economy, 1961"
    (Catalogue No. 15-502)
```

Table 13 Values of Industry Inputs and Final Expenditures, 1961 Aggregation L
14 Industry Input and Final Expenditure Coefficients - Aggregation L
Impact Table Without Import Leakages - Aggregation L
Impact Table With Import Leakages - Aggregation L
Valuation Conversion Coefficients - Aggregation L

## INTRODUCTION

This Volume and Volume 2 (The Input-Output Structure of the Canadian Economy, 1961 - Volume 2, D.B.S. cat. 非15-502) contain preliminary estimates of Input-Output Accounts for Canada for the year 1961 and some analytical tables based on these Accounts. They are the first in a series of publications reporting on this work. The data are preliminary because some of the estimates have not been reconciled with the revised estimates of the Income and Expenditure Accounts which are being prepared.

In addition to revisions of the preliminary Input-Output estimates, subsequent publications will present detailed information on the structure of final expenditure and a number of supplementary analytical models.

The content of this Volume is as follows: the present chapter provides a description of the basic structure of the 1961 Input-Output Accounts, /1/ outlines the relationship of these Accounts to the System of National Accounts, and gives a brief introduction to their uses in models of the economy; Chapter 2 presents a description of the fully detailed conceptual framework for the 1961 Input-Output Accounts (the content of Chapter 2 is concerned with the complete set of 1961 Tables, and not only with the data in Volumes 1 and 2 which are incomplete in final demand detail); Chapter 3 gives a non-mathematical description of the use of this information for analysis; Chapter 4 contains a description of the tables published in this Volume and in Volume 2; Chapter 5 discusses the sector, comodity and

[^0]industry classification systems for the 1961 Input-Output Tables (including those for tables appearing in Volume 2) and some supplementary definitions of industries and comodities. Appendix $A$ is an appendix to Chapter 3 which contains a mathematical discussion of Input-0utput models; Appendix $B$ contains the lists of industries and commodities of the 1961 Input-Output Tables.

The tables published in Volume 1 relate to two aggregations of the detailed system, one for 16 industries and 40 commodities, and the second for 65 industries and 65 commodities; Volume 2 is, in effect, a continuation of Volume 1; it contains the tables relating to a third aggregation (110 industries and 197 commodities).

### 1.1 The Input-Output Accounting Framework and Its Relationship to the System of National Accounts

Input-Output Tables form part of a broader System of National Accounts which includes (in addition to Input-Output Tables) the Income and Expenditure Accounts, the Indexes of Real Domestic Product by Industry, Productivity Studies, the Financial Flow Accounts, the Balance of International Payments and, potentially, balance sheets showing the assets and liabilities of the economy. The System of National Accounts was originally developed to satisfy the need for consistent and comprehensive measures of economic activity. As new demands for data for economic analysis have grown over the years, the conceptual framework has been extended and refined; at the same time flows of data have been established to fill in the System through the exploitation of existing sources of information, the development of new sources, and the design of new estimating techniques.

The best known Accounts of the System are the Income and Expenditure Accounts which were designed, in part, to provide current and comprehensive,
though relatively aggregative measures of the output of the economy in two ways: (1) as the values of the "final" expenditures on goods and services by the various sectors of the economy, less total imports of goods and services; (ii) as the incomes accruing to (or the costs of) primary factors of production - labour and capital -engaged in the production of goods and services, plus certain non-factor costs. As is explained below, the Income and Expenditure Accounts are closely related to the Input-Output Accounts.

Another part of the System related to the Input-Output Accounts is the Indexes of Real Domestic Product by Industry,/1/ which provide current measures of the contribution of each industry to total output in "constant dollars" (see below).

A description of the fully detailed conceptual framework for the 1961 Input-Output Accounts appears in Chapter 2. In what follows, a highly simplified numerical example of the Input-Output accounting framework is presented (see Diagram 1) and the relationship with the Income and Expenditure Accounts and with the Indexes of Real Domestic Product by Industry is described.

The 1961 Input-Output Tables for Canada contain two sets of interrelated accounts. The first details the supply of and demand for individual commodities (goods and non-factor services). The second contains the commodity outputs of industries and the complete costs of production of industries (including profits).

The presentation of accounts does not follow customary accounting practice. Individual accounts for each industry and each commodity, with debits on the left and credits on the right, are replaced by a tabular arrangement in which a single entry appears in two accounts at the same time as a debit in the column and a credit in the row.

A major feature of the 1961 Input-Output Accounts is that the inputs and outputs of industries are presented in separate tables; both inputs and outputs are classified by commodity. Commodities are clearly distinguished from industries, the number of commodities exceeding the number of industries/2/
/1/ See D.B.S. cat.\#61-506 [1968].
/2/ This is one of the main differences between the 1961 and 1949 Tables.

$$
\underline{D} \underline{I} \underline{A} \underline{G} \underline{R} \underline{M} \quad \underline{1}
$$

Hypothetical Example of a Simplified Set of Input-Output Accounts
(for an economy in which there are three industries which produce five commodittes)

|  |  | Commodities |  |  |  |  | Industries |  |  | Final |  | Demands |  | 氙 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | 2 | 3 | 4 | 5 | A | B | C | P | G | CF | X |  |
| Commodities | 1 |  |  |  |  |  | 3 | 3 | 1 | 3 | 1 |  | 7 | 18 |
|  | 2 |  |  |  |  |  | 7 | 4 | 2 | 10 | 2 | 5 | 11 | 41 |
|  | 3 |  |  |  |  |  | 2 | 2 | 1 | 5 |  | 4 |  | 14 |
|  | 4 |  |  |  |  |  | 8 | 10 | 4 | 10 | 3 |  |  | 35 |
|  | 5 |  |  |  |  |  | 3 | 3 | 1 | 10 | 1 | 2 | 3 | 23 |
| Industries | A | 15 | 22 | 8 | 1 |  |  |  |  |  |  |  |  | 46 |
|  | B |  | 1 | 4 | 30 |  |  |  |  |  |  |  |  | 35 |
|  | C |  |  | 2 | 3 | 22 |  |  |  |  |  |  |  | 27 |
| Imports |  | 3 | 18 |  | 1 | 1 |  |  |  |  |  |  |  | 23 |
| Indirect Taxes |  |  |  |  |  |  | 3 | 2 | 1 | 9 | 2 | 2 |  | 19 |
| Wages \& Salaries |  |  |  |  |  |  | 14 | 8 | 12 |  | 13 |  |  | 47 |
| Surplus |  |  |  | 1 |  |  | 6 | 3 | 5 |  |  |  |  | 14 |
| TOTAL |  | 18 | 41 | 14 | 35 | 23 | 46 | 35 | 27 | 47 | 22 | 13 | 21 |  |

## Final Demand Categories

P - Personal Expenditure on Consumer Goods and Services
G - Government Expenditure on Goods and Services
CF - Business Gross Fixed Capital Formation
X - Exports of Goods and Services
Note: This example abstracts from the following details which are introduced in Chapter 2:

- Changes in inventories
- Net income of unincorporated business
- Valuation adjustments
- Supplementary labour income; military pay and allowances
- Production by final demand sectors
- Import duties; subsidies
- The distinction between competing and non-competing imports

In the commodity accounts (columns and rows 1 - 5), the supply / // for a commodity, shown in its column, is subdivided into the production by each domestic industry and the amount imported. The demand for a commodity, shown in its row, is subdivided into the consumption by each domestic industry which uses it as an intermediate input and the demands of final consumers - persons, governments, industries (on captial account) and nonresidents (exports).

The industry accounts are shown in rows and columns $A, B$ and $C$. The total gross output of an industry, classified by commodity, is shown in the industry's row. The inputs of an industry are shown in the industry's column; these are subdivided into intermediate and primary inputs. In this example, intermediate inputs consist of current account inputs of commodities consumed in the process of production; primary inputs consists of indirect taxes, wages and salaries and "surplus" which is defined as the sum of the "costs" of, or incomes accruing to, captial employed in production in the form of profits and other investment income, plus the cost of the consumption of the stock of fixed capital employed, that is, depreciation.

Entries which occur at the intersections of the commodity and industry rows and columns are shared by the commodity accounts and the industry accounts. The basic accounting indentities of the system are as follows:

For each commodity: total supply $=$ total demand
For each industry: total output $=$ total inputs (intermediate plus primary inputs)

The latter indentity holds because the balancing item - profit - is included in primary inputs.

[^1]The measures of production of the Income and Expenditure Accounts, and their main components, can be calculated from the Input-Output Accounts by aggregating certain detailed parts of the latter. On the expenditure side, the relevant measure is Gross Domestic Expenditure at Market Prices ( $\mathrm{GDE}_{\mathrm{m}}$ )./1/ The measure is "gross" because the cost of fixed capital consumed during the year has not been deducted. It is however, a "net" output measure, and therefore avoids duplication, to the extent that intermediate goods and services used by industries in the production of other goods and services are excluded. For example, the value of flour used by the baking industry to produce the bread which is purchased by persons is counted only once -as part of the value of the bread.

In the Income and Expenditure Accounts, $\mathrm{GDE}_{\mathrm{m}}$ is estimated directly as the sum of final expenditures at market prices by persons, governments, industries (on capital account) and non-residents (exports), less total purchases of goods and services from non-residents (imports). In Diagram 1 these expenditure totals appear as the sums of the entries in the columns of the Input-Output Accounts which refer to final demand categories, and the sum of entries in the import row:

Personal Expenditure on Consumer Goods and Services .......... 47
Government Expenditure on Goods and Services ................... 22
Business Gross Fixed Capital Formation ........................... 13
Exports of Goods and Services ........................................ 21
Deduct: Imports of Goods and Services .............................23
Gross Domestic Expenditure at Market Prices ..................... 80
/1/ The Input-Output Accounts are on a "domestic" basis; they are concerned with the costs of production of, and the expenditure on the output of, producing units in the domestic economy, regardless of the residence of the primary factors of production used by those producing units. The main tables of the Income and Expenditure Accounts are on a "national" basis -see Tables 1 and 2 of D.B.S. cat. 非13-502 [1962] and of D.B.S. cat. \#13-201 [annual]. The former publication contains the concepts, sources and methods of the currently published Income and Expenditure Accounts. Table 4 in each of these publications shows the relationship between Gross National Product and Gross Domestic Product. Aside from the "residual error of estimate" in the Income and Expenditure Accounts (there is no residual error in the 1961 Input-Output Tables), one must add incomes received from non-residents and subtract incomes paid to nonresidents in order to move from the measure of Gross Domestic Product to that of Gross National Product.

For the economy as a whole, the comparable measure of production on the income side of the Income and Expenditure Accounts is Gross Domestic Product at Market Prices ( $\mathrm{GDP}_{\mathrm{m}}$ ). As calculated from Diagram $1, \mathrm{GDP}_{\mathrm{m}}$ is equal to the row sums for wages and salaries, surplus, and indirect taxes:

Wages and Salaries ..... 47
Surplus ..... 14
Sub-total: Gross Domestic Product at Factor Cost ..... (61)
Indirect Taxes ..... 19
Gross Domestic Product at Market Prices ..... 80Again, the measure of $\mathrm{GDP}_{\mathrm{m}}$ avoids duplication by excluding the intermediateinputs of industries in the form of current account goods and services usedin production; this is appropriate because, for each industry, these inputsrepresent the accumulated values of gross domestic product originating indomestic industries at earlier stages of production, plus the value offoreign commodities (imports) used at earlier stages of production ordirectly imported by that industry.

The necessary identity of $G D E_{\mathrm{m}}$ and $G D P_{\mathrm{m}}$ is readily apparent from the following:
Total outputs of
all industries $=\quad$ total commodity outputs of all industries
$=\quad$ total commodity supply - total commodity imports
= (a) total final demands - total imports + total intermediate demands

Total outputs of
all industries $=\quad$ total inputs of all industries
$=(b)$ total primary inputs + total intermediate inputs
Since $(a)=(b)$ and since total intermediate demands = total intermediate inputs, subtaction of the duplication in output represented by the total of intermediate entries from both (a) and (b) gives:

Total Final Demands - Total Imports = Total Primary Inputs
The above equations do not provide for primary inputs related to final demand categories. Since these are, at the same time, both primary inputs and final demands, the identity of $G D E_{m}$ and $G D P_{m}$ is maintained when they are added in.

The most frequently used measure of output originating by industry is Gross Domestic Product at Factor Cost $\left(\mathrm{GDP}_{\mathrm{f}}\right)$, which excludes indirect taxes but includes capital consumption allowances. There is no unique way of
distributing indirect taxes by industry (this applies particularly to taxes on commodities). The industrial distribution of indirect taxes shown in any set of Input-Output Tables is dependent on the conventions chosen for the "routing" and valuation of commodities in those Tables (see Chapter 2). Hence it is not possible to make a meaningful distribution by industry of Gross Domestic Product at Market Prices. If estimates of capital consumption by industry were available, it would be possible to calculate Net Domestic Product at Factor Cost by industry, i.e, the cost of (or the incomes accruing to) the primary factors of production of each industry.

In principle, Input-Output Tables can also be related to the "constant dollar" Expenditure Accounts, and to the Indexes of Real Domestic Product by Industry. Here, the objective is to try to remove the influence of price changes in measuring and comparing levels of output over time. If a series of Input-Output Tables for different years were avallable, together with detailed information on commodity prices, then the values in the commodity accounts of the Tables could be "deflated", that is, expressed in the prices which obtained in the year chosen as the base period. Constant dollar expenditures would be represented by the sums of the constant dollar final expenditure categories less constant dollar imports of the deflated Input-Output Tables.

There is no meaningful way to deflate every category of income directly. However, the constant dollar gross domestic product of the economy classified by industry could be estimated by subtracting, for each industry, its constant dollar intermediate inputs and indirect taxes from its constant dollar total output. The series of these values over time, expressed in index number form, would be equivalent to the Indexes of Real Domestic Product by Industry, that is, to indexes of constant dollar Gross Domestic Product at Factor Cost by industry./1/

[^2]
### 1.2 Analytical Uses of Input-Output Tables

As a description of the production, expenditure and international trade of the economy, Input-Output Tables are useful to business, academic and government analysts because they provide the only comprehensive and detailed presentation of the origin and disposition of individual commodity groups and of the cost structures of individual industries. They are also used as the basis for models of the operation of the economy. The accounting relationships embodied in Input-Output Tables describe the structure of demand and of productive activity in a particular year. It has been found that many of these relationships have considerable stability even when the conditions under which they were first observed change.

The construction of economic models based on the information contained in Input-Output Tables rests on the observation that the process of production, in modern technological societies, is roundabout. To produce an automobile, for example, requires the efforts not only of those who are in the automobile industry, but also of those who are concerned with the production of steel, aluminum, rubber, textiles and the myriad of other materials and services which are embodied in automobiles. In turn the production of steel, aluminum, rubber, etc. is only possible if yet other materials and services have been produced and are available. Thus the production of automobiles, and indeed of any other product, implicates a long chain of production which links many of the human, material and technological resources of the economy.

Now if the human, material and service inputs into automobiles are stable in relation to the output of automobiles, and $i f$, in turn, the requirements for producing steel, aluminum, rubber, etc., are stable, and so forth, then through mathematical models based on Input-Output Tables it is possible to estimate the impact of the demand for automobiles not only on the production of the automobile industry but also on the production of all the other industries which are involved, however indirectly, in the production of automobiles; similar estimates can be made for any other commodity. Input-Output models thus make it possible to study technological interdependence and to trace the propagation of demand through the economic system. Moreover, these models can be formulated so that the incomes and revenues generated by
industrial activity in turn determine the level and composition of a large proportion of final demand. In this way, Input-Output models can be made to simulate the circular flow of economic activity.

Of course, Input-Output models present a simplified account of economic interdependence. Since their inception they have undergone many changes designed to make them more realistic, but it is inevitable that they will continue to be very simple constructs compared to the complexity of economic systems. In this they are not unique; all models of economic behaviour represent a simplification of reality.

Because Input-Output models present economic relations in a highly disaggregated form, they lend themselves to analyses which are not possible with aggregative models, particularly where the interdependence of sectors of the economy is being studied. They have been used throughout the world for a variety of analytical purposes by governments, businesses and universities.

## THE DETAILED ACCOUNTING FRAMEWORK

Diagram 2 contains a schematic presentation of the detailed accounting framework for the 1961 Input-Output Tables. There are many ways of presenting the Input-Output Accounts in tabular format. The one shown here is not necessarily the most compact,/l/ but is consistent with the recommended international practice established by the United Nations Statistical Commission in its revision of the System of National Accounts./2/

The diagram depicts a matrix which has been partitioned into eightyeight submatrices, forty-one of which can, in principle, contain accounting entries in the 1961 framework. The diagram does not illustrate the relative sizes of the submatrices; some are very large, while others involve only one row or one column.

The entries in these submatrices represent, for the most part, transactions among industries, persons, governments and non-residents. These transactions are classified according to categories of transactors, according to the objects being exchanged (which in this system are mainly commodities) and according to the purposes for which one of the transactors (the buyer) enters into transaction. Since any transaction involves two transactors and can be classified by object and by the purpose of one of the transactors, a simultaneous classification of transations according to all these criteria would require an enormous diagram. Moreover the information required for such a classification would not be available. Diagram 2 therefore consolidates some of the classifications of transactions. These consolidations are not

[^3]12/ See UNITED NATIONS [1968].

$$
\underline{D} \underline{I} \underline{A} \underline{G} \underline{R} \underline{A} \underline{M} \quad \underline{2}
$$

Schematic Accounting Framework of the Detailed 1961 Input-Output Tables

uniform; in different parts of the accounts different consolidations are used, depending on the availability of information and on the form in which the data are most useful for analytical purposes. For example, Personal Expenditure on Consumer Goods and Services is classified by one of the categories of transactors (the buyer -persons), by object (by commodity) and by the purpose of the buyer (e.g., for Education). However, the transactions shown in this final demand vector are not detailed according to the various suppliers, i.e., domestic producing industries and imports.

### 2.1 Commodities and Industries

In full worksheet detail, there are 644 commodities and 187 industries (see Chapter 5 for classification systems). Two types of commodities are distinguished -"competitive" and "non-competitive". The latter consist of (six) selected categories of imported commodities for which there is no counterpart in domestic production. The balance are called "competitive", that is, they represent classes of goods and services for which there is production by domestic industries.

The distinction between competing and non-competing imports is necessarily arbitrary. It depends, in part, on the degree of detail of the commodity classification. For example, imports of machinery have a domestic counterpart but there are categories of imported machinery for which there is no domestic counterpart. Furthermore, the competitiveness of an import depends on whether the domestic economy has the means to produce a counterpart, the price at which a counterpart could be produced, and the availability of close substitutes in domestic production. Such concepts are most difficult to quantify. Consequently, various conventions have been proposed for making a distinction between competing and non-competing imports. One set of conventions is that employed in the "class or kind" rules used in determining Canadian customs import duties.

Such detailed conventions could not be applied in estimating competing versus non-competing imports for the 1961 Input-Output Tables. The basic import data for 1961 were tabulated according to an obsolete commodity classification (revised in 1963) which did not provide sufficient comparability in detail with domestic production data to allow fine distinctions between competing and noncompeting imports. As a result, only selected imports such as tropical fruit, raw cotton, raw natural rubber, green coffee beans, etc. were treated as noncompeting imports. There is one advantage to this approach - the list is likely to remain stable over an extended period.

It would be desirable for analytical purposes to classify data on competing imports by purchaser and purpose as well as by commodity, that is, to split each entry in the submatrices showing the demands for competitive commodities into domestically produced and imported components. Unfortunately, the records of firms and other purchasers generally do not contain information on the origin (domestic or foreign) of a purchased commodity. This leaves the possibility of making inferences about the origin of purchases on the basis of such attributes as the unit values of imported versus domestic commodities. Apart from the inherent uncertainty of such inferences and the absence of quantity information for many commodities, the obsoleteness of the 1961 import classification ruled out this approach; it was difficult enough to classify imports according to the same commodity classification as that used for domestic products.

An industry is a collection of individual producing units which are grouped together on the basis of some common characteristic -for example: the basic material used (Cement Products Industry); the purpose of the end product (Household Furniture Industry); the production process employed (Metal Stamping, Pressing and Coating Industry).

In the case of a firm or enterprise which carries on a variety of activities, there is a problem of dividing the entity into a number of homogeneous units suitable for statistical analysis. To attempt to define each separate production process or activity as the basic unit means, in most cases, adopting a unit which is smaller than that used by firms or enterprises for their accounting records of outputs and related inputs.

The unit used is the establishment, the smallest unit for which such accounting records are available. Typically, the establishment is the factory, mine, store, service outlet, etc. Because of conceptual and data problems, certain industries have not been defined as collections of establishments; these exceptions are discussed in Chapter 5.

The D.B.S. Standard Industrial Classification /1/ is a system of classification for establishments in both the business and non-commercial sectors. The term "industry" is employed in this Input-Output publication in a special sense; unless otherwise qualified, the term refers to the business sector only./2/

If an establishment produces two products, for example trucks and agricultural implements, its industrial classification depends upon which of the two products represents the larger share of its gross value of production. If trucks represent the larger share, then the whole establishment is classified to the Motor Vehicles Industry.

Each industry usually produces several characteristic or "principal" products; in many instances they also produce "secondary" commodities (commodities principal to other industries, such as agricultural implements in the above example). Some of the secondary products may be services as well as goods.

The concept of the principal products of industries provides the basis for the link between the Input-Output Industry Classification and Commodity Classification systems. The last three digits in the code numbers for competitive commodities present a numerically sequential listing for those commodities. For a particular commodity, this part of the code number is preceded by the code number of the industry which is the principal producer of the commodity (in practice, the industry which produced the largest value of the commodity in 1961)./3/
/1/ D.B.S. cat非12-501 [1960].
/2/ This definition of industries is consistent with the definition adopted in the revised United Nations System of National Accounts; see UNITED NATIONS [1968].
/3/ See lists of 187 Input-Output Industries and of 644 Input-Output Commodities (worksheet level of detail) in Appendix B.

In analysing economic interdependence, it is necessary to maintain the link between the original sources of supply of a good (that is, domestic industries or imports) and the intermediate or final consumer of the good. To this end, the wholesale and retail trade industries are short-circuited; they are not shown as consumers of the goods which they purchase nor as producers of those which they sell. Rather, their trading outputs are defined as the gross margins on goods traded, with the inputs defined accordingly.

It is customary to express the measures of inputs and outputs of commodities in Input-Output Tables on the same basis of valuation. Further, in some applications of Input-Output analysis the transaction values of commodities are interpreted as proxies for the corresponding quantities. Thus it is desirable that a dollar's worth of a commodity represent approximately the same quantity of that commodity in every part of the Tables. For these reasons (and for certain others) the basis of valuation used is "producers' values" (or values at "producers' prices"); the term is defined below.

### 2.2 The Commodity Accounts

Submatrix 13 contains that part of the supply of each competitive commodity that was produced by each industry at "producers' values" /l/ defined to be the selling values at the output boundaries of the producing establishments, excluding any sales or excise taxes levied after the final stage of processing. An entry in this submatrix can be interpreted as the sum of the values of all the transactions of the industry in question with the industries, persons, governments and non-residents who purchased a
/1/ For domestically produced commodities, the term "producers' values" used here corresponds to "approximate basic values" in UNITED NATIONS [1968], except in the treatment of subsidies on commodities (see Section 2.3).
particular commodity for whatever purpose. Because in Input-Output analysis it is desirable to relate inputs to production rather than to shipments, the entries show values of production. Hence, for the above-mentioned interpretation of an entry in this submatrix to be valid, the definition of transactions must be stretched to include the accumulation or decumulation of inventories by the producing industry. If there is an accumulation of such inventories, the consolidated transactions can be considered to include a sale to the industry's inventory account. Conversely, if there is a decumulation of inventories, the transactions will include a negative item representing a purchase from the industry's inventory account.

Submatrices 14 and 15 are row vectors showing, respectively, imports of competing commodities and imports of non-competing commodities. If domestically produced inputs and outputs must be valued uniformly, then so must imports. There is no precise value for imports which corresponds conceptually to the producers' values used for domestic products. International Input-Output practice suggests that imports should be valued at the border of the importing country inclusive of import duties (i.e., including all charges involved in conveying the imports to the border plus import duties). These are the measurable import values which, under a system of relatively competitive pricing, are likely to correspond to domestic producers' values. Hence, the producers' values of imports are defined to be imports c.i.f. /1/ the Canadian border plus import duties./2/

The demands for commodities by the various classes of transactors are shown in submatrices 1 through 6 for competitive commodities (whether domestically produced or imported) and in submatrices 7 through 12 for non-competitive commodities.

Submatrices 1 and 7 contain the demands, on current account, of each industry for each commodity for the purpose of using the commodity as an intermediate input in the production of other commodities. It is the
/1/ Cost, insurance, freight.
12/ To express imports c.i.f. the Canadian border, it was necessary to estimate the transportation and insurance charges involved in conveying each commodity to the Canadian border because Canada's trade statistics ordinarily value imports f.o.b. the last point of shipment in the country of export.
industry's consumption or use of the commodity (rather than the purchases) which must be related to the industry's production in Input-Output analysis. Hence, these entries refer to the amounts used. Any entry can be interpreted as the value of transactions of one industry for intermediate purposes with all of its suppliers of a particular commodity. Again, it is necessary to define these transactions to include the appropriate inventory changes - this time of the purchasing industry.

The total cost of a commodity laid down at the using establishment (the purchasers'value) will often include for-hire transportation charges, trade margins (if the good passes through one or more trading establishments) and commodity taxes such as sales taxes or excise duties, these "margins" being in addition to the producers' value. For many analytical purposes it has been found that a uniform valuation at the producers' level is preferable because the amounts of transportation charges, trade margins and commodity taxes included in the purchasers' values of commodities vary considerably from one purchaser to another. Thus, the entries in submatrices 1 and 7 do not contain the actual transaction values of industries with their suppliers (since these may include all or part of the margins). Rather, they represent estimates of the relevant producers' values of the transactions. Any for-hire transportation charges and any trade margins are treated as separate commodity inputs. Any comodity taxes levied after the producers' value stage and included in the purchasers' value are shown as inputs in the row entitled "Commodity Taxes" /1/ (submatrix 16). Therefore, the total costs of each industry include the full value of all transactions with suppliers for intermediate purposes.

The methods of valuation and treatment of transport, trade, and commodity tax margins for commodities purchased by final demand categories of transactors are identical to those employed for the intermediate demands of industries.

[^4]Submatrices 2 and 8 show the portion of personal expenditure on consumer goods and services which represent purchases of commodities. Persons are defined to include not only individuals and families, but also certain private non-profit organizations such as labour unions, religious organizations, private clubs, etc. The submatrices for personal expenditure on consumer goods and services are sub-divided into column vectors $/ 1 /$ according to the purpose or function of the consumer purchases, that is, food, transportation, medical care, etc. These categories will, so far as possible, be relatable to the categories of consumer expenditure in the current revision of the Income and Expenditure Accounts and to Family Expenditure Survey categories./2/

Submatrices 3 and 9 contain the expenditure of governments on commodi-
ties. These expenditures are further classified according to two levels of government -federal, and provincial plus local -and according to whether the expenditures are current or capital. Further, the accounting units in government are grouped by their main purposes, such as education, health, welfare, defence, administration, etc. Any revenues of governments from their production and sale of commodities (that is, of goods and services typically produced by industries) are treated as negative entries in the appropriate column of government expenditure./3/

Submatrices 4 and 10 contain the expenditures of industries on new fixed capital goods, that is, on new plant and equipment. It would be most useful to classify the value of each commodity in this vector according to the industry which makes the purchase, in the same way that the current account inputs of industries are classified. This information is basic to

[^5]the formulation of "dynamic" Input-Output models which trace the impact of current period levels of demand, output and capacity on the capital formation required for future production. Unfortunately, the information collected on capital expenditures of industries does not permit detailed identification of the specific goods purchased by each industry. However, it may prove feasible to make such estimates at the "Major Group" level of the D.B.S. Standard Industrial Classification (this would involve, for example, estimates for 20 industrial groups in Manufacturing). The Input-Output Staff will prepare these estimates if investigation proves that such a profect is feasible.

Submatrices 5 and 11 contain the values of the physical changes in inventories of commodities held by industries. An entry refers to the total change in the inventories of a commodity wherever held in the business sector --whether in the industries which produce the commodity, those which purchase it for intermediate use, or those which acquire it for trading purposes. An accumulation of inventories is considered to be an increase in demand for commodities even though the accumulation may have been involuntary. A decumulation of inventories is a source of supply of the commodities; these entries thus represent elements of both the demand and supply of commodities.

The valuation of inventory change presents special problems because firms employ a variety of inventory accounting methods; the book values of inventories of firms may show changes in the values of inventories which do not reflect actual changes in the quantities; this is particularly true when the relevant commodity prices have changed during the accounting period. Various adjustments are made in order to estimate the "value of the physical change" in inventories based on average current period producers'prices./1/

Submatrices 6 and 12 show exports classified by commodity. Consideration will be given to a breakdown of exports by country or area when additional

[^6]final demand detail is published. As with other elements of commodity demand, the valuation of exports is at producers'prices./1/

### 2.3 The Industry Accounts and Other Entries

Submatrix 13 (the production of competitive commodities by industries) and submatrices 1 and 7 (the intermediate use of commodities by industries) have already been dealt with in describing the Commodity Accounts.

Submatrix 16 contains, for each industry, the sum of commodity taxes levied beyond the producers' prices valuation level on the commodities used by the industry for intermediate purposes; submatrices 17 through 21 contain comparable commodity tax totals on the purchases of commodities by final demand categories. The principal taxes represented here are the federal manufacturers' sales tax, excise taxes and excise duties, the provincial motor fuel taxes, and provincial and municipal sales taxes. Customs import duties, being part of the producers' values of imports, are not included.

Submatrix 22 contains government subsidies received by industries on current account operations. The entries are negative because the subsidies are revenues to industries.

This accounting procedure for subsidies differs from that recommended in UNITED NATIONS [1968], where subsidies on commodities are treated as the converse of commodity taxes. In the United Nations treatment, a commodity subsidy is shown as a negative input into the industry using the commodity as an intermediate input, or as a negative expenditure of the final demand

[^7]transactor who purchases the commodity; appropriate adjustments must be made to the producers' values of comodity and industry outputs and of (intermediate) commodity inputs and/or final expenditures on commodities.

It is much easier to make the estimates using the accounting concepts for subsidies as in the Canadian preliminary 1961 Tables. From the viewpoint of Input-Output analysis, certain aspects of each of the two methods are desirable. In revising the 1961 Tables, estimates on the basis of the United Nations concepts will be considered --it may, in fact, be useful to have the data available on both bases. Thus provision has been made in Diagram 2 for entries in submatrices $23-27$, as well as in submatrix 22.

Submatrix 28 contains, for each industry, non-comodity indirect taxes including property taxes plus certain government fees and licensing charges which are treated as indirect taxes in the Income and Expenditure Accounts. Submatrices 29,30 and 31 contain comparable data for persons, governments and non-residents.

Submatrix 32 contains payments by industries for certain "services" produced in the government sector which are considered to be unique to government (and therefore not part of "commodities"); submatrices 33, 34 and 35 contain the comparable payments by persons, governments and nonresidents. In addition to certain registration fees, licenses and similar charges not treated as indirect taxes in the Income and Expenditure Accounts, such payments as harbour dues, airport landing fees, and tuition charges by educational institutions in the government sector are also included. The payments by the industry or final demand category which uses the "service" are represented by positive entries in the relevant column; the "Services of Governments" row shows the offsetting receipts by governments as negative entries in the appropriate government columns where these "service" revenues are produced.

Submatrix 36 contains wages, salaries and supplementary labour income of employees in industries. Submatrix 37 contains the comparable labour incomes of employees of private non-profit institutions, plus those of domestic servants. Submatrix 38 contains wages, salaries and supplementary labour income of public servants and other civilian employees in the government sector
plus military pay and allowances. These are entered in the current account columns of the relevant government purpose categories.

The entries in submatrix 39 show the net incomes of unincorporated businesses which include the returns to the labour contribution of proprietors, for whom no separate "wage and salary" estimates are made.

The entries in submatrix 40 represent a residual "surplus" calculated, for each industry, as the difference between the value of the industry's total output and its costs as shown in submatrices $1,7,16,22,28,32,36$, and 39. In principle, these entries contain the following: for incorporated business, profits on productive activity (before corporation income taxes and before payments of interest and dividends), and capital consumption allowances; for unincorporated business, capital consumption allowances, the non-farm inventory valuation adjustment, and certain other valuation adjustments.

The concepts of net income of non-farm unincorporated business and corporate profits in the Income and Expenditure Accounts, and of net income of non-farm unincorporated business and profit on production activity for corporations in the Input-Output Accounts, are based on industry output levels that are calculated using "book value" inventory changes. As described earlier in this chapter, it is the values of the physical change in inventories that are employed on the expenditure side, resulting in a revision of the value of the output for each non-farm industry. This "inventory valuation adjustment" must therefore be entered on the input side of each non-farm industry to maintain the equality of total output and total input.

Since the non-farm inventory valuation adjustment is not made to net income of unincorporated business, it becomes part of surplus. For all industries including Agriculture, the miscellaneous valuation adjustments are similarly included in surplus.

The relationship of net income of unincorporated business and surplus in the Input-Output Accounts to the components of the income side of the Income and Expenditure Accounts, as they relate to the business sector, is:

| INCOME AND EXPENDITURE ACCOUNTS (domestic basis) |
| :--- |
| Accrued Net Income of Farm Operators from Farm <br> Production INPUT-OUTPUT <br> ACCOUNTS <br> Net Income of Non-Farm Unincorporated Business  |
| Net Income of <br> Unincorporated <br> Business |
| Capital Consumption Allowance and Miscellaneous <br> Valuation Adjustments <br> (Unincorporated and Corporate Business) |
| Inventory Valuation Adjustment <br> (Non-Farm Unincorporated and Corporate Business) |
| Corporation Profits Before Taxes <br> (Before Payments of Dividends) |
| Interest and Other Investment Income <br> (Including Interest Paid to Non-Residents and <br> After Deduction of Interest Received From <br> Non-Residents) |

The concept of the value of production in the Income and Expenditure Accounts and in the Input-Output Accounts excludes revenues from financial operations such as interest and dividends received. Hence, in the InputOutput Accounts, net income of unincorporated business and profit on productive activity for corporations exclude these revenues.

The portion of surplus which has been defined as profit on productive activity for corporations thus includes the miscellaneous valuation adjustments from item \#3, plus items 非4, 5 and 6 of the Income and Expenditure Accounts (as they relate to corporations). It should be noted that item \#5 in the Income and Expenditure Accounts --corporation profits before taxes --excludes interest paid but includes interest received. The relevant offsets appear in item 非6 which includes "net interest paid", that is, interest paid less interest received./1/

Submatrix 41 shows capital consumption allowances on fixed capital in the government sector.

For a particular industry, the sum of wages, salaries and supplementary labour income, net income of unincorporated business, and surplus represents the Gross Domestic Product at Factor Cost originating in the industry. It is important to recall that "industries" in these Input-Output Accounts cover only establishments classified to the business sector. Gross Domestic Product at Factor Cost originating in activities in the sectors for persons and government appear in submatrices 37 and 38 (wages, salaries and supplementary labour income and military pay and allowance) and in submatrix 41 (consumption of fixed capital in the government sector).

As has already been mentioned, data for the full system of Diagram 2 are not being published in this document. One reason --a temporary one -is that some of the tabulations of final demand categories are not yet complete and will be published later. In addition, many entries in the full framework are confidential and cannot be published in the detail in which they were calculated. Chapter 4 describes the tables contained in this Volume and in Volume 2.

[^8]
## ANALYTICAL USES

The 1961 Input-0utput Tables have features which are not characteristic of conventional Input-Output Tables; both the inputs and outputs of industries are classified in two ways (according to the producing or using industry and according to the commodity produced or used) and the number of commodities is greater than the number of industries.

A dual classification of inputs and outputs according to industry and commodity is recommended by the United Nations Statistical Commission and is beginning to gain acceptance. However in the commodity and industry classifications of the United Nations /l/ each commodity is defined to be the characteristic product (or principal product) of one industry and each industry has only one characteristic product. When the characteristic product of one industry is produced by another industry it is referred to as a secondary product of the latter industry.

In the Canadian system the one-to-one correspondence between industries and their characteristic products is abandoned; the characteristic product of each industry is often subdivided into several comnodities. Hence the tables containing the outputs and intermediate inputs of industries are rectangular rather than square. $/ 2 /$ This rectangular arrangement of InputOutput Tables does not prevent the formulation of standard Input-Output models. However with rectangular tables it also becomes possible to develop other kinds of Input-Output models.
/1/ See UNITED NATIONS [1968].
/2/ The compilation of rectangular Input-Output Tables was first implemented for the Province of Quebec under the direction of Professor Matuszewski of Laval University and for the Atlantic Provinces under the direction of Professor K. Levitt of McGill University.

This Chapter contains a non-mathematical description of the uses of the models published in this Volume and in Volume 2. A mathematical description of these models is provided in Appendix A which also contains descriptions of a number of additional models.

The exposition in this Chapter makes use of the simplified hypothetical example contained in Diagram 1. Certain features of Input-Output Tables which were neglected in Diagram 1 and which were introduced in Chapter 2 are now added to the example. Thus Diagram 3 is identical with Diagram 1 except in the following respects:

1) competing imports are shown as a negative demand for commodities rather than as a positive supply of commodities. Consequently, the total for a commodity row and column represents the domestic production rather than the total supply of the commodity;
ii) capital formation has been subdivided into fixed capital formation and the value of the physical change in inventories;
iii) exports have been subdivided into exports of domestic commodities (referred to as net exports) and exports of imported commodities (referred to as re-exports);
iv) indirect taxes have been subdivided into taxes levied on transactions in commodities (referred to as commodity taxes) and other indirect taxes such as property taxes (referred to as indirect taxes).

### 3.1 The Basic Model

Input-Output models are developed from the information contained in Diagram 3. In their simplest expression / / /hey take the form of tables

[^9]$$
\underline{D} \underline{I} \underline{G} \underline{R} \underline{A} \underline{M}
$$

Expanded Hypothetical Example of a Simplified Set of Input-Output Accounts
(for an economy in which there are three industries which produce five commodities)
(billions of dollars)

|  |  | Commodities |  |  |  |  | Industries |  |  | Final Demand \& Imports |  |  |  |  |  |  | HHEH |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 2 | 3 | 4 | 5 | A | B | C | P | G | F. C. F |  <br> inv | NX | RX | -M |  |
| Commodities | 1 |  |  |  |  |  | 3 | 3 | 1 | 3 | 1 |  |  | 7 |  | -3 | 15 |
|  | 2 |  |  |  |  |  | 7 | 4 | 2 | 10 | 2 | 4 | 1 | 10 | 1 | -18 | 23 |
|  | 3 |  |  |  |  |  | 2 | 2 | 1 | 5 |  | 4 |  |  |  |  | 14 |
|  | 4 |  |  |  |  |  | 8 | 10 | 4 | 10 | 3 |  |  |  |  | -1 | 34 |
|  | 5 |  |  |  |  |  | 3 | 3 | 1 | 10 | 1 | 2 |  | 3 |  | $-1$ | 22 |
| Industries | A | 15 | 22 | 8 | 1 |  |  |  |  |  |  |  |  |  |  |  | 46 |
|  | B |  | 1 | 4 | 30 |  |  |  |  |  |  |  |  |  |  |  | 35 |
|  | C |  |  | 2 | 3 | 22 |  |  |  |  |  |  |  |  |  |  | 27 |
| Commodity Taxes |  |  |  |  |  |  | 1 | 1 |  | 9 | 2 | 2 |  |  |  |  | 15 |
| Indirect Taxes |  |  |  |  |  |  | 2 | 1 | 1 |  |  |  |  |  |  |  | 4 |
| Wages \& Salaries |  |  |  |  |  |  | 14 | 8 | 12 |  | 13 |  |  |  |  |  | 47 |
| Surplus |  |  |  |  |  |  | 6 | 3 | 5 |  |  |  |  |  |  |  | 14 |
| TOTAL |  | 15 | 23 | 14 | 34 | 22 | 46 | 35 | 27 | 47 | 22 | 12 | 1 | 20 | 1 | -23 |  |

## Final Demand Categories and Imports

P- Personal Expenditure on Consumer Goods and Services
G- Government Expenditures on Goods and Services
F.C.F. - Business Gross Fixed Capital Formation
$\triangle$ inv. - Value of the Physical Change in Inventories
NX- Net Exports of Goods and Services
RX- Re-Exports of Goods and Services
M- Imports of Goods and Services
Note:
This example abstracts from the following details which were introduced in Chapter 2:

- Net income of unincorporated business
- Valuation adjustments
- Supplementary labour income; military pay and allowances
- Production of final demand sectors
- Import duties; subsidies
- The distinction between competing and non-competing imports
which summarize the impact of deliveries to final demand on levels of productive activity. In general, these impact tables are based on two assumptions. The first is that each commodity is produced by industries in fixed proportions./1/ These fixed proportions are derived from Diagram 3 by dividing, for each commodity the value of the production of the commodity by each industry by the the value of the total output of the commodity. The tables of values of outputs and the corresponding proportions (which are referred to as the market shares of industries in the production of each commodity) are shown below as Tables $A A$ and $A B$ :

TABLE AA
Values of Outputs
Matrix V /2/
(billions of dollars)

|  |  | 1 | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\stackrel{\sim}{0}$ | A. | 15 | 22 | 8 | 1 |  |
| $\stackrel{5}{3}$ | B |  | 1 | 4 | 30 |  |
| H | C |  |  | 2 | 3 | 22 |

Vector $q^{\prime}$

| Comm, <br> Outputs | 15 | 23 | 14 | 34 | 22 |
| :--- | :--- | :--- | :--- | :--- | :--- |

/1/ To simplify the exposition it is assumed for the moment that there are no imports. The treatment of imports is discussed at some length below.

12/ For the convenience of mathematically inclined readers the matrix notation developed in Appendix $A$ is included with each table. Non-mathematical readers can disregard these symbols.

The second assumption on which impact tables are based is that in order to produce each dollar of output an industry requires certain fixed values of commodity inputs. These are referred to as the intermediate input coefficients of the industry which are derived from Diagram 3 by dividing, for each industry, the value of each commodity input of the industry by the total value of output of the industry. It should be noted that according to this assumption the inputs of an industry are proportional to the output of the industry irrespective of the level of that output and of its conmodity composition. Thus whether Industry A is producing a dollar of Commodity 1 or of Commodity 3 it will use the same inputs to do so. This assumption is usually defended by suggesting that technology is organized on an industrial basis so that roughly the same structure of inputs is appropriate for the various commodities produced by an industry. For this reason the assumption is referred to as the industry technology assumption. The values of industry inputs and the corresponding input coefficients are shown in Tables $A C$ and $A D$ :

TABLE AC
Industry Inputs
Matrix U
(billions of dollars)

|  |  | I n | us | 1 es |
| :---: | :---: | :---: | :---: | :---: |
|  |  | A | B | C |
| Commodities | 1 | 3 | 3 | 1 |
|  | 2 | 7 | 4 | 2 |
|  | 3 | 2 | 2 | 1 |
|  | 4 | 8 | 10 | 4 |
|  | 5 | 3 | 3 | 1 |
| Vector $\mathrm{g}^{\prime}$ |  |  |  |  |
| Industry Outputs |  | 46 | 35 | 27 |

TABLE AD
Input Coefficients
Matrix B

|  |  | Industries |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | A | B | C |
| fommodities | 1 | . 0652 | . 0857 | -0370 |
|  | 2 | . 1522 | . 1143 | . 0741 |
|  | 3 | . 0435 | . 0571 | . 0370 |
|  | 4 | . 1739 | . 2857 | . 1481 |
|  | 5 | . 0652 | . 0857 | . 0370 |

Impact tables are derived from Tables $A B$ and $A D$ by tracing the impact on all commodity and industry outputs of a hypothetical dollar of final expenditure on a particular commodity. To show how these impact tables are calculated it will be assumed that there is a dollar of final expenditure on Commodity 3.

According to the market share assumption (Table AB) \$.5714 of this dollar of final expenditure will be produced by Industry A, $\$ .2857$ by Industry B, and $\$ .1429$ by Industry C.

According to the industry technology assumption (Table AD) this production by Industries $A, B$ and $C$ will require intermediate inputs which are calculated by multiplying all the intermediate input coefficients of Industry A by $\$ .5714$, those of Industry B by $\$ .2857$ and those of Industry C by $\$ .1429$. The result is shown in Table AE:

TABLE AE
Inputs (dollars)

|  |  | A | B | C | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Commodities | 1 | . 0373 | . 0245 | . 0053 | . 0671 |
|  | 2 | . 0870 | . 0327 | . 0106 | . 1303 |
|  | 3 | . 0249 | . 0163 | . 0053 | . 0465 |
|  | 4 | . 0994 | . 0817 | . 0212 | . 2023 |
|  | 5 | . 0373 | . 0245 | . 0053 | . 0671 |

The totals (for all industries) of each commodity input constitute requirements for commodities which in turn require additional production by industries. Once again the distribution of this production among industries is determined through the market share assumption (Table AB) by multiplying the market share coefficients of each industry in the production of Commodity 1 by $\$ .0671$, in the production of Commodity 2 by $\$ .1303$, in the production of Commodity 3 by $\$ .0465$, in the production of Commodity 4 by $\$ .2023$ and in the production of Commodity 5 by $\$ .0671$. The result is shown in Table AF.

TABLE AF

```
Outputs (dollars)
```

|  |  | C o m m o d i t i e s |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | 2 | 3 | 4 | 5 |
| Industries | A | . 0671 | .1247 | . 0266 | .0059 | 0 |
|  | B | 0 | . 0057 | . 0133 | .1785 | 0 |
|  | C | 0 | 0 | . 0066 | 0178 | 0671 |


| $\begin{aligned} & \text { H } \\ & \stackrel{\rightharpoonup}{G} \\ & \text { E } \\ & \text { B } \end{aligned}$ |
| :---: |
| . 2243 |
| .1975 |
| . 0915 |

This further production required in each industry (\$. 2243 in Industry A, $\$ .1975$ in Industry B and $\$ .0915$ in Industry C) requires additional commodity inputs which, in turn, require further production, and so forth. The first five rounds of this process are summarized in Table AG:

$$
\frac{\text { TABLE AG }}{(\text { dollars })}
$$

|  | Round 1 | Round 2 | Round 3 | Round 4 | Round 5 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Commodity Outputs | 1 | 0 | .0671 | .0349 | .0183 | .0094 |
|  | 2 | 0 | .1303 | .0635 | .0329 | .0171 |
|  | 3 | 1.0000 | .0465 | .0245 | .0128 | .0069 |
|  | 4 | 0 | .2023 | .1090 | .0570 | .0297 |
|  | 5 | 0 | .0671 | .0349 | .0183 | .0094 |
|  | Tota1 | 1.0000 | .5133 | .2668 | .1393 | .0725 |


| Industry Outputs | A | .5714 | .2243 | .1128 | .0588 | .0306 |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- |
|  | .2857 | .1975 | .1060 | .0554 | .0289 |  |
|  | C | .1429 | .0915 | .0480 | .0251 | .0130 |
|  | Total | 1.0000 | .5133 | .2668 | .1393 | .0725 |

The notable thing about Table AG is that through successive rounds the derived demands for each commodity and the required outputs of each industry diminish steadily and, in this example, rapidly. This is no accident; it follows from the fact that the sum of the intermediate commodity inputs required by any industry to produce a given output must be smaller than that output because intermediate commodity inputs are only part of the total inputs of the industry which also include, in this example, commodity taxes, indirect taxes, wages and salaries and surplus./1/ Thus in each round the intermediate comodity inputs required by industries are smaller than the industry outputs of the previous round.

The fact that successive rounds of impacts diminish steadily implies that after a certain number of rounds the additional impact of further rounds on commodity and industry outputs becomes negligible. It is therefore possible to calculate (for all practical purposes) the total direct and indirect effects on industry and commodity outputs of a dollar of final demand for a particular commodity. /2/ Table AH shows the total direct and indirect effects on commodity and industry outputs of a dollar of final expenditure on Commodity 3 and compares these effects with the effects of five rounds.

[^10]
## TABLE AH



| Industry Outputs | A | 1.0303 | .9979 | .0324 |
| :---: | :---: | :---: | :---: | :---: |
|  | B | .7044 | .6735 | .0309 |
|  | C | .3347 | .3205 | .0142 |
|  | Total | 2.0694 | 1.9919 | .0775 |

The process of tracing these total direct and indirect effects can be repeated for Commodities $1,2,4$ and 5 . The results are the impact Tables AI and AJ:

TABLE AI

Direct and Indirect Effects on Commodity Outputs of a Dollar of Final Demand for Each Commodity

$$
\text { Matrix }[I+B(I-D B)]^{-1} D=[I-B D]^{-1}
$$

|  |  | 1 | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Commodity Outputs | 1 | 1.1356 | . 1373 | . 1399 | . 1668 | . 0852 |
|  | 2 | . 2812 | 1.2810 | . 2621 | . 2650 | . 1602 |
|  | 3 | . 0927 | . 0939 | 1.0975 | . 1151 | . 0707 |
|  | 4 | . 3927 | . 4004 | . 4300 | 1.5409 | . 2995 |
|  | 5 | . 1356 | . 1373 | . 1399 | . 1668 | 1.0852 |
|  | Total | 2.0378 | 2.0499 | 2.0694 | 2.2546 | 1.7008 |

TABLE AJ
Direct and Indirect Effects on Industry Outputs
of a Dollar of Final Demand for Each Commodity Matrix $[I-D B]-1{ }_{D}$


The usefulness of impact tables is that the effect on commodity and industry outputs of any final expenditure on a given commodity will be proportional to the effect of a dollar of final expenditure on that commodity. This is due to the proportionality assumptions embodied in the input and market share coefficients on which the impact tables are based. Thus to assess the total direct and indirect effects of $\$ 200$ million of final demand for Commodity 3 it is sufficient to multiply the figures in the third column of Tables AI and AJ by $\$ 200$ million:

TABLE AK
Direct and Indirect Effects on Commodity and Industry Outputs of $\$ 200$ Million of Final Demand for Commodity 3
(millions of dollars)

| Commodity Outputs | 1 | 27.98 |
| :---: | :---: | :---: |
|  | 52.42 |  |
|  | 3 | 219.50 |
|  | 4 | 86.00 |
| 5 | 27.98 |  |
|  | Total | 413.88 |


| Industry Outputs | A | 206.06 |
| :---: | :---: | :---: |
|  | B | 140.88 |
|  | C | 66.94 |
|  | Total | 413.88 |

The reader will observe that the $\$ 200$ million of final demand for Commodity 3 is shown as requiring $\$ 219.50$ million of production of that commodity. This is because Commodity 3 is also used by every industry as an intermediate input. In fact to deliver $\$ 200$ million of Commodity 3 to final users, the systemas a whole is shown as producing $\$ 413.88$ million, $\$ 213.88$ million of which is used up as intermediate input.

The impact of $\$ 200$ million of final demand for Commodity 3 on domestic industry and commodity outputs given in Table AK is overstated. Impact Tables AI and AJ can be interpreted as measuring the direct and indirect effects of a dollar of final demand for each commodity on the assumption that there are no import leakages, i.e. that all demand, whether intermediate or final, is supplied through domestic production only. The use of these Tables to calculate Table AK therefore implies that no part of the $\$ 200$ million of final demand is routed to imports and that no part of the further required intermediate demand in each round of impact is routed to imports. The overstatement is all the more serious because in each round, the imports which would normally act as a leakage, are counted as domestic goods and therefore require further domestic production.

In order to adjust the results obtained in Table AK to reflect the impact on domestic industry and commodity outputs of the $\$ 200$ million of final demand, it is necessary: (i) to estimate independently the total imports for each commodity required directly and indirectly by $\$ 200$ million of final demand; (ii) to estimate through Tables AI and AJ the impact on commodity and industry outputs of the fact that these imports were counted as demand for domestic goods in the original calculation; (iii) to subtract the resulting industry and commodity outputs from the industry and commodity outputs of the original calculation. Of course, it is unnecessary to first calculate Table AK and then adjust for import leakages; both calculations can be performed at the same time. For example,if the imports directly and indirectly required by $\$ 200$ million of final demand for Commodity 3 are estimated independently as $\$ 7.63$ million for Commodity $1, \$ 29.71$ million for Commodity $2, \$ 32.93$ million for Commodity $3, \$ 2.46$ million for Commodity 4 and $\$ 1.40$ million for Commodity 5, these figures can be combined with the original $\$ 200$ million of final demand for Commodity 3 to give the following composite final demand less imports:

## (millions of dollars)

| Commodity | 1 | -7.63 |
| :---: | ---: | ---: |
|  | -29.71 |  |
|  | +167.07 |  |
|  | -2.46 |  |
| 5 | -1.40 |  |

The impact on commodity and industry outputs of this final demand less imports can then be calculated by multiplying the figures in the first column of Tables AI and AJ by $-\$ 7.63$ million, those in the second column by $-\$ 29.71$ million, those in the third column by $+\$ 167.07$ million, and so forth. The result is shown in Table AL:

## TABLE AL

Direct and Indirect Effects on Commodity and Industry Outputs of $\$ 200$ Million of Final Demand for Commodity 3, Including the Effects of Import Leakages
(millions of dollars)

|  |  |  | C O | m o | 1 t |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | 2 | 3 | 4 | 5 |
| Commodity Outputs | 1 | -8.66 | -4.08 | +23.38 | -. 41 | -. 12 |
|  | 2 | -2.15 | $-38.06$ | +43.79 | - 65 | -. 22 |
|  | 3 | -. 70 | -2.79 | $+183.36$ | -. 28 | -. 10 |
|  | 4 | -3.00 | -11.90 | +71.84 | -3.72 | -. 42 |
|  | 15 | -1.03 | -4.08 | +23.37 | -. 41 | -1.52 |


| TOTAL |
| ---: |
| 10.11 |
| 2.71 |
| 179.49 |
| 52.73 |
| 16.33 |


| A | -11.21 | -42.42 | +172.14 | -1.31 | -.40 |
| :--- | :--- | :--- | ---: | ---: | ---: |
| B | -2.94 | -12.95 | +117.68 | -3.45 | -.41 |
| C | -1.40 | -5.53 | +55.92 | -.78 | -1.57 |


| 116.80 |
| ---: |
| 97.93 |
| 46.64 |

When account is taken of import leakages, the production of Commodity 3 drops to $\$ 179.49$ million from $\$ 219.50$ and the total production of all commodities (which is equal to the production of all industries) drops from $\$ 413.88$ million to $\$ 261.37$ million.

It should be noted that the impact on commodity outputs of a given final demand can be estimated through Tables AJ and AD, i.e. without using Table AI. Taking the previous example of $\$ 200$ million of final demand for Commodity 3 less the total imports required by this demand, the impact on industry outputs has been calculated from Table AJ as $\$ 116.80$ million for Industry A, $\$ 97.93$ million for Industry B and $\$ 46.64$ million for Industry C (see Table AL). The intermediate commodity inputs required for this production (including inputs of both domestic and foreign goods and services) can be calculated from Table $A D$ by multiplying the figures in each column of Table AD by the appropriate industry output:

TABLE AM
Intermediate Inputs
(millions of dollars)

|  |  | A | B | C |
| :---: | :---: | :---: | :---: | :---: |
| Commodities | 1 | 7.62 | 8.39 | 1.73 |
|  | 2 | 17.78 | 11.19 | 3.46 |
|  | 3 | 5.08 | 5.59 | 1.73 |
|  | 4 | 20.31 | 27.98 | 6.91 |
|  | 5 | 7.62 | 8.39 | 1.73 |


| TOTAL |
| :---: |
| 17.74 |
| 32.43 |
| 12.40 |
| 55.20 |
| 17.74 |

If to this intermediate demand is added the final demand of $\$ 200$ million for Commodity 3, less the estimates of total imports directly and indirectly required for the $\$ 200$ million of final demand, the results (apart from rounding errors) are the commodity outputs calculated through Table AI and shown in Table AL:

TABLE AN

|  |  | Intermediate Inputs | Final <br> Demand | Less <br> Total <br> Imports | Commodity Outputs |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Commodity | 1 | 17.74 |  | -7.63 | 10.11 |
|  | 2 | 32.43 |  | -29.71 | 2.72 |
|  | 3 | 12.40 | 200.00 | -32.93 | 179.47 |
|  | 4 | 55.20 |  | -2.46 | 52.74 |
|  | 5 | 17.74 |  | -1.40 | 16.34 |

Since commodity outputs can be calculated from Tables AJ and AD, it is unnecessary to calculate impact Table AI; consequently no tables corre= sponding to Table AI are published in this Volume or in Volume 2.

The problem with calculating the impact of a given final demand for a particular commodity is that independent estimates must be made of the imports directly and indirectly required by this demand. There is really no satisfactory way of making such estimates./1/ On the other hand, it is possible to estimate imports for a year other than the base-year (the year for which the Input-Output Tables have been compiled).
/1/ However, see Section 3.4 for impact tables designed to make allowance for import leakages in each successive round. They can be used to estimate direct and indirect effects on imports.

In general, complete estimates of final demand are made in connection with applications of Input-Output analysis for projection purposes. For such applications total imports classified by commodity can be projected on the basis of past trends. The projected levels of final demand less the projected levels of imports are then used to derive projections of industry and commodity outputs. Sometimes the estimates of final demand and imports are made not for a future year but for some year (other than the base-year) for which data has been collected on categories of final demand In that case estimates of imports can usually be found in statistical publications on imports.

The following example illustrates the use of impact tables in deriving projections of industry and commodity outputs from complete projections of final demand and imports. Table AO contains projections of final demand and imports which might be derived from analysis of trends or through more elaborate econometric techniques. The important point is that impact tables play no part in establishing these projections which are therefore exogenous to the Input-Output analysis.

TABLE AO
Projections of Final Demand Including Imports
(billions of dollars)

|  |  | P | G | F.C.F. | A inv. | NX | RX | Sub- <br> Total | $-M$ | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Commodity | 1 | 4 | 2 |  |  | 8 |  | 14 | -4 | 10 |
|  | 2 | 13 | 4 | 6 | 0 | 14 | 1 | 38 | -20 | 18 |
|  | 3 | 7 |  | 5 |  |  |  | 12 |  | 12 |
|  | 4 | 15 | 5 |  |  |  |  | 20 | -1 | 19 |
|  | 5 | 14 | 1 | 3 |  | 4 |  | 22 | -1 | 21 |

Given the projections of total final demand less total imports shown in the last column of Table $A O$, the resulting projections of industry outputs are calculated through Table AJ by multiplying the figures in the first column of Table AJ by $\$ 10$ billion, those in the second column by $\$ 18$ billion, and so forth. The sum of these figures for each industry constitute the projections of industry outputs.
(billions of dollars)

| Industry <br> Output Projections | A | 68.89 |
| :---: | :---: | :---: |
|  | B | 52.95 |
|  | C | 38,82 |

Projections of commodity outputs can then be obtained by calculating through Table $A D$ the intermediate input requirements implicit in the industry output projections, and adding the projections of final demand less imports of Table AO:

TABLE AP
Projections of Commodity Outputs
(billions of dollars)

|  | Projections of <br> Intermediate <br> Demand | Projections of <br> Final Demand <br> Less Imports | Projections of <br> Commodity <br> Outputs |
| :---: | :---: | :---: | :---: |
| Commodity | 1 | 10.47 | 10.00 |
|  | 2 | 19.41 | 18.00 |
|  | 3 | 7.46 | 12.00 |
|  | 4 | 32.86 | 19.00 |

### 3.2 Patterns of Final Expenditure

The foregoing example (see Table AP) illustrates a case where the projections of final demand and imports are made at the same level of detail as the base-year estimates. In reality, projections are initially likely to be less detailed than base-year data. Frequently, projections are made only for the total of particular categories of final expenditure, such as personal expenditure on consumer goods and services, government expenditures, and gross fixed capital formation./1/ In order to derive projections of final demand it is necessary to determine their commodity composition. In the absence of better information, it can be assumed that the commodity composition of a total projection for a category of final expenditure will be proportional to its base-year commodity composition.

The pattern of the base-year commodity composition of categories of final expenditure can be represented for each category of final expenditure by coefficients calculated by dividing the expenditure on each commodity by the total expenditure. The commodity composition of a projection for a category of final expenditure can then be obtained by multiplying the baseyear coefficients by the total value of the projection.

Table AQ contains patterns of final expenditure for selected categories of final expenditure obtained from the data in Diagram 3:

[^11]
## TABLE AQ

Final Expenditures on Commodities by Category of Expenditure as a Proportion of Total Final Expenditures by Category of Expenditure

Matrix E

|  | P | G | F.C.F. |
| :---: | :---: | :---: | :---: |
| Commodities | 1 | .0638 | .0455 |
|  | 2 | .2128 | .0909 |
|  | .1064 |  | .3333 |
|  | 4 | .2128 | .1364 |
| 5 | .2128 | .0455 | .1667 |
|  | TOTAL | .8086 | .3183 |

Because expenditures on commodities are not the only elements of the total expenditures of these categories of final expenditure, the sums of the coefficients in each column of Table $A Q$ are less than one.

The use of these patterns of final expenditure for projection is illustrated in the following example. Table AR contains aggregate profections of personal expenditure on consumer goods and services, government expenditures, and gross fixed capital formation, and detailed projections of changes in inventories, exports, and imports: /1/

TABLE AR
Aggregate Projections of Personal Expenditure, Government Expenditure and Gross Fixed Capital Formation and Detailed Projections of Inventory Change, Net Exports, Re-Exports and Imports
(billions of dollars)

|  |  | P | G | F.C.F. | $\Delta$ inv. | NX | RX | -M |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Commodity | 1 |  |  |  | 0 | 8 |  | -4 |
|  | 2 |  |  |  | 0 | 14 | 1. | -20 |
|  | 3 |  |  |  | 0 |  |  |  |
|  | 4 |  |  |  | 0 |  |  | -1 |
|  | 5 |  |  |  | 0 | 4 |  | -1 |


| Total Final | 67 | 37 | 16 |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

T1/ The projections of exports, imports and inventory change are the same projections shown in Table AO.

Given the aggregate projections for selected categories of final expenditures of Table AR, Table AQ can be used to derive projections of final expenditures on commodities. The result is shown in Table AS:

TABLE AS
Detailed Projections of Final Demand and Imports
(billions of dollars)

|  | P | G | F.C.F. | S inv. | NX | RX | Sub- <br> Total | -M | TOTAL |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Commodity | 1 | 4.27 | L. 68 |  |  | 8.00 |  | 13.95 | -4.00 | 2.95 |
|  | 2 | 14.26 | 3.36 | 5.33 |  | 14.00 | 1.00 | 37.95 | -20.00 | 17.95 |
|  | 3 | 7.13 |  | 5.33 |  |  |  | 12.46 |  | 12.46 |
|  | 4 | 14.26 | 5.05 |  |  |  |  | 19.31 | -1.00 | 18.31 |
|  | 5 | 14.26 | 1.68 | 2.67 |  | 4.00 |  | 22.61 | -1.00 | 21.61 |

The figures in the last column of Table AS can be used in conjunction with Table AJ to derive projections of industry outputs. These industry outputs can be applied to Table $A D$ to derive projections of intermediate inputs, which can then be added to the figures in the last column of Table AS to derive projections of commodity outputs; this procedure has already been described in detall in the previous illustration. The result is:

| (billions of dollars) |  |  |  |
| :--- | :---: | :---: | :---: |
|  | I ndustry |  |  |
|  | A | B | C |
| Projection of <br> Industry Outputs | 69.03 | 52.44 | 39.42 |


|  | C o m m o d i t |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 |
| Brojection of | 20.40 | 37.37 | 19.91 | 51.13 | 32.06 |

The same projections of total consumer expenditure, government expenditure and fixed capital formation are involved in this case as in Table AP but this commodity composition of the projections is different. This creates the difference between the projected outputs in the two cases.

The foregoing illustrations describe the use of Input-Output Tables to derive a single projection of industry and commodity outputs from a single projection of final expenditures. However, Input-Output Tables are of ten used to test and compare the implications of a variety of projections of final expenditures. This is especially the case in tests of the implications of alternative projections of government policy on economic activity but is also true for projections of consumer expenditure and capital formation, which are likely to be affected by anticipated government policy.

Using any given pattern of expenditures on commodities for each category of final expenditure, it is possible to derive an impact table which sumarizes the direct and indirect effects on industry outputs of a dollar spent on each category of final expenditure. With such impact tables, alternative projections can be tested without going through all the calculations described in the foregoing illustrations.

One such impact table can be calculated by applying the base-year expenditure patterns of Table $A Q$ to Table $A J$ to derive, for each category of final expenditure, the impact on industry outputs. The result is shown in Table AT:

TABLE AT

Direct and Indirect Effects on Industry Outputs of a Dollar Spent on Selected Categories of Final Expenditure

|  |  | P | G | F.C.F. |
| :---: | :---: | :---: | :---: | :---: |
| Industry Outputs | A | .6815 | .2822 | .8673 |
|  | B | .5531 | .2619 | .4286 |
|  | C | .3935 | .1198 | .3606 |

Table AT is an impact table similar to Table AJ, except that it contains the effects on industry outputs of a dollar of final demand spent not on a single commodity but on several commodities according to the baseyear pattern of each category of final expenditure./1/

The following example illustrates the use of Table AT to derive the impact on industry outputs of alternative projections of final expenditures. As in the previous examples, imports, exports and inventory change are projected in detail and at the levels shown in Table AR. For total consumer expenditures, total government expenditures and total fixed capital formation the following alternative projections are assumed:

TABLE AU
Alternative Projections of Final Expenditures
(billions of dollars)

|  | P | G | F.C.F. |
| :---: | :---: | :---: | :---: |
| Projection 1 | 67 | 37 | 16 |
| Projection 2 | 69 | 34 | 17 |
| Projection 3 | 63 | 39 | 18 |

Projection 1 is identical with the projection shown in Table AR. Projections 2 and 3 involve redistributions of projected expenditures among the three categories of final expenditure.

The first step is to calculate separately the impact on industry outputs of those elements which are common to the three projections, i.e., exports plus inventory change less imports./2/ From Table AR these are:
/1/ The reader is reminded that part of the dollar is spent on primary input.
/2/ It is asuumed, for the purposes of this example, that the projection of imports is not affected by the alternative projections of the three selected categories of final expenditure.

TABLE AV
Projections of Inventory Change, Exports and Imports
(billions of dollars)

|  | inv. | NX | RX | $-M$ | TOTAL |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Commodity | 1 |  | 8 |  | -4 | 4 |
|  | 2 | 0 | 14 | 1 | -20 | -5 |
|  | 3 |  |  |  |  |  |
|  |  |  |  | -1 | -1 |  |
|  | 5 |  | 4 |  | -1 | 3 |

The figures in the last column of this table are then applied to Table AJ to calculate the impact on industry outputs:

TABLE AX
Impact on Industry Outputs of the Projections of Inventory Change, Exports and

Imports
(billions of dollars)


Table AT can then be used to calculate the impact on industry outputs of the alternative projections of consumer and government expenditures and fixed capital formation. To calculate, for example, the impact on industry outputs of $\$ 67$ billion of consumer expenditures, it is sufficient to multiply the figures in the first column of Table AT by $\$ 67$ biliion. The impact of any of the other expenditures shown in Table AU can similarly be calculated by multiplying the figures in the appropriate column of Table AT by the expenditure. The results are summarized in Table AY:

TABLE AY
Impact on Industry Outputs of the Alternative Projections of Final Expenditures of Table AU
(billions of dollars)

|  |  | Industry Outputs |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Projection 1 | Projection 2 | Projection 3 |  |  |
| Industry | A | 69.98 | 71.35 | 69.55 |  |
|  | B | 53.61 | 54.35 | 52.77 |  |
|  | C | 36.56 | 37.44 | 36.05 |  |

The impact on industry outputs of each complete projection can now be calculated by adding the figures of Table AX to the figures in each column of Table AY. The result as shown in Table AZ:

TABLE AZ
Impact on Industry Outputs of Three Alternative Projections of Final Demand Less Imports
(billions of dollars)

|  |  | Industry Outputs |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Projection 1 | Projection 2 | Projection 3 |  |
| Industry | A | 69.05 | 70.42 | 68.62 |  |
|  | B | 52.44 | 53.18 | 51.60 |  |
|  | C | 39.41 | 40.29 | 38.90 |  |

The impact on commodity outputs of these alternative projections of final expenditures can be calculated in the manner already described in previous illustrations.

The usefulness of impact tables such as Table AT increases with the level of disaggregation of the categories of final expenditure. For example, if instead of one column for government expenditures Diagram 3 had several columns showing the breakdown of government expenditures by level of government and by purpose (e.g. health, education, defence), it would be possible, in making projections, to calculate the impact on levels of economic activity of alternative government policies involving, for example, transfers of funds from expenditures on defence to expenditures on education. In a subsequent publication this type of breakdown of government expenditures as well as breakdowns of other categories of final expenditures will be provided. In that publication impact tables of the same form as Table AT will be published. In this Volume and in Volume 2 no impact tables similar to Table AT are published because the categories of final expenditure in the present preliminary tables are highly aggregated.

### 3.3 Primary Inputs

The direct and indirect effects on industry outputs of given final expenditures are often used to determine the primary inputs associated with these final expenditures. These calculations involve an extension of the industry technology assumption to each category of primary inputs. Thus on the basis of Diagram 3 it is assumed that the taxes, wages and salaries and surplus of each industry will be proportional to the total output of the industry. These proportionalities are expressed in the form of primary input coefficients which are calculated by dividing, for each industry, the value of each primary input by the total value of output. The result is shown in Table BA:

TABLE BA
Primary Input Coefficients of Industries

Matrix $Y$

|  | I r d u s t r y |  |  |
| :---: | :---: | :---: | :---: |
|  | A | B | C |
| Commodity taxes | . 0217 | . 0286 |  |
| Indirect taxes | . 0435 | .0286 | . 0370 |
| Wages and Salaries | . 3044 | .2286 | . 4445 |
| Surplus | . 1304 | . 0857 | . 1853 |

Tables AJ and BA can be used to calculate the direct and indirect effects on the primary inputs of industries of a hypothetical dollar of final demand for each commodity. Taking Commodity 1 as an example, from Table AJ it follows that a dollar of final demand for Commodity 1 will require $\$ 1.4690$ of output in Industry A, \$. 3853 in Industry B and $\$ .1835$ in Industry C. Each of these industry outputs will require primary inputs which can be determined from Table BA by multiplying the figures in the first column of the table by $\$ 1.4690$, the figures in the second column by $\$ .3853$ and those in the third column by $\$ .1835$. The result is shown in Table BB:

TABLE BB
Direct and Indirect Effects on the Primary Inputs of Industries of a Dollar of Final Demand for Commodity 1

|  | I $n$ d us t r y |  |  | TOTAL |
| :---: | :---: | :---: | :---: | :---: |
|  | A | B | C |  |
| Commodity taxes | . 0319 | . 0110 |  | . 0429 |
| Indirect taxes | . 0639 | . 0110 | . 0068 | . 0817 |
| Wages \& Salaries | .4471 | . 0881 | . 0816 | .6168 |
| Surplus | . 1916 | . 0330 | . 0340 | . 2586 |

Similar calculations can be made to determine the direct and indirect effects on primary iputs of a dollar of final demand for each of the other commodities. The results of these calculations are summarized in Table BC:

TABLE BC
Indirect Effects on the Primary Inputs of Industries of Dollar of Final Demand for Each Commodity

$$
\text { Matrix } Y[I-D B]^{-1} D
$$



Table $B C$ is an impact table similar to Table AJ except that it is the impact on the primary inputs of industries rather than the impact on industry outputs which is being measured.

The reader will note that the direct and indirect effects on the total primary inputs of industries of a dollar of final demand for any commodity are equal to one dollar. This is due to the fact that primary inputs are by definition equal to final expenditures less imports; since the imports associated with a dollar of final demand for each commodity were not subtracted from the dollar of final demand, a full dollar of primary inputs is generated. Thus Table BC involves an overestimate of the primary inputs of industries induced by a dollar of final demand comparable to the overestimate of industry outputs of Table AJ.

Like Table AJ, Table $B C$ can be used to derive projections -in this case the primary inputs of industries- from projections of final demand less imports. To illustrate this application, the projections of final demand less imports shown in Table AO of Section 3.1 are used in conjunction with Table BC to derive projections of the primary inputs of industries. The procedure involves multiplication of the figures in each column of Table $B C$ by the final demand less imports for the appropriate commodity, taken from the last column of Table AO:

## TABLE BD

Projections of the Primary Inputs of Industries Derived From the Projections of Final Demand Less Imports of Table AO
(billions of dollars)

|  | C 0 m m o d i t y |  |  |  |  | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 |  |
| Commodity taxes | .43 | 78 | . 51 | .98 | 31 | 3.01 |
| Indirect taxes | . 82 | 1.47 | 23 | 1.43 | 1.31 | 5.96 |
| Wages \&Salaries | 6.17 | 11.11 | 7.48 | 11.87 | 13.71 | 50.34 |
| Surplus | 2.59 | 4.64 | 3.08 | 4.73 | 5.68 | 20.72 |

The sum of the figures in the last column of Table BD is $\$ 80$ billion, equal to the sum of the figures in the last column of Table AO. Thus the equality between final demand less imports and primary inputs is observed in the projections.

The direct and indirect effects on the primary inputs of industries of the patterns of final expenditure shown in Table $A Q$ can also be calculated from Table $B C$. For example, the direct and indirect effects on the primary inputs of industries of a dollar of consumer expenditure can be calculated
by multiplying the figures in the first column of Table BC by $\$ .0638$, those in the second column by $\$ .2128$, and so forth. The sum of the five resulting columns gives the total direct and indirect effects on the primary inputs of industries of a dollar of consumer expenditure. This process can be repeated for the other three categories of final expenditure. The result is shown in Table BE:

TABLE BE
Direct and Indirect Effects on the Primary Inputs of Industries of a Dollar of Final Demand for Each Cattegory of Final Demand

Matrix $Y[I-D B]^{-1} D E$

|  | Final Expenditure Categories |  |  |
| :---: | :---: | :---: | :---: |
|  | P | G | F.C.F. |
| Commodity taxes | . 0306 | . 0136 | . 0311 |
| Indirect taxes | . 0600 | . 0242 | . 0633 |
| Wages \& Salaries | . 6088 | . 1990 | . 5223 |
| Surplus | . 2092 | . 0814 | . 2166 |
| Total Primary Inputs of Industries | . 8086 | . 3183 | . 8333 |

It can be seen from Table BE that the total direct and indirect effects on the primary inputs of industries of a dollar of final demand for each category of final expenditure are not equal to one dollar; they are equal to the amounts spent on commodities out of the dollar. Thus the totals shown in Tables $A Q$ and $B E$ are equal for each category of final expenditure. If to the direct and indirect effects on the primary inputs of industries are added the direct effects on the primary inputs of each category of final expenditure then the total for each category of final expenditure becomes one dollar.

The direct effects on the primary inputs of each category of final expenditure are calculated by dividing the figures in Diagram 3 showing the primary inputs associated with each category of final expenditure by the total for the category. These are shown in Table BF:

## TABLE BF

Primary Inputs per Dollar of Final Expenditure (for primary inputs associated with categories of final expenditure)

|  | Matrix $S_{f}\left(f^{\prime}\right)^{-1}$ |  |  |
| :--- | :---: | :---: | :---: |
|  | Final Expenditure Categories |  |  |
| Commodity taxes | P | G | F.C.F. |
| Indirect taxes | .1914 | .0909 | .1667 |
| Wages and Salaries |  |  |  |
| Surplus |  | .5908 |  |

The sum of the direct and indirect effects on the primary inputs of industries plus the direct effects on the primary inputs of each category of final expenditure of a dollar of final demand for each category of final expenditure (the sum of Tables BE and BF) is shown in Table BG:

## TABLE BG

Total Direct and Indirect Effects on Primary Inputs of a Dollar of Final Demand for Each Category of Final Expenditure

|  | Final Expenditure Categories |  |  |
| :---: | :---: | :---: | :---: |
|  | P | G | F.C.F. |
| Commedity taxes | .2220 | 1045 | 1978 |
| Indirect taxes | . 0600 | . 0242 | . 0633 |
| Wages and Salaries | . 5088 | . 7899 | . 5223 |
| Surplus | . 2092 | . 0814 | . 2166 |


| Total Primary Inputs | 1.0000 | 1.0000 | 1.0000 |
| :--- | :--- | :--- | :--- |

Table BG can be used to calculate the impact on primary inputs of alternative projections of final expenditures in the same way that Table AT was used to calculate the impact on industry outputs.

### 3.4 Imports

With all of the impact Tables described so far, it is necessary to subtract estimates of total imports by commodity from final expenditures in order to derive the impact of final expenditures on industry and commodity outputs and on primary inputs. It has already been pointed out in Section 3.1 that it is difficult to estimate the imports associated with some particular element of final expenditure. For this reason the use of these impact tables was illustrated in terms of complete projections of final expenditures and imports.

Many important uses of Input-Output Tables involve the simulation of the impact on commodity and industry outputs and on primary inputs of specific events or policies. This kind of analysis is not necessarily carried out in the context of projections but may have the purpose of evaluating the costs and benefits of alternative courses of action. Since it is not practical to estimate independently the total imports directly and indirectly required by each course of action, the alternative is to construct impact tables which automatically allow for import leakages out of both final and intermediate demand.

Ideally such tables would be based on the following information: the total value of each element of intermediate and final demand would be separated into demand for domestic and demand for foreign goods and it would be assumed that the foreign commodities represent a fixed proportion of the total. For example if in addition to the information that Industry $A$ of Diagram 3 absorbs $\$ 8$ biliion of Commodity 4 it were known that $\$ .8$ billion of this represents imports, then the ratio of $\$ .8$ biliion to $\$ 8$ bilifon could be assumed to represent the proportion that imports will always constitute
of Industry A's absorption of Commodity 4 . When it came to calculating the intermediate input requirements of Industry $A$ (Table $A D$ ) the intermediate input coefficient for Comodity 4 could be multiplied by $1-.1=.9$ to determine the requirement for inputs of Commodity 4 produced domestically per unit of output of Industry $A$. If comparable information on the import content of each element of demand, both final and intermediate, were available it would be possible to determine the domestic portion of any given final demand and to calculate new impact tables based on intermediate input coefficients which would represent the absorption of domestic commodities per unit of output of each industry. With such impact tables it would be unnecessary to estimate total imports in advance.

Unfortunately the import content of each element of demand is not known; only in the case of exports is such information available because export documents distinguish exports of domestic goods from export of foreign goods. In the absence of such information the import content of any intermediate or final element of demand is usually estimated with the aid of the assumption that, for each commodity, imports will constitute a stable proportion of total demand. This assumption implies that the import of any element of the demand for a commodity can be calculated by multiplying that element by the overall ratio of imports to total demand for the commodity. In this way the same proportion of foreign to domestic goods is routed to each element of the demand for a commodity. An exception to this rule is made for exports since specific information on the import content of exports, i.e. on re-exports, is available. Thus, for each commodity, two ratios representing import content are calculated, one for exports and one for all other demand. The first ratio is calculated by dividing, for each commodity, re-exports by exports. The second ratio is calculated by dividing imports less re-exports by total demand less exports. These calculations are shown in Table BH :

TABLE BH
Re-Export and Import Content Coefficients
Vectors $\mu_{1}$ and $\mu_{0}$

|  |  | $\begin{gathered} \text { Re- } \\ \text { ex- } \\ \text { ports } \end{gathered}$ | $\begin{gathered} \text { Ex- } \\ \text { ports } \end{gathered}$ | Re-export Content Coefficients $\mu_{1}$ | Imports less Re-exports | Total Demand less Exports | Import <br> Content Coefficients $\qquad$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Commodity | 1 |  | 7 | 0 | 3 | 11 | . 2727 |
|  | 2 | 1 | 11 | . 0909 | 17 | 30 | . 5667 |
|  | 3 |  |  | 0 |  | 14 | 0 |
|  | 4 |  |  | 0 | 1 | 35 | . 0286 |
|  | 5 |  | 3 | 0 | 1 | 20 | . 0500 |

These re-export and import content coefficients are then subtracted from one in order to calculate coefficients representing the domestic content of exports and of other demand for each commodity. The result is shown in Table BI:

## TABLE BI

Domestic Content Coefficients
Vectors $\left(i-\mu_{1}\right)$ and $\left(i-\mu_{\partial}\right)$

|  |  | Domestic Content <br> of Exports <br> coefficients | Domestic Content <br> of Other Demand <br> Coefficients |
| :---: | :---: | :---: | :---: |
| Commodity | 1 | 1.0000 | .7273 |
|  | .9091 | .4333 |  |
|  | 3 | 1.0000 | 1.0000 |
|  | 4 | 1.0000 | .9714 |
|  | 5 | 1.0000 | .9500 |

The coefficients in the second column of Table BI can now be used to calculate the domestic content of the intermediate input coefficients of industries. This is done by multiplying the figures in the first row of Table AD by . 7273, those in the second row by . 4333 and so forth. The result is shown in Table BJ:

TABLE BJ
Domestic Input Coefficients


Matrix $\left(I-\hat{\mu}_{0}\right) B$


In exactly the same way that Tables $A D$ and $A B$ were used to calculate impact Table $A J$, Tables $B J$ and $A B$ can be used to calculate impact Table BK:

TABLE BK

Direct and Indirect Effects on Domestic Industry Outputs of a Dollar of Final Demand for Each Commodity, Spent on Domestic Goods Only

$$
\text { Matrix }\left[I-D\left(I-\hat{\mu}_{0}\right) B\right]^{-1} D
$$



The difference between impact Tables $A J$ and $B K$ is that the former makes no allowance for import leakages whereas the latter allows for import leakages out of intermediate demand. However, Table BK is constructed as if the dollar of final demand for each commodity is spent on domestic commodities. It is also possible to calculate the impact of a dollar of final demand which is subject to a direct import leakage. The same assumptions involved in establishing import leakage out of intermediate demand are made here. However, two different impact tables are derived because a dollar of exports will have a different direct import content than a dollar of other final demand. Thus impact Table BL is derived from impact Table BK by multiplying the figures in each column of Table BK by the coefficient representing the domestic content of exports of the appropriate commodity while impact Table BM is derived from Table BK by multiplying the figures in each column by the coefficient representing the domestic content of other final demand, of the appropriate commodity:

## TABLE BL

Direct and Indirect Effects on Domestic Industry Outputs of a Dollar of Exports of Each Commodity


## TABLE BM

Direct and Indirect Effects on Domestic Industry Outputs of a Dollar of Final Demand, Other Than Exports, for Each Commodity

|  | Matrix $\left[I-D\left(I-\hat{\mu}_{0}\right) B\right]^{-1} D\left(I-\hat{\mu}_{0}\right)$ <br> C m m d i t y |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | 2 | 3 | 4 | 5 |
| Industry <br> Outputs | A | . 8945 | . 5149 | . 8023 | . 2829 | . 1406 |
|  | B | 2194 | 1525 | . 6228 | 1.2776 | .2281 |
|  |  | . 1049 | . 0636 | . 2964 | . 2693 | 1.0431 |
|  | Total | 1.2188 | . 7310 | 1.7215 | 1.8298 | 1.4118 |

Comparison of impact Tables BL and BM with impact Table AJ shows the extent to which import leakages diminish the domestic industrial activity required per dollar of final demand for each commodity. Table AJ shows the situation if no part of demand is routed to imports. Tables BL and BM allow for normal import leakages. The difference is most striking in the case of commodity 2 for a dollar of final demand other than exports. This difference is explained by the fact that in the example of Diagram 3, imports of Commodity 2 constitute the bulk of total imports and a substantial proportion of the supply of Commodity 2. Although the figures in the example are hypothetical and the effect of import leakages exaggerated, a parallel might be drawn with the Canadian economy where Comodity 2 might correspond to manufactured goods.

In order to save space, no impact Tables comparable to Tables BL and BM are published in this Volume or in Volume 2. As indicated above, these Tables can very easily be calculated from Table BA given re-export and import coefficients. In fact it is just as easy to use Table BK itself to calculate the impact on domestic industry outputs of any final demand, provided the domestic content of the final demand is first calculated with the aid of the coefficients of Table BI. Thus, to calculate the impact on domestic industry outputs of an increase of $\$ 100$ million in the exports of Commodity 2 and of an increase of $\$ 200$ million in government expenditures
on Commodity 1, the domestic content of these expenditures is first calculated as $\$ 145.46$ million for Commodity 1 and $\$ 90.91$ million for Commodity 2. These figures are then used to multiply the figures in the first and second columns of Table BK. The sum of the two resulting figures for each industry represent the expected increase in the output of each industry:

## TABLE BN

Impact on Industry Outputs of Increases of $\$ 100 \mathrm{Million}$ in the Exports of Commodity 2 and of $\$ 200$ Million in Government Expenditures on Commodity 1


The impact on commodity outputs of any final demand can also be calculated. The domestic content of the final demand for commodities is calculated as before with the aid of the coefficients of Table BI. The resulting industry outputs are also calculated as indicated above. These industry outputs are then used to calculate the domestic inputs of industries which constitute the domestic content of the intermediate demand for commodities. This calculation is performed by multiplying each column of Table BJ by the appropriate industry output. The sum of the domestic content of the final demand for commodities plus the domestic content of the intermediate demand for commodities is equal to the required commodity outputs.

Once again in order to save space no table comparable to Table BJ is published. However, the impact on commodity outputs of any final demand can be calculated using Table AD instead. The same steps are followed up
to the point where industry outputs have been calculated. These industry outputs are then used to calculate the total intermediate inputs of industries (both domestic and imported) through Table AD. The sums of these inputs for each commodity represent the intermediate demand for commodities. The domestic content of this intermediate demand is calculated with the aid of the coefficients in the second column of Table BI. The sum of the domestic content of the intermediate plus final demand for commodities equals commodity outputs. Using the previous example of an increase of $\$ 100$ million in the exports of Commodity 2 and of $\$ 200$ million in government expenditures on Commodity 1 - which have a domestic content of $\$ 90.91$ million and $\$ 145.46$ million respectively and which require $\$ 286.93$ million of output in Industry A, \$75.88 million in Industry B and \$34.33 million in Industry Cthe calculation of the impact on commodity outputs is shown in Table BO:

TABLE BO
Impact on Commodity Outputs of $\$ 200$ Million of Government Expenditures on Commodity 1 and $\$ 100$ Million of Exports on Commodity 2

|  |  | Intermediate Inputs (Table AD Multiplied by Industry Outputs) <br> Industry |  |  |  | ```Domestic Content Coefficients (Table BI)``` | Domestic <br> Content of <br> Intermediate | Domestic <br> Content of Final Demand | Commodity Outputs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | A | B | C | Total |  | Demand |  |  |
|  | 1 | 18.71 | 6.50 | 1.27 | 26.48 | . 7273 | 19.26 | 145,46 | 164.72 |
|  | 2 | 43.67 | 8.67 | 2.54 | 54.88 | . 4333 | 23.78 | 90.91 | 114.69 |
|  | 3 | 12.48 | 4.33 | 1.27 | 18.08 | 1.0000 | 18.08 |  | 18.08 |
|  | 4 | 49.90 | 21.68 | 5.08 | 76.66 | . 9714 | 74.47 |  | 74.47 |
|  | 5 | 18.71 | 6.50 | 1.27 | 26.48 | . 9500 | 25.16 |  | 25.16 |

The impact on imports of any final demand can also be calculated through the procedure outlined in Table BO if the import and re-export content coefficients for intermediate and final demand are substituted for the domestic content coefficients. Using the same example the import content of final demand is calculated by applying the import content coefficient for Commodity 1 to the $\$ 200$ million of final demand for Commodity 1 and the re-export content coefficient for Commodity 2 to the $\$ 100 \mathrm{million}$ of final demand for Commodity 2. The remaining calculations are shown in Table BP:

## TABLE BP

Impact on Imports of $\$ 200$ Million of Government Expenditures on Commodity 1 and $\$ 100$ Million of Exports of Cormodity 2

## (millions of dollars)

|  |  | Intermediate Inputs (Table AD Multiplied by Industry Outputs) Industry |  |  |  | Import <br> Content Coefficients (Table BH ) | Import <br> Content <br> of <br> Inter- <br> mediate <br> Demand | Import <br> Content <br> of <br> Final <br> Demand | Imports |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | A | B | C | Total |  |  |  |  |
| $\begin{aligned} & \stackrel{\rightharpoonup}{3} \\ & \ddot{0} \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ | 1 | 18.71 | 6.50 | 1.27 | 26.48 | 2727 | 7.22 | 54.54 | 61.76 |
|  | 2 | 43.67 | 8.67 | 2. 54 | 54,88 | . 5667 | 31.10 | 9.09 | 40.19 |
|  | 3 | 12.48 | 4.33 | 1.27 | 18.08 | 0 |  |  | 0 |
|  | 4 | 49.90 | 21.68 | 5.08 | 76.66 | . 0286 | 2.19 |  | 2.19 |
|  | 5 | 18.71 | 6.50 | 1.27 | 26.48 | . 0500 | 1.32 |  | 1.32 |

If, for certain kinds of analysis, it is necessary to calculate repeatedly the impact of different final demands on commodity outputs or on imports, it may be advantageous to construct impact tables which summarize the various calculations outlined in Tables BO and BP. This can be done by successively calculating the impact of one dollar of final demand for each commodity on commodity outputs and on imports, in the same way that the impacts of $\$ 200$ million for Commodity 1 and $\$ 100$ million for Commodity 2 were calculated in the example. The impact on commodity outputs or imports of any given final demand for a commodity will be a multiple of the impact of one dollar. The reader is reminded that two different impact tables must be calculated for both commodity outputs and imports because a dollar of exports will not have the same effect as a dollar of other final demand.

Impact tables with built-in import leakages can also be used, of course, for projection purposes. To illustrate this application, the projections of final demand set out in Table AO will be used to derive industry output projections. In this case, no projection of imports is required in advance. The first step is to determine the domestic content of the projections of final expenditures. Exports are handled separately from other final expenditures because they have a different domestic content. The relevant calculations are shown in Table BO :

## TABLE BQ

Domestic Content of the Projections of Final Expenditures of Table AQ (billions of dollars)

|  |  | Exports | Domestic Content of Exports Coefficients | Domesti <br> Content <br> of <br> Exports | Other <br> Final <br> Demand | Domestic Content of Other Final Demand Coefficients | Domestic Content of Other Final Demand | Domestic Content of Total Final Demand |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { it } \\ & \circ-\mathrm{y} \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ | 1 | 8.00 | 1.0000 | 8.00 | 6.00 | 7273 | 4.36 | 12.36 |
|  | 2 | 15.00 | . 9091 | 13.64 | 23.00 | . 4333 | 9.97 | 23.61 |
|  | 3 |  | 1.0000 |  | 12.00 | 1.0000 | 12.00 | 12.00 |
|  |  |  | 1.0000 |  | 20.00 | . 9714 | 19.43 | 19.43 |
|  | 5 | 4.00 | 1.0000 | 4.00 | 18.00 | . 9500 | 17.10 | 21.10 |

The last column of Table $B Q$ can now be used in conjunction with Table BK to derive projections of industry outputs. The result is:
(billions of dollars)

| Industry Output <br> Projections | A | 61.67 |
| :--- | :---: | :---: |
|  | B | 50.13 |
|  | C | 37.36 |

Comparison of these projections of industry outputs with the projections immediately following Table AO reveals that in all cases the former are appreciably lower. The reason for this is that the increases in imports (over their levels in Diagram 3) projected in Table AO are relatively small by comparison with the increases in final expenditures. Thus, the projections of imports implicit in the present projections of industry outputs, which are determined by the magnitude of the import content coefficients built into Table BK, are considerably higher than the projections shown in Table AO. This can be verified by deriving the projection of imports through the procedure described in Table BP. The result is:
(billions of dollars)

|  | 1 | 4.29 |
| :--- | :--- | :---: |
| Projections of <br> Imports by <br> Commodity | 2 | 24.53 |
|  | 3 | 0 |
|  | 4 | 1.44 |

Which set of projections is more reasonable? There is no a priori answer to this question. The projections of imports of Table AO imply a substantial decline in the role of imports as a source of supply for commodities. The present projections assign exactly the same role to imports as in the base-year. In actual applications of Input-Output analysis for projection purposes it may be desirable to use the impact tables with built-in import leakages to derive initial projections of imports which can then be modified on the basis of independent information (including the possible effects of import substitution policies). The modified projections of imports can then be used in conjunction with impact tables which do not involve built-in import leakages to derive projections of industry and commodity outputs and primary inputs.

Impact tables similar to those described in Sections 3.2 and 3.3 can also be constructed on the alternative treatment of imports developed in the present section.

To measure the impact on domestic industry outputs of a hypothetical dollar of final demand for a particular category of final expenditure, the domestic content of that dollar can be estimated and applied to Table BK to derive its impact on industry outputs. The domestic content of a dollar of final demand for each category of final expenditure can be calcualted by applying the domestic content coefficients of Table BI to the patterns of final expenditure of Table AQ. The result is shown in Table BR:

TABLE BR
Final Expenditures on Domestic Commodities by
Category of Expenditure as a Proportion of Total Final Expenditures by Category of Expenditure Matrix (I- $\left.\hat{\mu}_{0}\right) \mathrm{E}$

|  | P | G | F.C.F. |  |
| :---: | :---: | :---: | :---: | :---: |
| Commodity | 1 | .0464 | .0331 |  |
|  | 2 | .0922 | .0394 | .1444 |
|  | 3 | .1064 |  | .3333 |
|  | 4 | .2067 | .1325 |  |
|  | 5 | .2022 | .0432 | .1584 |
|  | 6 | .6539 | .2482 | .6361 |

The figures in each column of Table BG represent final expenditures on domestic commodities; their impact on industry outputs can be estimated through Table BK:

> TABLE BS

Direct and Indirect Effects on Domestic Industry Outputs of a Dollar of Final Expenditure on Selected Categories of Final Expenditure
Matrix[I-D (I- $\left.\left.\hat{\mu}_{0}\right) B\right]^{-1 D}\left(I-\hat{\mu}_{0}\right) E$

|  |  | P | G | F.C.F. |
| :--- | :---: | :---: | :---: | :---: |
| Industry <br> Output | A | .3421 | .1325 | .4624 |
|  | B | .4331 | .2085 | .2964 |
|  | C | .3311 | .0947 | .2939 |

Table BS is an impact table comparable to Table AT but with import leakages built in. Nothing prevents the construction of an impact iable showing the impact on domestic commodity outputs of a dollar of final expenditure on each category of final expenditure--the domestic content of final demand is already calculated in Table BR and the domestic content of intermediate demand can be calculate through the routine in Table BO, given the industry outputs in each column of Table BS.

Similarly a table showing the impact on imports can be calculated.
The import content of final demand can be established by subtracting Table $B R$ from Table AQ. The import content of intermediate demand can then be calculated through the routine described in Table BP. Of course, it is not worth calculating either of these impact tables unless they are to be used very frequently because otherwise it is less costly to calculate the impact of final expenditures on commodity outputs or import wihtout the aid of such tables.

The direct and indirect effects on primary inputs of either a dollar of final demand for each commodity or a dollar for selected categories of final expenditure can be calculated from Table BA and Tables BK and BS. The procedure is identical with the one followed in Section 3.3 in deriving Tables BC and BE from Table BA and Tables AJ and AQ. The results are shown in impact Tables $B T$ and $B U$ :

TABLE BT
Direct and Indirect Effects on the Primary Inputs of Industries of a Dollar of Final Demand for Each Commodity

Spent on Domestic Goods Only

|  |  | c 0 m | 0 | i t |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 |
| Commodity taxes | . 0353 | . 0359 | . 0352 | . 0439 | . 0101 |
| Indirect taxes | . 0675 | . 0672 | . 0637 | . 0605 | . 0539 |
| Wages and Salaries | . 5075 | . 5074 | . 5183 | . 5125 | . 5880 |
| Surplus | . 2130 | . 2123 | . 2129 | . 2021 | . 2433 |
| Total primary inputs | . 8233 | . 8228 | . 8301 | . 8190 | . 8953 |

## TABLE BU

Direct and Indirect Effects on the Primary Inputs of Industries of a Dollar of Final Demand for Each Category of Final Expenditure

|  | P | G | F.C.F. |
| :---: | :---: | :---: | :---: |
| Commodity taxes | . 0198 | . 0088 | . 0185 |
| Indirect taxes | . 0395 | . 0152 | . 0395 |
| Wages and Salaries | . 3503 | . 1301 | . 3392 |
| Surplus | . 1431 | . 0527 | . 1402 |
| Total primary inputs | . 5527 | . 2068 | . 5374 |

Table BT is constructed as if the dollar of final demand for each commodity is spent on domestic goods only. Therefore, as in the case of Table $B K$, it is necessary to calculate the domestic content of any given final demand before applying it to Table BT to estimate the impact on primary inputs. The reader will note that the sum of the figures in each column of Table $B T$ is less than one. This illustrates the effect of import leakages out of intermediate demand in measuring the impact on primary inputs of a dollar of final demand for domestic commodities. However, since import leakages out of final demand are not incorporated in the Table, it underestimates the total effect of import leakages. Impact tables incorporating
all import leakages can be calculated from Table BT by multiplying the figures in each column of the Table by the appropriate domestic content coefficients from Table BI. Two different impact tables will be obtained, reflecting the different domestic content of exports and of other final demand.

Table BU shows the direct and indirect effects on the primary inputs of industries of a dollar spent on selected categories of final expenditure. In this case all import leakages are taken into account. The direct effects on the primary inputs of these categories of final expenditure have already been calculated in Table BF. The total direct and indirect effects on primary inputs are shown in Table BV:

TABLE BV

Total Direct and Indirect Effects on Primary Inputs of a Dollar of Final Demand for Selected Categories of Final Expenditure

|  | P | G | F.C.F. |
| :---: | :---: | :---: | :---: |
| Commodity taxes | .2113 | .0997 | 1852 |
| Indirect taxes | . 0395 | 0152 | 0395 |
| Wages and Salaries | .3503 | 7210 | 3392 |
| Surplus | 1431 | 0527 | 1402 |
| Total primary inputs | . 7442 | . 8886 | . 7041 |

The illustrations provided in Sections 3.2 and 3.3 can be adapted to impact tables incorporating built-in import leakages. The adaptation is left to the reader.

In the example of Diagram 3 and throughout this Chapter only competing imports, i.e. imports for which there is a counterpart in domestic production, have been considered. Non-competing imports have not been discussed because they present no particular problem. In the 1961 Tables they are included in primary inputs and are treated in exactly the same way as any other primary input.

### 3.5 Valuation

In the 1961 Canadian Input-Output Tables, valuation is at producers' prices as described in Chapter 2. In some analytical applications of these Tables, estimates of final demand and imports for past or subsequent years or projections of final demand and imports for future years are likely to be used in conjunction with the Tables. The figures for final demand available from various sources are not likely to be valued at producers' prices nor are the published figures on imports valued at the Canadian border plus import duties. The object of this Section is to provide a guide for the conversion of final demand and imports to the appropriate level of valuation so that they can be used in conjunction with the Tables.

In Input-Output Tables at producers' prices, the trade and transportation margins and the commodity taxes which constitute the difference between a transaction valued at purchasers' prices and the same transaction valued at producers' prices are recorded as if they constitute separate transactions of the purchaser. If, for example, governments purchase one hundred dollars worth of a commodity at purchasers' prices, fifteen dollars of which represent trade and transportation charges and five dollars commodity taxes, then governments are shown as purchasing eighty dollars of the commodity, fifteen dollars of transportation and trade, and as paying five dollars in commodity taxes.

In Diagram 3, commodity taxes are shown as a separate row and Commodity 5 can be thought of as representing trade and transportation charges. The entries in these rows represent the sum of the transport and trade charges and of the commodity taxes applicable to the intermediate use of all commodities by each industry and to the purchase of all commodities by each category of final demand.

Aside from imports, net exports and re-exports, information on categories of final demand is usually available at purchasers' prices. This information generally comes in two forms --either as the total expenditures for particular categories of final expenditure / / or as expenditures on specific commodities for categories of final expenditure.
/1/ The reader is reminded that the final version of the 1961 Input-Output Tables will contain fairly detailed breakdowns of categories of final expenditure as described in Chapter 2.

In the first case, the commodity and primary input composition of the total expenditures for particular categories of final expenditure can be estimated on the basis of the 1961 commodity and primary input composition of these expenditures; in terms of the example of Diagram 3, they can be estimated through Tables $A Q$ and $B F$ or through Tables $B R$ and BF (if final expenditures on domestic goods are required). The coefficients of Tables $A Q$ and $B R$ are calculated from data at producers' prices so that the resulting estimates of the commodity composition of categories of final expenditure will also be valued at producers' prices and no further adjustment will be required. The figures for Commodity 5 will represent the accumulated trade and transport margins on the purchases of other commodities by each category of final demand. The figures for commodity taxes calculated from Table BF will similarly represent accumulated commodity taxes.

In the second case, where information on final demand at purchasers' prices is avallable by commodity, it will be necessary to convert it to producers' prices and to estimate the sum of trade and transport charges and the sum of commodity taxes.

In constructing the 1961 Tables the purchases of commodities by categories of final demand (and the use of commodities by industries) were estimated both at producers' and at purchasers' prices. Using the example of Diagram 3, the following type of information was estimated:

TABLE BW
Final Demand at Producers' Prices

|  |  | P | G | F.C.F. | $\Delta$ inv. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Commodity | 1 | 3 | 1 |  |  |
|  | 2 | 10 | 2 | 4 | 1 |
|  | 3 | 5 |  | 4 |  |
|  | 4 | 10 | 3 |  |  |
|  | 5 | 10 | 1 | 2 |  |
| Commodity taxes |  | 9 | 2 | 2 |  |
| Total |  | 47 | 9 | 12 | 1 |

## TABLE BX

Trade and Transportation Charges on Each Element of Final Demand
(billions of dollars)

|  | P | $G$ | F.C.F. | D inv. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Commodity | 1 | 2.0 | .2 |  |  |
|  | 2 | 6.0 | .8 | 1.2 |  |
|  | 3 | 2.0 |  | .8 |  |
|  | 4 |  |  |  |  |
|  | 5 |  |  |  |  |
|  | Tota1 | 10.0 | 1.0 | 2.0 |  |

TABLE BY
Commodity Taxes on Each Element of Final Demand
(billions of dollars)

|  | P | G | F.C.F. | A inv. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Commodity | 1 | 1.0 | .4 |  |  |
|  | 4.0 | .8 | 1.3 |  |  |
|  | 2.0 |  | .7 |  |  |
|  | 2.0 | .8 |  |  |  |
|  |  |  |  |  |  |
|  | Total | 9.0 | 2.0 | 2.0 |  |

## TABLE BZ

Final Demand at Purchasers' Prices
(billions of dollars)

|  |  | P | G | F.C.F. | inv. |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Commodity | 1 | 6.0 | 1.6 |  |  |
|  | 2 | 20.0 | 3.6 | 6.5 | 1.0 |
|  | 3 | 9.0 |  | 5.5 |  |
|  | 4 | 12.0 | 3.8 |  |  |

Table BX contains the distribution of trade and transport charges over each commodity. The totals for each column of Table BX correspond to the entries in the row for Commodity 5 of Table BW. Similarly Table BY contains the distribution of commodity taxes over each commodity and the column totals of the Table correspond to the entries in the commodity tax row of Table $B W$. Table $B Z$ contains the sum of the corresponding entries of the first four rows of Tables $B W, B X$ and $B Y$.

The totals for each column of Tables $B W$ and $B Z$ are identical. In Table BZ the trade and transport charges (Commodity 5) and the commodity taxes of Table BW have been distributed over the other commodities.

Given Tables BX, BY and BZ, it is possible to convert final demand valued at purchasers' prices into final demand valued at producers' prices provided it is assumed that the trade, transport and tax content of each element of final demand will be a stable proportion of the purchasers' value. To perform this conversion it is therefore sufficient to calculate tables containing the ratios of trade and transport charges to purchasers' values for each element of final demand:

TABLE CA
Trade and Transport Charges as a Proportion of Final Demand at Purchasers' Prices

|  | $P$ | $G$ | F.C.F. | A inv, |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Commadity | 1 | .3333 | .1250 |  |  |
|  | 2 | .3000 | .2222 | .1846 |  |
|  | 3 | .2222 |  | .1455 |  |
|  | 4 |  |  |  |  |

TABLE CB
Commodity Taxes as a Proportion of Final Demand at Purchasers' Prices

|  |  | P | G | F.C.F. | s inv. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Commodity | 1 | .1667 | .2500 |  |  |
|  | 2 | .2000 | .2222 | .2000 |  |
|  | 3 | .2222 |  | .1273 |  |
|  | 4 | .1667 | .2105 |  |  |

The use of Tables $C A$ and $C B$ to convert final demand at purchasers' prices to final demand at producers' prices is illustrated by the following example in which personal expenditure on consumer goods and services at purchasers' prices is given as:
(billions of dollars)

|  |  | $P$ |
| :--- | :---: | :---: |
| Commodity | 1 | 5 |
|  | 2 | 24 |
|  | 3 | 12 |
| Total | 4 | 15 |

From Table CA it follows that the trade and transport charges on each commodity will be:
(billions of dollars)

|  |  | $p$ |
| :--- | :---: | :---: |
| Commodity | 1 | 1.6667 |
|  | 2 | 7.2000 |
|  | 3 | 2.6664 |
|  | 4 |  |
| Total |  | 11.5331 |

From Table $C B$ it follows that the commodity taxes on each commodity will be:

> (billions of dollars)

|  |  | $P$ |
| :--- | :--- | :---: |
| Commodity | 1 | .8335 |
|  | 2 | 4.8000 |
|  | 3 | 2.6664 |
|  | 4 | 2.5005 |
| Total |  | 10.8004 |

Consumer expenditures on Commodities 1 through 4 at producers' prices are obtained by subtracting trade and transport charges and commodity taxes from the purchasers' values. Consumer expenditures on transport and trade at producers' prices are obtained as the sum of transport and trade charges on Commodities 1 through 4. The corresponding commodity taxes are obtained as the sum of the commodity taxes estimated for Commodities 1 through 4. Thus, personal expenditures on consumer goods and services at producers' prices are estimated as:

|  | P |  |
| :--- | :---: | :---: |
| Commodity | 1 | 2.4998 |
|  | 2 | 12.0000 |
|  | 3 | 6.6672 |
|  | 4 | 12.4995 |
|  | 5 | 11.5331 |
| Commodity taxes | 10.8004 |  |
| Total | 56.0000 |  |

The major sources of information on net exports, re-exports and imports are the Trade of Canada publications of the Dominion Bureau of Statistics. /l/ The valuation of the Trade of Canada figures does not correspond to the valuation in the 1961 Input-Output Tables, so that Trade of Canada figures on net exports, re-exports and imports must be adjusted before they are used in conjunction with these Tables.

In the 1961 Input-Output Tables imports are valued at the Canadian border including import duties. Trade of Canada imports are valued f.o.b. the country of last consignment which, in most cases, coincides with the country of origin; import duties levied on each commodity are tabulated separately. The difference between the two sets of figures (if import duties are added to the Trade of Canada figures) is made up of the transportation and insurance charges involved in conveying each commodity from its country of last consignment to the Canadian border. In the absence of current information on these charges, the Trade of Canada figures can be adjusted to the level of valuation of the 1961 Input-Output figures by assuming that transportation and insurance charges will constitute a stable proportion of the value of each commodity f.o.b. the country of last consignment. Similarly, it can be assumed that import duties will constitute a stable proportion of imports f.o.b. the country of last consignment. In terms of the example of Diagram 3, the following type of information has been estimated for imports:

TABLE CC
(billions of dollars)

|  |  | Imports at <br> Canadian <br> Border inclu <br> ding Duties | Import <br> Duties | Transportation and Insurance Charges | Imports f.o.b. <br> Country of <br> Last <br> Consignment |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Commodity | 1 | 3.0 | . 3 | . 4 | 2.3 |
|  | 2 | 18.0 | 3.6 | 1.4 | 13.0 |
|  |  |  |  |  |  |
|  | 4 | 1.0 |  |  | 1.0 |
|  | 5 | 1.0 |  |  | 1.0 |

/1/ Annual commodity export and import statistics appear respectively, in the December issue of D.B.S. cat. \# 65-004 [monthly]; and the December issue of D.B.S. cat. \# 65-007 [monthly].

The figures shown for Commodity 4 represent imports of services; there are no duties or transportation and insurance charges on such imports./1/ The figures for Commodity 5 represent imports of water and pipeline transportation. For example, American ships may carry Canadian goods between two points in Canada on the Great Lakes; this is a direct import of water transportation. It may be noted that imports of transportation services do not include estimates for passenger travel. No such estimates could be made for $t$ he preliminary 1961 Input-Output Tables. The figures on imports and exports of passenger travel are included in a balance of payments adjustment, described in Section 4.2.

Valuation conversion coefficients can be calculated from the information in Table CC by taking, for Commodities 1 and 2, the ratios of import duties and of transportation and insurance charges to imports $f .0 . b$. the country of last consignment. These coefficients are shown in Table CD:

TABLE CD
Import Duties and Transportation and Insurance Charges as a Proportion of Imports f.o.b. the Country of Last Consignment

|  |  | Transportation <br> and <br>  <br> Import Duties <br> Charges <br> Coefficients |
| :---: | :---: | :---: | :---: |
| Coefficients |  |  |$|$| Commodity | 1 | .1304 |
| :---: | :---: | :---: |

[^12]The coefficients in Table CD can be applied to Trade of Canada imports to estimate import duties and transportation and insurance charges which can then be added to the Trade of Canada figures to derive estimates of imports at the Canadian border including import duties.

Trade of Canada figures on net exports / / / are valued at the exporter's establishment. In some cases where the exporter of a commodity is also the producer, Trade of Canada net exports are, in fact, valued at producers' prices and require no valuation conversion. In other cases it is necessary to adjust for the transportation and trade charges making up the difference in the value of the net exports at the exporter (who may be a wholesaler) and at the producer. In Input-Output Tables at producers' prices these Transportation and Trade charges are entered as exports of transportation and trade; in terms of the example of Diagram 3 they are entered under Commodity 5. However, the entry for net exports of Commodity 5 also includes exports of the transportation charges involved in conveying exports from the exporter to the Canadian border.

In terms of the example of Diagram 3 the following type of information is available for net exports:

TABLE CE
(billions of dollars)

|  |  | Net Exports at Producers' Prices | Transportation and Trade <br> Charges from Producers to Exporters | Trade of Canada Net Exports | Transportation Charges From Exporters to the Canadian Border | Net Exports at Purchasers' Prices |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 各0000 | 1 | 7.0 | . 6 | 7.6 | . 7 | 8.3 |
|  | 2 | 10.0 | . 9 | 10.9 | . 8 | 11.7 |
|  | 3 |  |  |  |  |  |
|  | 4 |  |  |  |  |  |
|  | 5a | 1.5 |  |  |  |  |
|  | 5b | 1.5 |  |  |  |  |

[^13]In Table CE, net exports of Commodity 5 have been separated into two parts, the first of which involves the transportation charges from producers to exporters plus the trade margins of the exporters, and the second, the transportation charges from exporters to the Canadian border. The second column of Table CE shows the distribution of transportation and trade charges from producers to exporters (Commodity 5a) over Commodities 1 and 2. The third column shows the corresponding Trade of Canada figures. The fourth column shows the distribution of transport charges from exporters to the Canadian border (Commodity 5b) over Commodities 1 and 2. The fifth column shows net exports valued at purchasers' prices. Columns 2, 3 and 4 of Table CE can be used to calculate valuation conversion coefficients for Trade of Canada figures on net exports:

## TABLE CF

Valuation Conversion Coefficients for Net Exports: Transportation and Trade Margins as a Proportion of Trade of Canada Net Exports

|  | Coefficients of Producer- <br> to-Exporter Margins | Coefficients of Exporter- <br> to-Canadian Border Margins |  |
| :---: | :---: | :---: | :---: |
| Commodity | 1 | .0789 | .0921 |
|  | 2 | .0826 | .0734 |

The coefficients in the first column of Table CF can be applied to Trade of Canada figures on net exports to estimate transportation and trade charges from producers to exporters. These can be subtracted from the Trade of Canada figures to derive net exports of Commodities 1 and 2 at producers' prices. The sum of these transportation and Trade charges must be entered under Commodity 5 as exports of transportation and trade. The coefficients in the second column of Table CF can be applied to Trade of Canada figures on net exports to estimate transportation charges from exporters to the Canadian border. The sum of these transportation charges must also be entered under exports of Commodity 5.

In theory, the Trade of Canada figures on re-exports should also be adjusted. However, because re-exports are relatively unimportant, it was assumed that all margins on exports apply to net exports only and that no valuation conversion is therefore required for re-exports.

Table CG brings together the various valuation conversion coefficients shown in Tables $\mathrm{CA}, \mathrm{CB}, \mathrm{CD}$ and CF :

TABLE CG

Valuation Conversion Coefficients

|  |  |  |  |  |  |  |  | $\begin{aligned} & \text { Net Exports: Producer } \\ & \text { to Exporter Margins } \end{aligned}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | .3333 | . 1667 | . 1250 | .2500 |  |  | . 0789 | . 0921 | . 1304 | . 1739 |
|  | 2 | .3000 | . 2000 | . 2222 | . 2222 | . 1846 | .2000 | . 0826 | . 0734 | . 2769 | . 1077 |
|  | 3 | . 2222 | . 2222 |  |  | . 1455 | .1273 |  |  |  |  |
|  | 4 |  | .1667 |  | . 2105 |  |  |  |  |  |  |

No valuation conversion coefficients are shown for inventory change. This is not because in this hypothetical example they are equal to zero, but because no estimates of inventory change are usually made in specifying final demand for a year other than the base-year.

Is should be noted that the valuation conversion coefficients for imports can be used to calculate imports f.o.b. the country of last consignment given the solutions for imports (valued at the Canadian border including import duties) derived from Table BP of section 3.4. To calculate imports f.o.b. the country of last consignment it is sufficient to divide, for each commodity, imports at the Canadian border including import duties by one plus the sum of the two import valuation conversion coefficients. The purpose of these calculations would be to compare the solutions for imports derived from impact tables with time series for imports from the Trade of Canada pub1ications.

### 3.6 Limitations and Potential

The logic in the process of using the impact tables developed in this Chapter to estimate requirements for output, given final demand, can be summarized as follows:
i) to deliver commodities of a certain value to final demand it is necessary to determine the manner in which these commodities will be supplied; the possible sources of supply are domestic industries and imports; /1/
ii) if the commodities delivered to final demand are supplied from imports, there is, of course, no requirement for domestic production;
iii) if the commodities delivered to final demand are supplied by domestic production, additional deliveries of commodities are required as intermediate inputs to the industries supplying commodities to final demand; these intermediate inputs are determined by allocating production to particular industries through the market share assumption and calculating the input requirements

[^14]of each industry on the basis of the industry technology assumption;
iv) the additional delivery of commodities for intermediate use requires, once again, a choice between sources of supply. Steps (ii) and (iii) of the process are repeated for deliveries for intermediate use until all requirements for domestic production and imports /1/ have been calculated;
v) given total requirements for industry outputs associated with a delivery to final demand, the corresponding primary input requirements can be calculated by assuming that primary inputs are proportional to industry outputs. Indeed, requirements for any variables which can be assumed to be proportional to industry outputs can be calculated; employment requirements are a notable example. /2/

The process just described cannot be interpreted as a sequence of events in time. This point bears emphasizing. The calculation of requirements for domestic outputs is an exercise in balancing a set of accounts. The balancing process answers the following question: given deliveries of commodities to final demand valued at so much, and given imports (however they may be calculated) what must domestic outputs be to sustain these deliveries, on the assumption of constant market shares and industry technology. The rounds of impact involved in the calculation of impact tables imply no time sequence; they are a method for calculating the total outputs required to balance the accounts.

The interpretation of the use of Input-Output Tables for profection follows from the preceding considerations. Projections of industry and commodity outputs and primary inputs based on projections of final demand and imports can be interpreted as the outputs and primary inputs required in the projection year, to sustain the deliveries to final demand in the projection year, given projected imports. The market share and industry T1/ There are two ways of estimating imports: total direct and indirect requirements for imports can be specified in advance; alternatively,import requirements can be built into impact tables through import content coefficients.
12/ See Appendix A, Section A. 3.
technology assumptions determine that there will only be one set of commodity and industry outputs compatible with the projected deliveries in final demand.

The use of impact tables to test the implications for domestic production (and consequently for incomes and employment) of particular events or policies involves a similar rationale. Under the assumption that the coefficients from the base period table are stable, that is, that they apply currently and will continue to apply in the future, the question is: what outputs would be required to maintain the balance of the sytem in meeting the specific changes in final demand implied by the specific event or policy? Again, nothing can be said about any timing aspects of the adjustment process.

The validity of the analysis carried out with the aid of the impact tables developed in this Chapter depends on the validity of the market share, industry technology, and import content assumptions. The deliveries to final or intermediate demand determined by these assumptions always take place; no mechanism is provided whereby supply conditions can interfere with, or modify, these deliveries. To appreciate what this means, it is necessary to remember that deliveries are defined in terms of values of commodities delivered. The changes in prices which would result from the normal interaction of supply and demand, and which would therefore change the value of these deliveries and also cause substitution among the commodities delivered, are allowed no play. /1/ The base-year observations from which coefficients are calculated reflect the interaction of supply and demand: the use of intermediate inputs by industries in the base-year is not only a function of the technological requirements of industries but is also affected by supply conditions. Thus, the intermediate inputs observed in the base-year are the product of a state of disequilibrium in which supply is in the process of adjusting to demand and demand is in the process of adjusting to supply.
/1/ This point is not only related to the question of deflating Input-Output Tables; the interaction of demand and supply would cause changes in the "constant dollar" values of commodities delivered. In fact it has been observed that changes in prices and quantities of deliveries may tend to compensate so that Input-Output Tables valued in current dollars may be more appropriate for analysis than constant dollar tables.

Yet impact tables are calculated on the assumption that the base-year intermediate inputs reflect pure technological requirements which can be fulfilled without adjustment. Similarly the market shares of industries and of imports, which in the base-year emerge from the interaction of many factors, are assumed to remain constant under conditions other than those of the base-year. Such considerations have led many economists to suggest that Input-Output analysis is a dead end.

While that view is still fairly widespread, the compilation and use of Input-Output Tables is nevertheless growing at a very rapid rate. The arguments in favour of Input-Output analysis can be summarized as follows: the delivery of commodities to intermediate and final demand does get allocated among domestic industries and imports; the market share and import content assumptions provide an approximation of the actual allocation. To produce their outputs, industries do require intermediate inputs; the industry technology assumption provides an approximation of these requirements. There is also evidence that to some extent errors in the allocation of demand and in the determination of requirements for intermediate inputs tend to cancel out. Consequently Input-Output Tables can be used to determine the approximate outputs, primary inputs and imports associated with any given final demand. For many purposes the approximation involved is acceptable. In any case, there are no alternative techniques for measuring the propagation of demand in a disaggregated system.

The degree of approximation in Input-Output analysis depends on a number of factors. It has been observed that input, market share and import content coefficients tend to change over time. Hence for some purposes it is important to use Input-Output Tables which are reasonably up-to-date. The complete compilation of Input-Output Accounts is a very time consuming process, but techniques have been developed for updating existing accounts on the basis of partial information for a later year coupled with mathematical procedures designed to balance the Accounts in that year. /1/ The 1961 InputOutput Accounts will be updated when the final revisions of the 1961 data have been completed.

[^15]The tendency of coefficients to change over time implies that to use Input-Output Tables for projection purposes it is necessary to profect changes in these coefficients. There are no well established techniques for making such projections - the best results to date have been obtained by asking knowledgeable people to project the introduction of new techniques and marketing patterns.

Aggregation is an important source of error in Input-Output analysis. The hypothesis that the inputs of industries will be proportional to their outputs irrespective of the comodity composition of these outputs becomes less tenable as the definition of industries broadens. When industries are defined narrowly so that each produces only a few commodities which have similar input structures the industry technology assumption is more justifiable. For this reason the 1961 Canadian Tables have been compiled in considerable detail. /1/

The impact tables described in this Chapter are the simplest analytical tools that can be defined on the basis of the information contained in the 1961 Input-Output Accounts. A number of more complex models have been developed, some of which are discussed in Appendix A, Sections A. 6 to A.10. In general these models replace the industry technology, market share and import content assumptions with more sophisticated assumptions which allow coefficients to change in response to the conditions under which the models are being operated. In particular, the input coefficients of industries can be made to depend on the level and commodity composition of industry outputs while market share and import content coefficients can become subject to scale and capacity effects. Moreover market share coefficients can be made to vary according to the source of demand (particular categories of final demand or particular industries) and can be modified to allow for special handling of by-products and joint products.

In these models, demand is still the prime mover. The models calculate the domestic outputs and imports required to make given deliveries to final demand. However, the more sophisticated manner in which these requirements are calculated improves the accuracy of the calculations.

[^16]Input-Output models in which the passage of time is explicitly taken into account have also been developed. These are "dynamic" Input-Output models which incorporate capacity building activities triggered by increases in industry outputs beyond existing capacity levels. The very complex interactions between levels of output, expectations and capacity building and the very complex timing involved in these interactions are represented in these models by very simple functions. It remains to be seen whether disaggregated Input-Output models can be made to approximate the evolution of the economy over time.

## DESCRIPTION OF PUBLISHED TABLES

The 1961 Input-Output Tables have been compiled on the basis of 187 industries and 644 commodities. At this worksheet level of detail, many of the entries in the various matrices are confidential under the provisions of the Statistics Act. The data in Volume 1 and Volume 2 are published at three levels of aggregation: /1/

| Designation of Aggregation | Number of Industries | Number of Competitive Commodities | For Table Numbers: |
| :---: | :---: | :---: | :---: |
| S | 16 | 40 | 1 to 7 (Volume 1) |
| M | 65 | 65 | 8 to 12(Volume 1) |
| L | 110 | 197 | 13 to 17 (Volume 2) |

With two exceptions, comparable tables are published for each level of aggregation. The exceptions are the output and market share matrices for aggregations $M$ and $L$ which are not published because they contain a considerable number of confidential entries.

All of these tables are preliminary. They will be published in final form when they have been reconciled with the revised estimates of the Income and Expenditure Accounts. At that time, additional detail on the structure of final demand will also be published, together with the impact tables based on models using this information as described in Appendix A, Section A. 2 .

[^17]
### 4.1 Services to Users

The published tables can be furnished to users in machine readable form, that is, on cards or tape; moreover, tables for alternative aggregations can be programmed and requests from users for such aggregations will be considered. A charge to the user will be made to cover the cost of services provided. /1/

### 4.2 Description of Each Published Table

Tables 1 and 8 (Volume 1) and Table 13 (Volume 2) show the values of inputs into industries and the values of final expenditures for aggregations $S$, $M$ and $L$. In these tables, imports are shown as a negative column of demand, rather than as a supply row (as in Diagram 1, Chapter 1, and in Diagram 2, Chapter 2). In addition, a "Balance of Payments Adjustment" row and an entry for total customs import duties are introduced (see Table A below).

The positive entry of $\$ 515.0$ million in the row for Commodity Taxes and the column for Imports is the total value of customs import duties. Since all other (negative) entries in the Import column include duties, the net result is that:
i) the column total for Imports excludes duties;
ii) the row total for Commodity Taxes includes duties.

[^18]TABLE A
Industry Inputs and Final Expenditures,1961- Summary


Entries in the Balance of Payments Adjustment row occur only in the Net Export, Import and Other Final Demand columns. These entries are the result of the attempted reconciliation of exports and imports in the preliminary 1961 Input-Output Accounts with worksheet detail from the D.B.S. Balance of International Payments.
of the resulting totals for Net Exports and Imports, the following amounts remain unallocated, that is, they have not yet been distributed over detailed commodity and other expenditure items:

Balance of Payments Categories (items \#1 - 6)
Net
Exports Imports (millions of dollars)

1. Adjusted Merchandise Trade (mainly "special trade" transactions)
16.2
97.5
2. Travel Expenditures
482.0
642.0

Freight and Shipping:
3. Expenditure in Canada (Abroad) of Foreign (Canadian)Ocean Shipping
67.0
62.0
4. Other Freight and Shipping
72.3
$-16.0$
5. Government (excluding official contributions)
70.0
111.0
6. Business Services
91.4
60.3

Sub-total
(798.9)
(956.8)
$\begin{array}{lll}\text { 7. Less: Overallocated Import Duties } & -22.4 \\ \text { Total Unallocated } & \overline{798.9} & \overline{934.3}\end{array}$

For each commodity，Other Final Demand in these preliminary Input－ Output Tables is largely a residual estimate derived by subtracting，from domestic production，the uses of the commodity by each industry，exports， and inventory change，and by adding imports．If some exports remain un－ allocated，then Other Final Demand classified by commodity is overstated； conversly，if some imports are unallocated，then Other Final Demand for commodities is overstated．It follows that an entry of $\$ 135.5$ million for unallocated Other Final Demand is required to offset the amounts of una11o－ cated exports and imports．

For item 非3，the totals on the export and import sides are similar， and so probably are the commodity content values．Hence there should be little net effect on the detailed commodity content of Other Final Demand．This is less true for items $⿰ ⿰ 三 丨 ⿰ 丨 三 一 1,2$ and 5，where the unallocated import values are sub－ stantially above those for exports．

The amounts shown in item 非 4 and a substantial portion of those in非6（ $\$ 63.9$ million in exports；$\$ 13.8$ million in imports）represent differences in estimates for these categories between the Balance of Payments and the preliminary Input－Output Accounts．Until a reconciliation is carried out， the Balance of Payments totals have been accepted，so that these amounts appear as unallocated．

Estimates of the values of customs import duties included in the detailed commodity imports of the preliminary Input－Output Tables are based on tabulations by the External Trade Division of D．B．S．；the total of these is $\$ 537.4$ miliion and is before duty rebates．Due to serious data problems， it has not yet been feasible to distribute the rebates over the relevant commodity import values，which therefore are overstated by the amounts of the rebates．Given the total $\$ 515.0$ million for customs import duties in the Income and Expenditure Accounts（which is after deduction of rebates），a net adjustment of $\$-22.4$ million（item $⿰ ⿰ 三 丨 ⿰ 丨 三 ⿻ ⿻ 一 𠃋 十 一 ~ 7) ~ i s ~ r e q u i r e d ~ a n d ~ i s ~ t r e a t e d ~ a s ~ u n-~$ allocated in the Balance of Payments Adjustment row．

Research will be undertaken，in connection with the forthcoming revision of the 1961 Input－Output Tables，to attempt to estimate the commodity distributions and reconciliations for items included in the Balance of Payments Adjustment row．

In Table A, the figure of $\$-77.4$ million in the row for Indirect Taxes and Government Services and the column for Other Final Demand is the offset to the sum of charges to industries for "government services". Since $\$ 77.4$ million represents the revenues of governments for such services, it is entered with a negative sign in the column which includes government expenditure, that is, in the column for Other Final Demand. Estimates for "government services" purchased by persons (also part of Other Final Demand) offset the related negative entries for governments; the result is a zero entry in Other Final Demand. Therefore, the net result is that the total of the Indirect Taxes and Government Services row represents only the total of (non-commodity) Indirect Taxes.

From Table A, the preliminary Input-0utput estimates of 1961 Gross Domestic Expenditure and Gross Domestic Product can be calculated:

TABLE B
Gross Domestic Expenditure and Gross Domestic Product, Canada, 1961 (based on preliminary 1961 Input-Output Accounts)

| Exports of Goods and Services |  | $7,226.6$ |
| :--- | ---: | ---: |
| Net Exports (Domestically Produced Exports) | $7,091.2$ |  |
| Re-Exports | $\underline{135.4}$ |  |

Value of the Physical Change in Inventories (Business) $-44.4$

Other Final Expenditure on Goods and Services
Deduct: Imports of Goods and Services

Sub-total: GROSS DOMESTIC PRODUCT AT FACTOR COST

GROSS DOMESTIC PRODUCT AT MARKET PRICES

[^19]It bears repeating that the totals and their components as published here are preliminary; they have not been completely reconciled with the revisions to the Income and Expenditure Accounts.

Diagrams 4 to 11 below show the schematic frameworks of Tables 1 to 6, 8 to 11 , and 13 to 16 (Tables 7,12 and 17 are described verbably following Diagram 11). Where the same framework applies to two or three of the aggregations, one diagram shows the frameworks of two or three tables. For example, the identical framework is used for the three tables showing the "Values of Industry Inputs and Final Expenditures, 1961"; these are: Table 1 for aggregation $S$ : Table 8 for aggregation $M$ : Table 13 for Aggregation I. This framework is shown in Diagram 4.

In the diagrams, each of the sub-matrices encompassed by the solid Iines (aside from certain "sub-total" rows and columns) contains one or more of the following pieces of information:

1) a verbal definition of the content;
ii) the "number" of the corresponding table from Chapter 3;
iii) the (mathematical) matrix notation used in Appendix A.

For example, at the intersection of the "Industries" columns and "Competitive Commodities" rows in Diagram 4, "Table AC" indicates the content is identical in concept to Table AC in Chapter 3, while the letter "U" is the matrix notation used for this sub-matrix in the mathematical models developed in Appendix A.

In the "Impact Tables" (Tables 5, 6, 10, 11, 15 and 16) which are described in Diagrans 8, 9, 10 and 11 , the 1961 value data on final demand for competitive commodities by category of final demand and on imports of competitive commodities are repeated for the convenience of the user. Also shown in Tables 6, 11 and 16 are the 1961 "import coefficients" and "reexport coefficients" comparable in concept to those shown in Table BH in Chapter 3.

The relevant row numbers for the tables being described appear in the dotted boxes to the right of the diagram, and the table column numbers appear in the dotted boxes at the bottom of the diagram.

Schematic Framework of Tables 1, 8 and 13 (Aggregations S, M and L)
(Values of Industry Inputs and Final Expenditures, 1961)


D I A G R A M $\underline{5}$
Schematic Framework of Tables 2, 9 and 14 (Aggregations S, M and L)
(Industry Input and Final Expenditure Coefficients, 1961)

/1/ Table AQ contains final expenditure coefficients only for personal expenditure, government expenditure and gross fixed capital formation which in Tables 2, 9 and 14 are aggregated into a single column. However, in principle, Table AQ could encompass all other categories of final demand and imports.
D I AGGRAMG

Schematic Framework of Table 3 (Aggregation S)
(Value of Industry Outputs, 1961)


|  | Competitive Commodities | $\frac{\text { Row Numbers }}{\text { Table }}$ |
| :---: | :---: | :---: |
| Industries | $\begin{array}{r} \text { Table } A B \\ D \end{array}$ | 1-16 |
| Total | $i^{\prime}(\mathrm{r})$ | 17 |
| Column Table <br> Numbers 4 | $1-40$ |  |

$$
\underline{D} \underline{I} \underline{G} \underline{R} \mathbb{M} \quad \underline{8}
$$

Schematic Framework of Tables 5 and 15 (Aggregations S and L)
(Impact Tables Without Import Leakages, 1961)


Schematic Framework of Table 10 (Aggregation M)
(Impact Table Without Import Leakages, 1961)


Note: the elements of each category of final demand and of imports are not classified by industry, as is implied in the diagram, but by competing commodity. Since there is a one-to-one correspondence between industries and"principally produced" commodities, the industrial classification is used as a proxy for the commodity classification.

D I A G R A M $\underline{10}$
Schematic Framework of Tables 6 and 16 (Aggregations S and L)
(Impact Tables With Import Leakages, 1961)


## D I A G R A M $\underline{11}$

Schematic Framework of Table 11 (Aggregation M)
(Impact Table With Import Leakages,1961)


Note: the elements of each category of final demand and of imports are not classified by industry, as is implied in the diagram, but by competitive commodity. Since there is a one-to-one correspondence between industries and "principally produced" commodities, the industrial classification is used as a proxy for the commodity classification.

It has been noted in Section 3.5 that regularly published annual or sub-annual detail for final demand categories and imports is valued differently from the detail for corresponding categories in the 1961 Input-0utput Accounts. Table 7 (for aggregation S), Table 12 (for aggregation M) and Table 17 (for aggregation L) provide valuation conversion coefficients, derived from the worksheets for the 1961 Input-Output Accounts, comparable in concept to those described in Section 3.5. The three tables share a common framework; therefore the following discussion is applicable to each of the tables.

The headings of columns 1 and 2 of these tables refers to "Trade of Canada Exports" and those of columns 3 and 4 to "Trade of Canada Imports". This is not quite accurate; more precisely, the references should be to Trade of Canada data adjusted for Balance of Payments purposes, that is, to the "Adjusted Merchandise Trade" concept from the Balance of Payments. In particular, imports and exports of ships and aircraft are of ten substantially affected by these adjustments.

With this qualification, the coefficients in column 1 of Tables 7, 12 and 17 correspond in concept to those in 7th column of Table CG (Section 3.5); coefficients in column 2 correspond to those in the 8th column of Table CG; coefficients in column 3 correspond to those in the loth column of Table CG; coefficients in column 4 correspond to those in the 9 th column of Table CG.

It will be noted from Tables 1,8 and 13 that there is $\$ 1.0$ million in commodity taxes in the Net Export column; this is the estimated tax on the export of electricity, and the value has been included with the trade and transportation margins in calculating the relevant coefficient in column 1 (for commodity 34 in Table 7; for commodity 58 in Table 12; for commodity 184 in Table 17).

The valuation of imported goods at the Canadian border inclusive of transportation costs results in an overstatement of imports to the extent that the goods were carried to the Canadian border by domestic carriers. Balance is maintained by reducing the absolute value of imports of transportation services (imported transportation services not associated with the imports of goods) by the estimate of the value of Canadian transport services employed in conveying imported goods to the Canadian border.

Columns 5 and 6 of Tables 7, 12 and 17 contain valuation conversion coefficients for Other Final Demand. The coefficients in column 5 are comparable in concept to the coefficients for trade and transportation charges as shown in the 1st, 3rd and 5th columns of Table CG. The coefficients in column 6 are comparable to the coefficients for commodity taxes as shown in the 2 nd, 4 th and 6 th columns of Table CG.

The term "purchasers' prices", as it applies to these two columns of coefficients, requires special explanation. In the commodity flow studies for the 1961 Input-Output Accounts, provincial and municipal retail sales taxes were not allocated by commodity (however, provincial motor fuel taxes and provincial and municipal amusement taxes were allocated). Hence the term "purchasers' prices" used here excludes provincial and municipal retail sales taxes. The estimate for the total value of such commodity taxes applicable to Other Final Demand in 1961 is included in the figure at the intersection of the row for Commodity Taxes and the column for Other Final Demand in Tables 1, 8 and 13.

## CLASSIFICATION SYSTEMS AND SELECTED DEFINITIONS

This Chapter describes the sector, industry and commodity classification systems of the 1961 Input-Output Tables. It also explains certain concepts and definitions not dealt with in Chapters 1 and 2.

### 5.1 Sectors and Industries - the Business Sector

The production and expenditure accounts of the System of National Accounts are divided into four sectors - business, government, personal, and non-resident. The business sector of the Input-Output Tables is subdivided into industries which are defined according to the D.B.S. Standard Industrial Classification (S.I.C.) /1/

The S.I.C. is a system for classifying accounting units which are known as establishments. This classification system applies to all establishments in the economy. Some S.I.C. Industries are composed of
/1/ D.B.S. cat. 非12-501 [1960].
establishments which do not belong in the business sector; for example, churches and synagogues, which are part of the personal sector, are classified in the S.I.C. to Industry 831 - Religious Organizations. Other S.I.C. Industries have establishments in the business sector and in one or both of the government and personal sectors; for example, hospitals, which occur in all three sectors, are classified in the S.I.C. to industry 821 - Hospitals.

The S.I.C. is a classification of establishments; it is not a classification of enterprises, firms, activities or commodities. "For statistical purposes, the 'establishment' is defined as the smallest unit which is a separate operating entity capable of reporting all elements of basic industrial statistics. This means that for purposes of industrial surveys, data are gathered from the most homogeneous units that maintain accounts which permit them to report on their main elements of input and output'./1/

In the business sector, the establishment must be distinguished from the firm, which is the legal entity. Typically, the establishment is the mine in mining, the plant in manufacturing, the store in retail trade, etc. The majority of firms have only one establishment but many firms, particularly the larger ones, have more than one establishment. The establishments of a multi-establishment firm may or may not be classified to the same S.I.C. Industry.

At the worksheet level of detail (187 industries) many InputOutput Industries correspond to S.I.C. Industries at the "three-digit" level of the S.I.C., while others represent groupings of S.I.C. Industries. As noted above, Input-Output Industries include only establishments in the business sector.

[^20]
### 5.2 Government Enterprises and the Government Sector

The revised version of the 1961 Input-0utput Tables, which will be published later will contain additional detail on the expenditures of categories of final demand (see Section 2.2). Establishments in the government sector will be grouped according to purpose or function (health, education, etc.) These groupings will correspond closely, although not precisely, to S.I.C. Industries.

Certain crown corporations, departments, boards, commissions and other agencies of federal, provincial and local governments are considered to be "goverment enterprises". In the production and expenditure accounts of the System of National Accounts, their activities are classified in the business sector. Principles have been established for distinguishing between government sector activities and government enterprises:

Those services of a general nature such as the protection of persons and property, health, education and highways, which are common to most governments, are usually financed out of ordinary revenues or funds repayable out of ordinary revenues. Nominal fees are charged for some general community services, but for the most part there is no necessary relationship between the taxes and levies paid by a person and the use or benefit he derives from the services./1/

The government activities involved in providing such services are
included in the government sector of the Input-0utput Accounts (see however, Section 5.8 on construction activity).

Certain other activities of government, however, have quite different characteristics, in as much as they involved the production of economic goods and the provision of services for sale on the market at a price to the consumer which is intended to compensate wholly or largely for their costs, and, in some cases, to yield a profit. The form of organization of this type of undertaking is usually a crown corporation,
/1/ D.B.S. cat. \#61-203 [1968], p.5.
or a special agency with specific powers, subject to varying degrees of financial control by government and public accountability. Capital funds are made available by direct loans and advances from government, or by outside borrowing usually guaranteed by government. In most cases, the activities of these enterprises are of an outright commercial or industrial nature, conducted in competition with private businesses or sometimes as monopolies. In terms of motivation and behavior they are more comparable to private business corporations than to institutional or non-commercial organizations with which latter category general government data are ordinarily classified./l/
The activities of government enterprises are included in the business sector and are classified to the appropriate Input-Output Industries. Examples of federal government enterprises are: the Canadian National Railways System; Canadian Arsenals Ltd; the Export Credit Insurance Corporation; the Canadian Wheat Board; the St. Lawrence Seaway Authority; the Prince Edward Island Car Ferry service./2/

### 5.3 The Personal Sector

The personal sector includes not only households, but private nonprofit institutions such as private religious and welfare organizations, private clubs, and labour unions.

The values of the outputs of commodities produced and sold by the government sector are entered as negative government expenditures; this
/1/ Ibid., p.5.
12/ For a listing of federal and provincial government enterprises and the relationship of their accounts to the Income and Expenditure Accounts, refer to D.B.S. cat. 非61-203 [annual] and D.B.S. cat. \#61-204 [annual].
has the effect of adding to the supply of these commodities. The values of the production and use of "services of government" are included in the row for Indirect Taxes and Government Services (see Sections 2.2 and 4.2). There are no comparable estimates for the commodities or for the "services of private non-profit institutions" which are produced and sold by private non-profit institutions. Sales of such goods and services to households are treated as inter-sector transfers and are therefore implicitly ignored. Thus the personal sector is treated as a direct purchaser of the items comprising the expenses of private non-profit institutions (commodities at producers' prices, commodity taxes, indirect taxes, and wages and salaries of employees).

Households are final consumers; by definition, they do not produce commodities. Where individuals and families engage in production which is to be counted as part of the domestic product, the value (cash or imputed) of the output and the related estimates of inputs (including net income) are transferred to the appropriate industry in the business sector; for this portion of their activities, the individuals and families become unincorporated business entrepreneurs. (An exception to this procedure is made for domestic servants and babysitters directly employed by households. They are not included in the business sector; rather, their wages and salaries are shown as direct payments of households.) One of the most important applications of this principle is for owner-occupants of dwellings who are treated as business entrepreneurs in the building, purchase and repair of their dwellings. In the System of National Accounts, a "space rent" is imputed for these dwellings which the individuals, as entrepreneurs, "rent" to themselves as households; the value of new construction of such buildings (including additions and major repairs) is included in business gross fixed capital formation. Thus owner-occupied dwellings are treated symetrically with dwellings for which cash rents are paid (see also Section 5.22).

By convention, all expenditures of households are current; there are no distinctions among expenditures on current account, expenditures on gross fixed capital formation and inventory change as in the business sector. However, for analytical purposes household expenditures may be classified as "durable goods" (automobiles, refrigerators), "non-durable goods" (jam, serviettes) and "services" (haircuts, piano lessons). The reader should
note the different treatment of owner-occupied dwellings and of consumer durables such as automobiles and refrigerators.

### 5.4 The Non-Resident Sector

A clear distinction must be made between resident (domestic) and non-resident (foreign) establishments on the one hand, and resident and non-resident individuals on the other. The output of the Canadian domestic economy is produced by Canadian domestic establishments which, in most instances, can be identified by the fact that they are located within the geographic boundaries of the country. The net domestic product at factor cost represents the incomes accruing to the primary factors of production employed by domestic establishments, regardless of the country of residence of those factors. Thus if a Detroit resident commutes to his job in Windsor, his wages earned in Windsor are part of Canadian domestic product.

The residence of an individual who is temporarily in another country is defined in terms of his intended length of stay, with the dividing line being one year. Thus if a Canadian resident takes a six-months training course with his parent company in the United States, for National Accounts purposes he continues to be a Canadian resident.

Canadian exports on a domestic basis are the sales of goods and services by Canadian domestic establishments to non-residents, that is, to foreign establishments and to non-resident individuals; included, therefore are such transactions as sales of food, accommodation and motor fuel to non-resident salesmen and tourists in Canada. Conversely, Canadian imports on a domestic basis are the sales by foreign establishments to Canadian domestic establishments and Canadian resident individuals.

### 5.5 The 1961 Input-Output Industrial Classification Systems

The listing of the 187 Input-Output Industries at the worksheet level of detail (the IOIC-W) appears in Appendix B. Each industry has a three-digit code, the code numbers ranging from 001 to 191 (codes, 005, 011 172 and 189 are blank). The listing shows the relationship of IOIC-W industries to the D.B.S. Standard Industrial Classification three-digit codes.

Appendix B also includes the lists of Input-Output Industries for each of the three aggregations published in Tables 1 to 6 and 8 to 11 (Volume 1 ), and Tables 13 to 16 (Volume 2):

Number of Industries 16 65 110

Designation of InputOutput Industrial Classification System IOIC-S IOIC-M IOIC-L

For
Tables:
1-6 (Volume 1)
8-11 (Volume 1)
13-16 (Volume 2)

In each of these three systems, the industry groups are numbered sequentially - for example, in IOIC-M, the industry groups are numbered from 1 to 65. Each industry group is identified in terms of the codes of IOIC-W industries which are included in that group.

### 5.6 The 1961 Input-Output Commodity Classification Systems

The list of the 644 Input-Output Commodities at the worksheet level of detail (the IOCC-W) is shown in Appendix B. The last three digits of the IOCC-W codes represent a sequential numbering of the 644 commodities, from 001 to 644. The three-digit sequential code number
is preceded by the code number of the IOIC-W industry which is the "principal producer" of the commodity. The last six commodities (IOCC-W \#000-639 to 000-644) are non-competitive. Each commodity, excluding services, is also defined in terms of the five-digit coding systems of the D.B.S. Standard Commodity Classification, /1/ the D.B.S. Import Commodity Classification, /2/ and the D.B.S. Export Commodity Classification./3/ The letter "s" following one of these five-digit codes indicates that the class has been split in establishing the IOCC-W.

The 1ists of the Input-Output commodity groups for each of the three aggregations published in Tables 1 to 17 are also shown in Appendix B:

| Number of <br> Competitive <br> Commodities | Designation of Input- <br> Output Commodity <br> Classification System | For |
| :--- | :--- | :--- |
|  | IOCC-S | Tables: |
| 65 | IOCC-M | $1-7$ |$\quad$ (Volume 1)

In each of these three classification systems, the last three digits of the code numbers represent a sequential numbering of the commodities. For a competitive commodity, this is preceded by the code number for the industry group, at the corresponding level of aggregation, which is the principal producer of the commodity. In addition, each commodity group is identified in terms of the code numbers of the IOCC-W commodities which are included in that group. (Note that in Tables 1 to 17 , the identification number for the principal producing industry is not included in the commodity group code number.)

[^21]
### 5.7 Inventories of Goods in Process

Inventories of goods in process are neither raw materials nor finished goods. Such goods could be treated as unique principal products of industries, but at the cost of creating many additional commodities. Alternatively, they could be treated as raw materials, or finished goods, or both. In the preliminary 1961 Tables, they are counted as finished goods; the value of the physical change in inventories of goods in process for an industry is assigned a commodity distribution based on the shipments of finished goods produced by the industry.

### 5.8 Dunmy Commodities and Dummy Industries

While establishments report most of their commodity inputs in considerable detail, some inputs can only be reported in catch-all categories such as office supplies, process supplies, cleaning supplies, etc. Each of these categories includes many IOCC-W commodities. The information required to estimate, for each industry, the detailed commodity content of these categories of inputs is not available. These inputs were therefore handled through the device of "dummy commodities" and "dummy industries". In the following, office supplies are used as an example to explain the technique.

A dummy commodity called "office supplies" was created. The use of office supplies by industries was estimated on the basis of information from industrial surveys. A corresponding dummy "office supplies" industry was created with an output equal to the use by all industries of the commodity "office supplies". It then remained to estimate the commodity inputs of the office supplies industry. Thus the problem of estimating the commodity composition of the office supplies purchased by each industry was replaced by the considerably simpler problem of estimating the commodity inputs of the single dummy office supplies industry. This was done by routing appropriate values of paper, envelopes, paper clips, etc. to this industry.

Eight dummy commodities and an equal number of dummy industries were created. These are IOIC-W industries 非183 to 191 (189 is blank). Dumm commodities were not routed to final demand. Thus the paper, envelopes, paper clips, etc., delivered to final demand do not appear under office supplies but are recorded separately. Moreover some commodities which might have been routed to industries through the intermediary of one or more of the dumm industries were in fact routed directly.

The analytical implication of the technique is that, under the assumption of industry technology, the detailed composition of a particular dummy commodity used by each industry is in proportion to the commodity and commodity tax inputs of the corresponding dummy industry.

### 5.9 Transportation

The producer's value of a product is defined as the value f.o.b. the producing establishment, that is, the value at the point where the product crosses the producing establishment's boundary. For an establishment which has its own means of transport this boundary extends to the point where the product leaves the captive transporting vehicle, and the transporting activity to that point is simply an internal operation of the establishment. The transportation industries in the Input-Output Tables include all business sector transportation establishments which operate on a for-hire basis, plus captive transportation activities in the business sector which are defined as separate establishments.

### 5.10 Construction

The force-account (own-account) new and repair construction of all business sector establishments and of sectors of final demand has been split off from these establishments and included in the Input-Output Construction Industry, which therefore encompasses all construction activity. This procedure, which contravenes the establishment definition of the S.I.C., was adopted for analytical reasons and because there is generally no detail
on the construction materials used by an industry or sector of final demand; however it is possible to estimate much of the input detail for total construction activity in the economy by identifying those commodities which are construction materials. Estimates of labour costs and of other inputs associated with force-account construction were also transferred to the Construction Industry.

The value of the new and repair construction which took place in a particular industry or sector of final demand was defined to be equal to the sum of the values of the inputs which were transferred out. Each industry or sector of final demand was assigned an input of repair construction (part of commodity IOCC-W ${ }^{(148-582)}$ equal to the value of the repair construction which it was estimated to have produced. Of course, purchases of contract repair construction were also included in each industry's inputs and each final demand sector's expenditure.

### 5.11 Scrap and Waste Materials

This commodity (IOCC-W 非083-283) is treated in the preliminary 1961 Input-Output Tables as a principal product of Smelting and Refining. It consists mainly of metal scrap produced in the metal industries and of the values of scrapped motor vehicles and other machinery and equipment.
$\frac{\text { Supply of IOCC-W \#083-283 }}{\text { (at producers' prices) }}$

| From Industries | (millions of <br> dollars) |
| :--- | ---: |
| Imports | 58.6 |
| Other Final Demand | 33.4 |
| Total | $\underline{69.5 *}$ |
| $\underline{161.6}$ |  |

[^22]
## Use of IOCC-W \#083-283

```
(at producers' prices)
```

| By Industries | (millions of <br> dollars) |
| :--- | ---: |
| Exports | 97.6 |
| Increase in Inventories | 57.0 |
| Total | $\underline{7.0}$ |
|  | $\underline{161.6}$ |

The figure of $\$-69.5$ million in Other Final Demand represents the receipts of persons, governments and business for scrapped motor vehicles and other machinery and equipment.

### 5.12 Agriculture

The Agriculture Industry (IOIC-W \#001) is defined mainly on an activity basis; it includes the farm activity of farm operators and the activities of certain business establishments which perform services ancillary to agriculture. The output of Agriculture consists of:
i) cash income and "income in kind" derived from the operation of farms, including farm woodlots. (Income in kind refers to the inputed value of commodities produced on the farm and consumed by the farm household; this value is added to both farm output and farm net income. The definition of a farm is that used in the 1961 Census, where a farm is an agricultural holding of one acre or more, with sales of agricultural products during the past twelve months of $\$ 50$ or more. Cash receipts from the
sale of farm products and income in kind are both adjusted for changes in farm-held inventories of field crops and livestock. Included in cash receipts are Canadian Wheat Board payments applicable to the 1961 crop, irrespective of the years in which payments were actually made.)
ii) the imputed space rental value of owner-occupied farm dwellings. (It is assumed that cash rents paid on farm dwellings are received by non-farm operators who are included in the Finance, Insurance and Real Estate Industry.)
iii) the value of output for the business sector establishments in Services Incidental to Agriculture (S.I.C. \#021).

### 5.13 Forestry

The output of the Forestry Industry (IOIC-W 非002) consists of :
i) the values of all forest products cut (logs, bolts, pulpwood, fuelwood, poles, etc.) excluding those cut on farm woodlots. (Where the forest and sawmill operations are integrated, a value is assigned to the outputs of the forestry activity, and these products appear as inputs of Sawmills; hence this portion of the Forestry Industry is defined on an activity basis excluding farm woodlots. Receipts by and payments to independent logging contractors are recorded as outputs of "work done" and inputs of "work done" in the Forestry Industry.)
ii) the outputs of business establishments in Services Incidental to Forestry (S.I.C. 非039).

### 5.14 Base Metal Mining, Smelting and Refining

Establishments primarily engaged in the activity of smelting and refining of base metals are included in the (manufacturing) industry, Smelting and Refining (IOIC-W \#083). The output of this activity is usually treated in D.B.S. Census of Manufactures statistics as a custom smelting and refining service which is provided to the mines; aside from ores and concentrates exported, the outputs of base metal mines are defined to be the smelted and/or refined metals, and their inputs include the custom smelting and refining charges. Thus the ores and concentrates which are custom smelted and refined do not appear as outputs of mining (except for changes in inventories) or as inputs of Smelting and Refining; they are simply goods in process of the mines.

For analytical reasons, it was decided to deviate from this approach in the Input-Output Tables. Mines are shown as producing ores and concentrates which then appear as inputs into Smelting and Refining (as do imported ores and concentrates) or as exports. The producers' values of smelted or refined metals appear as outputs of Smelting and Refining. As a result, the custom smelting and refining charges disappear.

Adjustments to Trade of Canada commodity classes were necessary in defining Input-Output commodity classes. Consider the export classes "nickel in ores, concentrates, and matte" and "copper in ores, concentrates, and matte". In the Input-Output Accounts, ores and concentrates are produced by mines, while the mattes are produced by Smelting and Refining; thus the values of the Trade of Canada export classes were assigned partly to ores and concentrates and partly to mattes.

### 5.15 Railroad Rolling Stock Industry

Railway repair shops have been excluded from this industry (IOIC-W \#104) in accordance with D.B.S. Census of Manufactures practice since 1961 (they are treated as part of Railway Transport)./1/

### 5.16 Advertising Services

The value of the output of this commodity (IOCC-W \#176-618), which is produced mainly by advertising agencies, consists of the value of the advertising services provided by the agencies; it does not include the cost of advertising space, advertising time, printing services, etc. which are contracted for by the agencies and included in billings to customers.

### 5.17 Meals and Alcoholic Beverages

One of the principal products of the Food and Accommodation Industry (IOIC-W \#178) is Meals (IOCC-W \#178-621). Alcoholic beverages are not included in Meals. The consumer who purchases an alcoholic beverage in a restaurant, lounge, etc. is shown as purchasing the producers' value of the beverage plus the various transportation costs, trade margins and commodity taxes up to the restaurant, lounge, etc., plus the commodity, "Service margin on alcoholic beverages" (IOCC-W \#178-622), plus any commodity taxes at the final point of sale.

[^23]
### 5.18 Gratuities

Gratuities for meals, drinks, porter service, taxi service, etc. are treated as additions to the values of outputs at producers' prices of the related goods and services provided, and are included in wages and salaries or net income of unincorporated business in the relevant industries.

### 5.19 Interest and Dividends

Dividends paid to shareholders represent a distribution to owners of corporate surplus (surplus is measured, in the Input-Output Accounts, before payments of dividends which are not identified separately). The receipt of dividends does not represent a commodity output of the receiving establishment and therefore is not taken into account in measuring the establishment's output or profit on productive activity. Interest paid by business sector establishments and interest receipts in the economy (adfusted for imputed service charges - see below) are treated in the same way as dividends.

Only interest paid by industries is included in Gross Domestic Product;
interest on the government and consumer debt is considered to be non-productive and is excluded from GDP (and from personal and government expenditure on goods and services). GDP may originate in the provision of advisory, administrative and other services in the course of arranging and managing business, consumer, government and non-resident borrowing and lending. This
leads to the problem of measuring surplus in financial institutions, such as the chartered banks, where much of the revenue is in the form of interest received from borrowers. The average rate of interest on deposits is usually lower than that on loans; because interest received is not included in the output of the recipient, the application of the concepts described above would result in negative surplus or even negative GDP for such financial institutions. It is clear that some adjustment is necessary if meaningful levels of gross output, surplus, and GDP by industry are to result.

The solution to the problem adopted in the Canadian System of National Accounts involves the imputation of an output of services provided to customers. For the chartered banks, there are two parts to the imputation:
i) it is assumed that the cash interest paid by banks to its depositors is lower than the pure interest involved, in lieu of making explicit banking service charges to depositors; the estimate for interest paid by the banks and received by depositors is raised, the offset being an imputed service output of the banks which is "purchased" by their depositors;
ii) it is assumed that the cash interest received by the banks from their borrowers is higher than the pure interest involved, in lieu of making explicit banking service charges to borrowers; the estimate for interest received by the banks and paid by borrowers is reduced, the offset being an imputed service output of the banks which is "purchased" by their borrowers.

In comparison with an initial GDP calculation made before these imputations, the adjustments increase the GDP of the banks by the amount of the imputed service charges. This increase represents:
i) an increase in the total GDP of the economy to the extent that the imputed service charges are allocated to persons, government and non-residents;
ii) a shift in GDP from other industries to the banks to the extent that the imputed service charges are allocated to those industries.
5.20 Commissions on Stock, Bond and Commodity Trading

For income tax purposes, non-financial companies usually capitalize stock and bond commissions. In the conceptual framework of the System of National Accounts, such commissions are current expenses, and the companies' book profits are overstated; therefore a capital valuation adjustment is made to profits. Stock, bond and commodity trading commissions are included in IOCC-W 非168-608.

### 5.21 Insurance

The commodity code IOCC-W \#168-609 refers to insurance service which has three components - casualty insurance service, life insurance service, and commissions of insurance agencies.

The value of the output of casualty insurance service (for fire, theft, accident, etc.) is defined to be equal to the insurance premiums received less insurance claims paid on such policies during the year, under the assumption that the insurance premiums represent payments for casualty insurance service plus risk, and that the value of claims paid represents the measure of the risk element.

In business accounting records, insurance premiums paid are treated as part of operating expenses; claims received are usually entered as adjustments to capital account. Therefore, in order to maintain the equality of final expenditures and primary inputs in the Input-Output Accounts, it is necessary to make a downward adjustment to business gross fixed capital formation or an upward adjustment to primary inputs. The latter approach has been adopted; the total input of casualty insurance service for all industries is defined as total premiums paid by business less total claims received by business. Claims received are distributed over industries according to the distribution of premiums paid. The distribution of claims is then deducted from premiums paid (the difference being cost of casualty insurance service) and added to depreciation which is part of surplus. Expenditures on casualty insurance service by persons, government, and non-residents are defined as premiums paid less claims received.

Premiums paid on life insurance policies often include a large element of saving. The value of output of life insurance service is measured in terms of the estmated expenses (of establishments providing life insurance service) which relate to life insurance activity proper. No expenditures on life insurance service have been estimated for the business sector.

The funds which represent the savings portion of life insurance policies are considered to be held in the personal sector by a private "association" of the individual policy holders; interest and dividends earned through investment of those funds are therefore deemed to be interest and dividends received by persons.

The output of the insurance activity of insurance agencies is defined to be the value of the commissions which they received from the insurance underwriters; this part of commodity IOCC-W \#168-609 is therefore a cost of establishments engaged in insurance underwriting.

### 5.22 Real Estate Rentals and Commissions

Cash rents for land, buildings, and structures are part of the commodity, "Rent of 1and, buildings, and other durable structures " (IOCC-W 非168620). Receipts of such rents are counted as outputs of the industries owning the land, buildings and structures; thus "net rent" (rent after deduction of operating expenses and depreciation) is part of the net income of unincorporated business or of the surplus of the industries which own the rented assets.

An individual who receives rent for land, buildings, etc. owned by him is considered for this purpose only to be part of the real estate industry (which in turn is part of the Finance, Insurance and Real Estate Industry -IOIC-W \#168). The imputed rental output and the associated expenses and net income of the owner-occupant of a non-farm dwelling /1/ are also included in the real estate industry (see Section 5.3). The treatment adopted for owner-
/1/ Owner-used garages are treated similarly. The expenditure of persons on dwelling rentals (whether cash or imputed) is for the residential-use portion only, that is, it excludes the business-use portion. Further, only the "space rent" is included. In the case of a cash rent payment, that portion which is estimated to represent the owners' cost of providing heat, light, water, etc. is excluded, the householder being treated as the direct purchaser of the fuel, electricity and water; similarly, where the owner provides facilities such as a refrigerator and stove, the estimated portion of the cash rent for this service is treated as a facility rental expenditure of the householder. For the owner-occupant, such adjustments are not necessary because the imputation is made only for the residential space rent.
occupied dwellings makes the level of business gross fixed capital formation and of GDP relatively invariant to the extent to which dwellings are owneroccupied rather than rented.

For the 1961 Input-Output Tables, the above discussion must be qualified by the fact that the outputs and associated inputs relating to new and repair construction activity are included in the Construction Industry.

Current period charges by governments for the rights to exploit mineral resources (mainly oil and natural gas) are treated as rental outputs of the governments, whether they are classified as "rents" or as "rovalties" in the government accounting records. This treatment will be reviewed in the preparation of the revised 1961 Input-Output Tables.

Real estate commissions for transferring land and buildings from one owner to another are included in IOCC-W \#168-608; the commissions are treated as additions to business gross fixed capital formation of the purchasing industry.

### 5.23 Royalties

Royalties received on patents, copyrights, trademarks, franchises and processes (IOCC-W \#168-611) are treated as commodity outputs of the receiving industries and commodity inputs of the paying industries.

### 5.24 Finance, Insurance and Real Estate Industry

The conceptual treatment of most of the activities engaged in by establishments classified to the industry (IOIC-W \#178) have been discussed in
previous Sections. The main types of operations and activities included in the industry are:

Chartered Banks<br>Bank of Canada<br>Credit Unions<br>Trust and Mortgage Companies<br>Loan Companies<br>Stock, Bond and Commodity Dealers<br>Investment and Holding Companies<br>Real Estate Companies and Agencies<br>Non-Farm Owner Occupied Dwellings<br>Insurance Companies<br>Insurance Agencies

Included in the above are government insurance enterprises and other government financial enterprises.

In addition to the imputed service charges for the Chartered Banks, imputations are made for service outputs of Trust and Mortgage Companies, Loan Companies, Credit Unions and the Bank of Canada. These imputed service charges, as well as certain cash service charges, are included in IOCC-W非168-608.

```
APPENDIX A
```


## MATHEMATICAL TREATMENT OF ANALYTICAL USES

The range of possibilities for developing models based on rectangular Input-Output Tables is not fully covered in the economic literature. This is partly because rectangular Input-Output Tables open the way for analytical refinements whose potential is only beginning to be explored. But even those models which have already been developed have not all appeared in the literature. For this reason the present Appendix contains a review of some models based on rectangular tables along with references to published or unpublished material which describes other models.

## A. 1 The Basic Model

Diagram 12 contains an abstract of the accounting framework of the 1961 Input-Output Tables. The symbols used are those proposed by the United Nations Statistical Commission in its current revision of the System of National Accounts. /1/ In this simplified framework final demand less imports for competitive commodities is shown in a single columns and designated by the symbol e. Similarly the primary inputs of industries are included in a single row and designated by the symbol $y^{\prime}$. In the course of the discussion
it will become necessary to break out particular elements of final demand and primary inputs but for the moment it is convenient to show them in aggregate./1/


## Notation

Capital letters are used for matrices, lower case letters for vectors and scalars. Column vectors are unprimed; row vectors are primed.
$U$ is a matrix of the values of intermediate inputs.
$V$ is a matrix of the values of outputs.
q is a vector of the values of total commodity outputs.
$g$ is a vector of the values of total industry outputs.
$e$ is a vector of the values of final demand less imports for competitive commodities.
$y^{\prime}$ is a vector of the values of the primary inputs of industries.
$y_{e}$ is a scalar representing the value of the primary inputs associated with final demand less imports.
/1/ The complete list and definition of symbols appears in Section A.12.

The specification of models based on the information contained in this framework involves two sets of assumptions. The first has the function of allocating the production of commodities /1/ among industries. The second establishes the production functions of industries which in turn determine the requirements of industries for commodity inputs. In combination with the accounting balance between total demand less imports and domestic production, these assumptions establish Input-Output models in which outputs are determined as a function of final demand less imports.

The simplest assumption concerning the allocation of commodity production among industries is that industries will preserve their observed share of the market for each commodity irrespective of the levels of commodity production. The mathematical expression of this assumption is the following matrix equation:
(1) $\quad g=D q$

In this equation vector $g$ represents the values of industry outputs and vector $q$ the values of commodity outputs. Matrix D is a matrix of coefficients which is calculated by dividing each element in a column of the output matrix V of Diagram 12 by the corresponding total commodity output. It will be referred to as the Market Share Matrix.

The simplest way of defining the production functions of industries is to suppose that the values of the inputs of each industry are fixed proportions of the value of the total output of the industry and are thus independent of the composition of this output. This assumption, which has always been a basic assumption of Input-Output analysis, is now being referred to in the literature as the "industry technology" assumption. The mathematical expression of this assumption is the following matrix equation:
(2) $\mathrm{Ui}=\mathrm{Bg}$

In this equation matrix $U$ is the matrix of comnodity inputs of Diagram 12. Vector $i$ is a column vector, equal in dimension to the number of
/1/ The term "commodities" unless otherwise qualified, refers to competitive commodities only.
industries, whose elements are all equal to 1 . The matrix product Ui, therefore represents a vector containing the sum of the intermediate inputs of all industries classified by commodity. Matrix B is a matrix of coefficients which is obtained by dividing each element in a column of matrix $U$ by the corresponding total industry output. Matrix B will be referred to as the Industry Technology Matrix. Vector g represents, as before, industry outputs. The equation as a whole states that total intermediate inputs classified by commodity can be calculated as the product of the Industry Technology Matrix and the vector of industry outputs.

The mathematical expression of the accounting balance between commodity production and intermediate plus final demand less imports is as follows:
(3) $\quad \mathrm{q}=\mathrm{Bg}+\mathrm{e}$

All the terms of this expression have already been defined. Substitution from eq. (1) into eq. (3) yields the following Input-Output models:
(4) $\quad \mathrm{q}=[\mathrm{I}-\mathrm{BD}]^{-1} \mathrm{e}$
(5) $\quad g=[I-D B]^{-1} D e$

These two expressions define linear transformations of final demand less imports into commodity outputs, in the case of eq. (4), and into industry outputs in the case of eq. (5).

It should be noted that, eq. (4) is redundant; eq. (5) can be used to solve for industry outputs and these solutions can be substituted into eq. (3) to give solutions for comodity outputs. The significance of using eqs. (3) and (5) instead of eq. (4) to solve for commodity outputs is that the inverse which must be calculated for eq. (4) is equal in dimension to the number of commodities whereas the inverse involved in eq. (5) is equal in dimension only to the number of industries. /1/ Thus the commodity classification can be arbitarily detailed without requiring the inversion of an arbitarily large matrix in order to solve for comodity outputs.
/1/ In fact matrix $[\mathrm{I}-\mathrm{BD}]^{-1}$ is identically equal to matrix $\left[\mathrm{I}+\mathrm{B}[1-\mathrm{DB}]^{-1} \mathrm{D}\right]$.

## A. 2 Patterns of Final Expenditure

For the purposes discussed in Section 3.2 it is convenient to know the effect of a dollar of final demand spent not on a single commodity, but on a group of commodities according to a given pattern. For example, if instead of a single vector of final demand there is a matrix of categories of final demand corresponding to submatrices 2 through 6 of Diagram 2, Chapter 2, then patterns of expenditure can be calculated as coefficients derived by dividing the elements of each column of the matrix of final demand by the total for the column. /1/ The mathematical expression of the foregoing is as follows:
(6) $\quad G=[I-D B]^{-1} D E$
where $E$ is a matrix of coefficients representing patterns of final expenditure and $G$ is a matrix any column of which represents the direct and indirect effects on industry outputs of spending one dollar on a particular category of final expenditure in the base-year pattern,/2/without allowing for import leakages./3/

## A. 3 Primary Inputs

The impact of final expenditures on industry outputs is interesting in itself, but often it represents an intermediate stage in the calculation of the impact of final expenditures on labour income, other incomes and indirect taxes. The assumption here is that the incomes and other primary inputs of an industry will be proportional to the value of the industry's output. These proportionalities are expressed by coefficients obtained by dividing the primary inputs of each industry by the industry's output. If these coefficients /1/ The total for each column includes the primary inputs associated with each category of final demand, i.e. a distribution of the scalar $y_{e}$ of diagram 12 over the categories of final demand.
/2/ Of course the coefficients of matrix E could be modified to allow for observed, hypothetical or projected changes in patterns of expenditure.
/3/ See Section 3.2.
are incorporated in a matrix $Y$ whose rows represent categories of primary inputs while the columns represent industries, then the direct and indirect effects on the primary inputs of all industries of one dollar of final demand spent on each commodity /1/ can be expressed as:
(7) $\quad H=Y[I-D B]^{-1} D$

Moreover, the impact on primary inputs of a dollar spent on each category of final expenditure $/ 2 /$ can be expressed as:

$$
\begin{equation*}
\mathrm{Y}[\mathrm{I}-\mathrm{DB}]^{-1} \mathrm{DE}=\mathrm{HE}=\mathrm{YG} \tag{8}
\end{equation*}
$$

It should be noted that matrix $Y$ can contain coefficients which represent not only the categories of primary inputs usually associated with InputOutput Tables but also coefficients for any variables which are likely to be approximately proportional to industry outputs. Two important applications of this proposition relate to employment-effects. If information is available on the occupational distribution of the employees of each industry, then by introducing occupational mix coefficients for each industry in matrix $Y$ the implications of different patterns of final expenditure for the occupational mix of the labour force can be estimated. This information might then be used to estimate educational and/or retraining requirements. When these applications take the form of projections of final expenditures for some future year, forecasts of labour requirements per unit of output are often used to refine the resulting estimates of manpower requirements. A second application in the field of employment involves the assumption that the regional distribution of employment for each industry is relatively stable and independent of the level of the industry's output. In this case the coefficients incorporated in matrix $Y$ represent the regional distribution of employment for each industry. The impact of given deliveries to final demand on the regional distribution of employment can thus be investigated. Such applications of Input-Output analysis are not confined to the field of employment. Input-Output Tables have been used to project water resource requirements, pollution effects, land use requirements and other variables which can be related to levels of industry outputs.

[^24]
## A. 4 Competing Imports

In the models described so far, competing imports are treated as exogenous vairables. Non-competing imports are, of course, determined by the levels of industry outputs when they are used by industries, or are pre-speciffed as part of final demand when they are used for final purposes. Many applications of Input-Output analysis involve investigation of the impact on both competing and non-competing imports of given deliveries to final demand. These applications require that the levels of competing imports be determined endogenously.

The simplest mechanism for determining the levels of competing imports involves the assumption that competing imports will constitute a stable proportion of the total supply of each commodity. This is simply an extension of the market share assumption to competing imports. In mathematical terms this assumption is expressed as:

$$
\begin{equation*}
m=\hat{\mu}(q+m) \tag{9}
\end{equation*}
$$

where vector $m$ represents competing imports and $\hat{\mu}$ is a diagonal matrix of coefficients whose elements are calculated as the ratios of competing imports to total supply for each commodity.

If eq. (9) is combined with eqs. (1) and (3), the following Input-Output model is obtained:

$$
\begin{align*}
& g=\left[I-D^{*} B\right]^{-1} D^{*} e^{*}  \tag{10}\\
& \text { where: } D^{*}=D(I-\hat{\mu}) \\
& : e^{*}=e+m
\end{align*}
$$

In this expression matrix $D(I-\hat{\mu})$ is a new market share matrix for which the market share coefficients of industries are calculated as a proportion of the total supply of each commodity rather than as a proportion of the domestic production of each commodity. The sum of the coefficients in any column of matrix $D(I-\hat{\mu})$ will not be equal to one, as is the case for matrix D, but will be equal to the proportion that domestic production
represents of the total supply of each commodity. Import leakages are thus built into the market share matrix. Alternatively, matrix ( $I-\hat{\mu}$ ) can be considered to modify matrix $B$ and the vector of final demand $e^{*}$. On this interpretation, the elements in each row of matrix $B$ and the corresponding element of vector $e^{*}$ are scaled down to represent the domestic content of each input coefficient and each element of final expenditure. Intermediate and final demands for domestic comodities are then apportioned to industries through the market share matrix $D$.

In principle it is possible to assign a different import content to each element of demand by scaling down each column of matrix $B$ and each category of final expenditure with a different set of domestic content coefficients. However, the information required for this purpose is only available for exports. Since the import content of exports is likely to be smaller than the import content of other elements of demand, it is important to introduce this distinction.

Coefficients representing the import content of exports are calculated from base-year exports and re-exports:
(11) $\mathrm{x}_{\mathrm{m}}=\hat{\mu}_{1} \mathrm{x}$
where $x_{m}$ is a column vector of re-exports, $\hat{\mu}_{1}$ is a diagonal matrix of import content coefficients and $x$ is a column vector of exports.

The import content of any demand other than exports is calculated as follows:
(12) $m-x_{m}=\hat{\mu}_{0}(m-x+q)$

The accounting balance equation, eq. (3), can now be rewritten as:
(13) $\quad \mathrm{q}=\mathrm{Bg}+\mathrm{e}^{0}+\mathrm{x}-\mathrm{m}$
where $e^{0}=e-x+m$

Substitution into eq. (13) from eqs. (1), (11) and (12) gives:
(14) $g=\left[I-D\left(I-\hat{\mu}_{0}\right) B\right]^{-1} D\left[\left(I-\hat{\mu}_{0}\right) e^{0}+\left(I-\hat{\mu}_{1}\right) x\right]$

Eq. (14) is comparable to eq. (10) except that exports are assigned a different import content from any other demand. Given the solutions for industry outputs defined by eq. (14), it is also possible to solve for commodity outputs and competing imports:

$$
\begin{align*}
& q=\left(I-\hat{\mu}_{0}\right)\left(B g+e^{0}\right)+\left(I-\hat{\mu}_{1}\right) x  \tag{15}\\
& m=\hat{\mu}_{0}\left(B g+e^{0}\right)+\hat{\mu}_{1} x \tag{16}
\end{align*}
$$

The expression developed in Section A. 2 for estimating the impact on industry outputs of a dollar spent according to the base-vear pattern of a particular category of final expenditure can be reproduced with matrix $\left[I-D\left(I-\hat{\mu}_{0}\right) B\right]^{-1} D$ rather than matrix $(I-D B)^{-1} D$. In this case, the elements of each column of the matrix of expenditure patterns, E, are scaled down to allow for direct import leakages before they are premultiplied by matrix $\left(I-D\left(I-\hat{\mu}_{0} B\right]^{-1} D\right.$. If exports are included in matrix $E$ the elements in the column for exports are scaled down by the proportions contained in matrix $\left(I-\hat{\mu}_{1}\right)$ rather than those contained in matrix ( $I-\hat{\mu}_{0}$ ).

The expressions developed in Section A. 3 for estimating the primary input requirements of final expenditures can also be reproduced in these models by premultiplying the matrix of direct and indirect effect on industry outputs by the matrix $Y$ of primary input coefficients:
(17) $K=Y\left[I-D\left(I-\hat{\mu}_{0}\right) B\right]^{-1} D$

The domestic content of final expenditures must be calculated before these expenditures are applied to matrix $K$.

The parameters of the preceding models are either being published or will be published in conjunction with the 1961 Input-Output Accounts. /1/
/1/ The contents of the tables being published in this report are described in Chapter 4.

The models described in subsequent sections represent extensions of these models, some of which can be developed on the basis of the 1961 Input-Output Accounts while others require additional data.

## A. 5 Business Projections

The model represented by eq. (14) can be simplified considerably for use in projections of the level of output of a particular industry. Suppose that the rows of matrix $\left[I-D\left(I-\hat{\mu}_{0}\right) B\right]^{-1} D$ have been rearranged so that the industry in question is the first industry. With the use of base-year data, the output of this industry can be calculated as the product of the first row of matrix $\left[I-D\left(I-\hat{\mu}_{o}\right) B\right]^{-1} D$ and of $\operatorname{vector}\left[\left(I-\hat{\mu}_{0}\right) e^{0}+\left(I-\hat{\mu}_{1}\right) x\right]$. This product will be the sum of the first element in the row of the matrix multiplied by the first element in the column vector plus the second element in the row of the matrix multiplied by the second element in the vector, and so forth. The products of each element in the row of the matrix multiplied by each element in the vector can be rearranged in descending order of magnitude. Each of these products represents the direct and indirect contribution to the industry's output of each commodity in final demand. For most industries a few elements in final demand will account for eighty or ninety percent of the industry's output. For these industries it will be sufficient to forecast the demand for a few commodities in order to project industry output. The following schematic diagram indicates what is involved:

| $\mathrm{R}_{11}$ | $\mathrm{R}_{12}$ |
| :--- | :--- |
| $\mathrm{R}_{21}$ | $\mathrm{R}_{22}$ |



Matrix $\left[I-D\left[I-\hat{\mu}_{0}\right] B^{-1} D\right.$ has been relabelled $R$ and partitioned into four submatrices. Submatrices $R_{11}$ and $R_{12}$ refer to the first industry. Submatrix $\mathrm{R}_{11}$ refers to those commodities the final demand for which accounts directly and indirectly for eighty or ninety percent of the first industry's output. Vector $\left[\left(I-\hat{\mu}_{0}\right) e^{0}+\left(I-\hat{\mu}_{1}\right) x\right]--$ relabelled $e^{\#}$-- is also partitioned so that the commodities in question constitute the part of the vector $e^{\#}$ which is labelled $e_{1}^{\#}$. The vector of industry outputs has also been partitioned into two parts, the first of which contains the output of the first industry, $\mathrm{g}_{1}$, and the other part the outputs of all the other industries. The determination of the output of the first industry involves the following matrices and vectors: /1/

$$
\begin{equation*}
\mathrm{g}_{1}=\mathrm{R}_{11} \mathrm{e}_{1}^{\|}+\mathrm{R}_{12} \mathrm{e}_{2}^{\#} \tag{18}
\end{equation*}
$$

On the right hand side of this equation only the first term is important; the other term $R_{12} e_{2}^{\#}$ covers only ten to twenty percent of the output of the industry. Thus if the elements of vector $e_{1}^{\#}$ are projected individually, while the product $\mathrm{R}_{12} \mathrm{e}_{2}^{\#}$ is increased on the basis of some projection of the level of economic activity, eq. (18) will provide a profection of the industry's output which takes account of the technological interdependence of the system. Industries which produce intermediate goods can concentrate on projections of the demand for the final goods which determine the bulk of the demand for their own products.

## A. 6 Interindustry Flow Models

The Canadian Interindustry Flow Table for the year 1949 sets out the flows of goods and services from one industry to another without identifying

[^25]their commodity content. The model developed from this table involves the assumption that the flows from supplying industries are proportional to the levels of output of the recipient industries. Although this assumption appears to be unrelated to the industry technology and market share assumptions adopted for the 1961 Tables, it is in fact equivalent to a combination of the industry technology assumption and a modified version of the market share assumption.

The construction of interindustry flow tables presupposes identification of the specific sources of supply (each domestic industry and imports) of the commodity inputs of each industry and of the commodities purchased by each sector of final demand. This information can be expressed in the form of market share matrices specific to each purchasing industry and to each sector of final demand. The interindustry flow model can therefore be formulated in the following way:

$$
\begin{align*}
& g=\left[I-\sum_{j} D_{j}^{*} B_{j}\right]^{-1} \sum_{k} D_{k}^{*} e_{k}^{*}  \tag{19}\\
& \text { where: } D_{j}^{*}=D_{j}\left(I-\hat{\mu}_{j}\right) \\
& : D_{k}^{*}=D_{k}\left(I-\hat{\mu}_{k}\right)
\end{align*}
$$

In this expression matrix $D_{j}$ is a market share matrix specific to the jth industry. The elements of any column of this matrix represent, for a given commodity, the market shares of the various industries which supplied that commodity to the fth industry in the base-year. Similarly matrix $D_{k}$ is a market share matrix specific to the kth category of final demand. Matrix $B_{j}$ is of the same dimensions as matrix $B$ and contains the elements of the jth column of matrix $B$, all its other elements being equal to zero. Matrices $\hat{\mu}_{j}$ and $\hat{\mu}_{k}$ are diagonal matrices which contain, for each purchasing industry and for each category of final demand, the proportion that competitive imports constitute of the use of each commodity. $e_{k}^{*}$ is a column vector containing the expenditures on comodities of the kth category of final demand.

It can be seen from eq. (19) that interindustry flow models are similar to the models discussed so far, except that instead of assuming that industries and imports preserve their overall share of the market for each
commodity, interindustry flow models assume that industries and imports preserve their share of the market for each commodity sold to each industry and each category of final demand.

Strictly speaking, in order to use an interindustry flow model, it is necessary to have all the market share matrices corresponding to each category of final demand, i.e. matrices $D_{k}^{*}$, in order to transform final demands for commodities into final demands for the products of each industry. These market share matrices were not published for the 1949 Interindustry Flow Tables. The 1949 published tables include the following:
i) the dollar value flow table (Table 1 of D.B.S. cat. \#13-513 [1960]),
 portion of Table 1 showing final demands for the outputs of industries classified by five categories of final demand corresponds to the vectors $D_{k}^{*} e_{k}^{*}$, where $k=1,2,3,4,5$.
ii) the matrices of direct intermediate input coefficients (corresponding to matrix $\sum_{j} D_{j}^{*} B_{j}$ ) and primary input coefficients (corresponding to matrix Y). The latter includes competitive plus non-competitive imports as one row. (Table 2 of D.B.S. cat. 非13-513 [1960]).
i11) the inverse matrix corresponding to $\left[I-\sum_{j}{ }_{j}^{*} B_{j}\right]^{-1}$, and a matrix showing the primary input content of final expenditure, corresponding to $Y\left[I-\sum_{j} D_{j}^{*} B_{f}\right]^{-1}$ (Table 3 of D.B.S. cat. \#13-513 [1960]).

The matrices in (1i) and (111) above do not correspond precisely to Tables 2 and 3, respectively, of D.B.S. cat. \#13-513 [1960] because in these Tables, industry outputs and intermediate inputs were redefined to exclude intra-industry transactions. Intra-industry transactions were, however, included in the value figures of Table 1. Since commodity detail was not maintained throughout the worksheets of the 1949 Tables, the market share matrices $D_{j}^{*}$ and $D_{k}^{*}$ are not available. Thus in using these Tables for analysis, it is necessary to specify final demands for the combined products of each industry rather than for individual commodities.

The assumption in interindustry flow models of stable patterns of supply from each supplier to each customer is questionable. Many of the base-year flows from which these patterns must be derived represent configurations of market factors which need not have any stability. It is preferable to suppose that, in a given commodity market, decreases in the market shares of an industry in supplying some customers will probably be offset by increases for other customers. This argues for the stability of the overall market share matrix. Moreover, in most cases, information on particular patterns of supply is lacking. Nevertheless, there are certain specific patterns of supply which are likely to be stable and which are known. These can be incorporated in Input-Output models through the device of the specific market share matrices.

## A. 7 Technological Constraints on Supply

Most Input-Output models involve some variant of the market share assumption. This is true, for example, of the models which have been used in conjunction with U.S. Input-Output Accounts, i.e., of the so-called transfer models. /1/

The market share assumption, in one form or another, is needed to link demand with productive activity: as long as the same commodities are produced by several industries some marketing transformation is required. The market share assumption is inappropriate, however, for some of the commodities produced by some industries. In particular, when there are technological constraints on the production of an industry, the industry is unlikely to preserve its share in each of its commodity markets. This has

[^26]always been recognized in Input-Output analysis and special provisions have been made for the treatment of technologically constrained outputs such as those of by-products and joint products.

The manner in which the outputs of such products are determined is more flexible in Input-output models based on commodity-by-industry accounts than in traditional models. The standard option of making the outputs of byproducts proportional to the outputs of the industries which produce them is available. In addition, it is possible to specify that certain products of an industry will be produced in fixed proportions, the demand for each product being determined by the demand for all the products. This device can be used for joint products and for the by-products of individual commodities. Moreover, partial technological relationships can be defined such that the output of a given product is partially tied to the total output of the industry which produces it or to the outputs of selected commodities produced by the industry and partially determined by market share considerations.

The introduction of such technological constraints on supply can lead to situations of oversupply or shortage. The models designed to accommodate such situations are complicated and probably should be used only for certain kinds of analysis. /1/

## A. 8 Input Structures

All of the models discussed to this point employ the assumption that the input structures of industries are independent of the composition of their outputs. This is the industry technology assumption which is represented by the matrix of input coefficients B. In fact, it is unlikely that industries will have stable innut structures if the proportions in which they produce various commodities change.

Stone has developed a model in which the input structures of commodities, rather than those of industries, are assumed to be stable. /1/ The model involves the assumption that the input structure of each commodity is unique, i.e., that a commodity has the same input structure in each of the industries which produce it.

In reality the input structures of commodities are likely to be affected by the technological environment of the industries which produce them: the input structures of a commodity which is produced by different industries will be similar but notidentical. The similarity will be greater for inputs which are directly embodied in the commodity than for inputs which represent more or less joint costs of production of the commodity in question with the other commodities produced by each industry.

The best solution to this problem is, of course, to obtain information on commodity input structures from the industries which produce them. However, even if firms did record the inputs associated with the production of each commodity -- and there is evidence that many of them don't --the problem of joint costs would still remain. In any case, the huge volume of information to be collected and processed makes this a remote possibility at present.

In the absence of actual information, two approaches to the problem of calculating commodity input structures specific to each industry are being developed at D.B.S. Both are at the experimental stage. One represents an extension of Stone's methods for calculating commodity input structures whereby the assumption that commodity input structures are unique is relaxed. /2/ The second involves the use of data on the commodity inputs and outputs of individual establishments in conjunction with multivariate estimation techniques to determine commodity input structures for each industry. This project is being carried out in co-operation with Professor F.T. Denton of McMaster University. The manner in which commodity input structures specific to each industry can be incorporated in Input-Output models is described in GIGANTES [1969].

[^27]
## A. 9 Modifiable Coefficients

One of the serious criticisms of Input-Output analysis concerns the proportionality assumptions associated with Input-Output models. These are the hypotheses that input structures and market shares are independent of the levels of commodity and industry outputs.

Professor Matuszewski of Laval University has developed a model in which these proportionality assumptions are relaxed. The model is based on Input-Output Tables for the Province of Quebec and is now operational. It is not the intention here to describe this model but only to enumerate some of its basic features. /1/

The model is a modification of the model represented by eq. (10). The well known properties of Leontief matrices permit expansion of the inverse [I $\left.-D^{*} B\right]^{-1}$ of eq. (10) into a convergent infinite series. Thus:

$$
\begin{equation*}
g=\left[I-D^{*} B\right]^{-1} D^{*} e^{*}=\left[I+D^{*} B+\left(D^{*} B\right)^{2}+\left(D^{*} B\right)^{3}+\ldots\right] D^{*} e^{*} \tag{20}
\end{equation*}
$$

Industry outputs can be calculated iteratively by taking the sum of matrix I plus successive powers of matrix $\mathrm{D}^{*} \mathrm{~B}$, and post-multiplying by vector $D^{*} e^{*}$. In general, the sum of the first few terms in the expansion will provide an adequate approximation of the whole series.

Professor Matuszewski's modification involves the option of changing the coefficients of matrices $D^{*}$ and $B$ at each iteration. The model thus becomes:

$$
\begin{equation*}
\mathrm{g}=\left[\mathrm{I}+\mathrm{D}_{1}^{*} \mathrm{~B}_{1}+\mathrm{D}_{2}^{*} \mathrm{~B}_{2} \mathrm{D}_{1}^{*} \mathrm{~B}_{1}+\mathrm{D}_{3}^{*} \mathrm{~B}_{3} \mathrm{D}_{2}^{*} \mathrm{~B}_{2} \mathrm{D}_{1}^{*} \mathrm{~B}_{1}+\ldots\right] \mathrm{D}_{\mathrm{o}}^{*} \mathrm{e}^{*} \tag{21}
\end{equation*}
$$

Modifications in the coefficients of matrices $B$ and $D^{*}$ are defined as functions of the cumulative levels of certain variables in the previous or present iteration. These are step functions which trigger the introduction of precalculated columns of coefficients to replace existing columns as soon as the threshold level of some variable has been reached. In particular, any column of matrix B can be replaced by a new column as soon as the output
/1/ For a description of the model, see MATUSZEWSKI et al. [1967].
of the industry in question reaches a certain level. Industry input structures thus become subject to scale effects designed to accommodate the inherent non-proportionality of certain inputs. A second type of modification of matrix $B$ involves changes in columns of $B$ as a function of the cumulative levels of certain primary inputs which are also calculated at each iteration. The object in this case is to allow for substitution effects when some primary factors are scarce. The model also allows for the recalculation at each iteration of industry input structures as linear combinations of commodity input structures. These linear combinations are determined by the commodity composition of increments in the output of each industry at each iteration.

The columns of matrix $D^{*}$ are modified in the same manner to allow for scale and capacity effects. Threshold levels of industry outputs which indicate that an industry is approaching a capacity ceiling induce an decrease in the industry's market shares in the present and in subsequent iterations. Levels of commodity outputs which are calculated at each iteration also trigger changes in market shares. These are primarily designed to allow for import substitution when the capacity of the domestic economy to produce a given commodity is being strained. Moreover, the model allows for modifications in market share coefficients depending on the industry or sector of final demand which is purchasing a commodity. This feature is equivalent to the specific market share matrices associated with interindustry flow models.

The options of Professor Matuszewski's model represent an important advance in Input-Output methodology. In effect, the production and marketing functions of the system are defined as linear approximations of non-linear functions. The non-proportionalities of the model require that the analysis be carried out incrementally given an initial state of the model and that the parameters of the model be derived from several observations. This raises a question about the volume and source of the information that must be fed into the model. The answer to this question lies in the ability of the model to absorb partial information. Some of the relationships of the model can be non-linear while other relationsips remain proportional. The selective estimation of functions describing the changes in some important coefficients gives greater realism to the model without multiplying many times over the
amount of information that must be stored and manipulated. Moreover the model has the capacity to learn in the sense that successive Input-nutput Accounts become observations which the model uses to define its functions.

## A. 10 Revenue-Expenditure Models

The models described to this point belong to the class of "open" Input-Output models; the elements of final expenditure are given exogenously and the resulting levels of industry and commodity outputs are calculated.

In reality, this productive activity also generates incomes which in turn largely determine some categories of final expenditure. In many applications of Input-0utput analysis it has been desirable to extend the models so that these expenditures are determined endogenously by the incomes generated within the models. This is referred to as closing or partially closing the models. Such extensions are also possible with rectangular Input-Output Tables.

The most common extension is to suppose that consumer expenditures are determined by the wages and salaries and other incomes generated within each industry. This can be done in a number of ways. The one described here takes advantage of the structure of the 1961 Input-Output Tables.

Some of the information required for this purpose is being compiled for the 1961 Input-Output Tables. This is the information relating to categories of consumer expenditure classified by commodity which has already been described in Section A.2. It consists of the portion of matrix E which contains patterns of consumer expenditure. This submatrix will be referred to as $E_{c}$.

If the totals for consumer expenditures classified by category of expenditure are represented by a vector $\mathrm{f}_{\mathrm{c}}$, then total consumer expenditures classified by commodity can be calculated as the matrix product $E_{c} f{ }_{c}$. This expression can be substituted in eq. (13) which thus becomes:

$$
\begin{equation*}
q=B g+e^{+}+E_{c} f_{c}+x-m \tag{22}
\end{equation*}
$$

where: $e^{\dagger}=e^{0}-E_{c} f_{c}$
The dependent variables in this equation are $q, g, m$, and $f_{c}$ and, as before, the following relationships are defined:
(1) $\quad \mathrm{g}=\mathrm{Dq}$

$$
\begin{equation*}
m=\hat{\mu}_{0}\left(B_{g}+e^{0}\right)+\hat{\mu}_{1} x \tag{16}
\end{equation*}
$$

What remains is to define a relationship for $f_{c}$ in order to derive solutions for $q, g$, $m$, and $f_{c}$ as functions of $e^{\dagger}$ and $x$. This relationship will take the form of a transformation of the incomes generated by productive activity into consumption by category of consumer expenditure.

The information required to define this transformation is not available. It would have to be the subject of special studies. It is not the intention here to describe the nature of these studies, but rather to give a rough idea of what information would be involved and of the way in which it can conveniently be introduced in rectangular models.

There are two approaches to the estimation of the consumption associated with particular levels of income. One involves establishing income elasticities of consumption through time series analysis. A study along these lines has recently been carried out by the Economic Council of Canada. /1/ The second involves the use of cross-sectional data on family expenditures classified by level of income./2/

Of the two, the cross-sectional approach seems the more promising; the consumption generated by the activity of an industry can, in principle, be related to the particular characteristics of the income recipients of the industry. This is not possible with the aggregative macro-economic approach.
/1/ See SCHWEITZER [1967].
$12 /$ D.B.S. is carrying out family expenditure surveys which, historically, were designed to provide weights for the Consumer Price Index; they were geared to the expenditure of middle income urban families. D.B.S. is now expanding these surveys so that all levels of income, including those of rural families, are represented.

In practice, it is feasible to identify the consumption characteristics of the wage and salary earners and of the recipients of the net incomes of unincorporated businesses of an industry. /1/ It is much more difficult to associate the recipients of investment income and their consumption with particular industries because investment income may flow from one industry to another before it reaches final recipients. Moreover, even for wage and salary earners it is difficult, with existing data, to distinguish consumption habits by industry except insofar as different industries have different levels and distributions of wages and salaries and that these can be related to family incomes. /2/

Nevertheless, cross-sectional data offer the possibility of developing consumption patterns which depend on the characteristics of income recipients within each industry. In fixed coefficient models, these consumption patterns will take the form of coefficients calculated as the ratios of the estimated values of the particular categories of consumer expenditures associated with the incomes generated by each industry to the values of the outputs of industries. Implicit in these coefficients are proportionality assumptions relating, within each industry, incomes of persons to industry output, disposable incomes to incomes of persons, consumption to disposable incomes, and patterns of consumer expenditure to consumption. For wages and salaries, these proportionality assumptions will be differentiated by industry. For other incomes, an aggregate pattern of the consumer expenditures generated by such incomes will be applied to each industry.

Once established, these coefficients can be ordered in a matrix $Y_{c}$, the rows of which represent categories of consumer expenditure while the columns represent industries. Consumption classified by category of consumer expenditure, which has already been referred to as vector $f_{c}$, can then be determined as a function of industry outputs:
/1/ In the subsequent discussion, the net incomes of unincorporated businesses are not mentioned. They can be treated in the same way as wages and salaries.
/2/ Wage and salary earners also receive investment income. Moreover, some families include more than one wage earner and some wage earners have more than one job. It is not, therefore, a simple matter to associate the consumption habits of families with the wages and salaries generated within each industry.

$$
\begin{equation*}
f_{c}=Y_{c} g \tag{23}
\end{equation*}
$$

This equation, in conjunction with eqs. (22), (1) and (16), defines the following solutions for industry outputs, consumption by category of consumer expenditure, commodity outputs and competing imports:
(24) $g=\left[I-D\left(I-\hat{\mu}_{0}\right)\left(B+E_{c} Y_{c}\right)\right]^{-1} D\left[\left(I-\hat{\mu}_{0}\right) e^{\dagger}+\left(I-\hat{\mu}_{1}\right) x\right]$
(23) $\quad f_{c}=Y_{c} g$
$q=\left(I-\hat{\mu}_{0}\right)\left(B g+e^{\dagger}+E_{c} f_{c}\right)+\left(I-\hat{\mu}_{1}\right) X$
$m=\hat{\mu}_{0}\left(B g+e^{\dagger}+E_{c} f_{c}\right)+\hat{\mu}_{1} X$
It should be noted that in this model, once the pattern of consumption of an industry is estimated from the average incomes or the size distribution of incomes generated in that industry, it remains fixed; it does not vary with the level of output of the industry and hence with the level of incomes generated in the industry. Nevertheless, since each industry has a different pattern of consumption, relative variations in the output of industries will result in a changing aggregate pattern of consumption.

In order to introduce income elasticities of consumption within each industry, it is necessary to go to models with modifiable coefficients. /1/ In such models it is possible to relax the proportionality assumptions concerning the relationship of personal incomes to levels of output, of disposable incomes to personal incomes, and of consumption to disposable incomes. /2/ Replacement columns for matrix $Y_{c}$ can in principle be introduced at each iteration as a function of the cumulative levels of industry outputs.

In the long run, modifications in the columns of matrix $E_{c}$ can also be introduced. These modifications will reflect changes in the detailed commodity composition of categories of consumer expenditure as a function of levels of income and hence of levels of output.

[^28]/2/ Employment within each industry can be determined as a non-proportional function of industry outputs and used to calculate average levels of wages and salaries at each iteration which in turn will define changing patterns of consumption.

Models with modifiable coefficients based on eqs. (24), (23), (25) and (26), can also handle consumption functions calculated from time series data. In this case, each industry will generate a certain amount of disposable income / // at each iteration which, aggregated over all industries and cumulated over previous iterations, will define a changing distribution of consumption by $c$ tegory of consumer expenditure.

Models with fixed coefficients in which patterns of consumption are not differentiated by industry are the simplest of all the models designed to relate consumer expenditure to inco es. To define such models, each column of Matrix $Y_{c}$ can be calculated on the basis of: (i) the common aggregate pattern of consumption; (ii) the disposable income generated by each industry, which will be proportional to the output of the industry. Thus these models are of the same form as the fixed coefficient models in which specific patterns of consumption are defined for the disposable incomes generated by each industry, i.e., they are represented by eqs. (24), (23), (25), and (26). However, these models are, in fact, equivalent to, and can be transformed into, standard models in which the relationship between incomes and consumption is specified by augmenting the matrix of intermediate input coefficients by one row and one column. /2/ In these models, consumption is strictly proportional to income and the pattern of consumption does not vary with the level of income.

## A. 12 Definition of Symbols

A number of the symbols in the list below do not appear in Chapters 3 and 4 or in Sections A. 1 to A. 11 of this Appendix. They are required to provide formal definitions of some of the symbols in those parts of the text where definitions are given only in words.

[^29]The symbol ${ }^{\text {a }}$ over a matrix indicates that the matrix is diagonal. The symbol ' after a matrix or vector indicates transposition The symbol ${ }^{-1}$ after a matrix indicates inversion.

There are $r$ commodities, $t$ industries, $n$ categories of final demand and imports, w categories of consumer expenditure and $p$ categories of primary inputs.

In describing matrices, the first classification given is that of the rows and the second, that of the columns.
$B$ is a matrix containing the intermediate input coefficients of industries classified by commodity and by industry. It is calculated as follows: $B=U(\hat{g})^{-1}$
$B_{j}$ is a matrix of the same dimensions as matrix $B$ whose $j$ th column is identical with the $j$ th column of matrix $B$, all of its other elements being equal to zero.
$B_{1}, B_{2}, B_{3} \ldots$ are matrices of input coefficients derived from matrix B through the modifications described in Section A. 9.
$D$ is a matrix of coefficients representing the market shares of industries in the domestic production of commodities classified by industry and by commodity. It is calculated as follows: $D=V(\hat{q})^{-1}$
$D^{*}$ is a matrix of coefficients representing the market shares of industries in the total supply of commodities classified by industry and by commodity. It is calculated as follows: $D^{*}=V(\hat{q}+\hat{m})^{-1}=D(I-\hat{\mu})$
$D_{j}$ is a matrix of coefficients representing the market shares of industries in the domestic production of commodities used by the jth industry, classified by producing industry and by commodity.
$D_{f}^{*}$ is a matrix of coefficients representing the market shares of industries in the supply of commodities to the jth industry for intermediate use classified by industry and by commodity. It is calculated as follows: $D_{j}^{*}=V_{j}\left(\hat{u}_{j}\right)^{-1}=D_{j}\left(I-\hat{\mu}_{j}\right)$
$D_{k}$ is a matrix of coefficients representing market shares of industries in the domestic production of commodities purchased by the kth category of final demand, classified by producing industry and by commodity.
$D_{k}^{*}$ is a matrix of coefficients representing the market shares of industries in the supply of commodities to the kth category of final demand classified by industry and by commodity. It is calculated as follows: $D_{k}^{*}=V_{k}\left(e_{k}^{*}\right)^{-1}=D_{k}\left(I-\hat{u}_{k}\right)$
$D_{0}^{*}, D_{1}^{*}, D_{2}^{*}, \ldots$ are market share matrices derived from matrix $D^{*}$ through the modifications described in Section A.9.
$\Delta$ inv. is a column vector containing the values of the physical changes in the inventories of competing commodities.
e is a column vector containing total final demand for competing commodities classified by commodity, less competing imports classified by commodity. It is calculated as follows: /1/e $=\mathrm{Fi}^{(\mathrm{n})}$
$e^{*}$ is a column vector containing total final demand for competing commodities classified by commodity. It is calculated as follows: $e^{*}=e+m$
$e^{\circ}$ is a column vector derived from vector $e^{*}$ by subtracting the vector of commodity exports from the latter: $e^{\circ}=e^{*}-x$
$e^{\#}$ is a column vector derived from vector $e^{0}$ and the vector of exports through the following operations: $e^{\#}=\left(I-\hat{\mu}_{0}\right) e^{0}+\left(I-\hat{\mu}_{1}\right) x$

$e_{k}^{*}$ is a column vector containing the expenditure on commodities of the kth category of final demand, classified by commoditv.
/1/ The formal definitions of $e, E, f^{\prime}, F, S, y_{e}$ and $Y_{E}$ in this Section provide for imports and every category of final demand. Where these symbols are used in Chapters 3 and 4, and in Sections A. 1 to A. 11 of Appendix A, the inclusion or exclusion of imports and of particular categories of final demand is indicated by the particular context of their uses. This is done in order not to further complicate the notation.
$e_{c}$ is a column vector containing consumer expenditure on commodities classified by commodity. It is calculated as follows: $e_{c}=F_{c}{ }^{i}(w)$
$e^{\dagger}$ is a column vector derived by subtracting vector $e_{c}$ from vector $e^{\circ}$.
$E$ is a matrix of coefficients representing: (i) the base-year pattern of expenditures on commodities of categories of final demand, classified by commodity and by category of final demand; (ii) the base-year pattern of imports of commodities classified by commodity. It is calculated as follows: $/ 1 / E=F\left(\hat{f}^{\prime}\right)^{-1}$
$E_{c}$ is a matrix of coefficients representing the base-year pattern of expenditures on commodities of categories of consumer expenditure classified by commodity and by category of consumer expenditure. It is calculated as follows: $E_{c}=F_{c}\left(\hat{f}_{c}\right)^{-1}$
$\mathrm{f}^{\prime}$ is a row vector containing total final demand classified by category of final demand and the total for imports with a negative sign. It is calculated as follows: $/ 2 / f^{\prime}=i^{\prime}(r) F+i^{\prime}(p)^{S} f^{\prime}$
$f_{c}$ is a column vector of total consumer expenditure classified by category of expenditure. This vector contains w elements of vector $\mathrm{f}^{\prime}$.
$F$ is a matrix containing: (i) the expenditure on commodities of categories of final demand classified by commodity and by category of final demand; (ii) a column of the value of imports of commodities classified by commodity, with negative signs. /3/
$F_{c}$ is the part of matrix $F$ which contains consumer expenditure on commodities classified by commodity and by category of consumer expenditure. Matrix $F_{c}$ contains $w$ columns of matrix $F$.
$g$ is a column vector of total industry outputs classified by industry.
$\left[\begin{array}{l}g_{1} \\ \cdots g_{2}\end{array}\right]$ is a column vector derived by partitioning vector g i. 5 .
$/ 1 /, / 2 /, / 3 /$ See footnote on p. 159.
$G$ is a matrix calculated as follows: $G=[I-D B]^{-1} D E$
$H$ is a matrix calculated as follows: $H=Y[I-D B]^{-1} D$
$i$ is a column vector, each of the elements of which is equal to one. Vector i can be of various dimensions indicated by a subscript in parentheses, e.g., $i_{(w)}{ }^{i}(n)$
$i^{\prime}$ is a row vector, each of the elements of which is equal to one. Vector i' can be of various dimensions indicated by a subscript in parentheses, e.g., $1^{\prime}(n), 1^{\prime}(p)$

I is the identity matrix.
$K$ is a matrix calculated as follows: $K=Y\left[I-D\left(I-\hat{\mu}_{0}\right) B\right]^{-1} D$
$m$ is a column vector containing competing imports classified by commodity.
$m_{j}$ is a column vector containing the use of competing imports by the fth industry for intermediate purposes, classified by commodity.
$m_{k}$ is a column vector containing the purchase of imported commodities by the kth category of final demand classified by commodity.
$\hat{\mu}$ is a diagonal matrix of coefficients representing, for each commodity, the ratio of total imports to total supply. It is calculated as follows: $\hat{\mu}=\hat{m}(\hat{m}+\hat{q})^{-1}$
$\hat{\mu}_{o}$ is a diagonal matrix of coefficients representing, for each commodity, the ratio of total imports less re-exports to total supply less exports. It is calculated as follows: $\hat{\mu}_{0}=\left(\hat{m}-\hat{x}_{m}\right)(\hat{m}+\hat{q}-\hat{x})^{-1}$
$\hat{\mu}_{1}$ is a diagonal matrix of coefficients representing, for each commodity the ratio of re-exports to exports. It is calculated as follows: $\hat{\mu}_{1}=x_{m}(\hat{x})^{-1}$
$\hat{\mu}_{j}$ is a diagonal matrix of coefficients representing, for each commodity, the ratio of the use of imports by the $j$ th industry to the total use of the commodity by the $j$ th industry. Matrix $\hat{\mu}_{j}$ is calculated as follows: $\hat{\mu}_{j}=\hat{m}_{j}\left(\hat{u}_{j}\right)^{-1}$
$\hat{\mu}_{k}$ is a diagonal matrix of coefficients representing, for each commodity, the ratio of the purchase of imports by the kth category of final demand to the total purchase of the commodity by the $k$ th category of final demand. Matrix $\hat{\mu}_{k}$ is calculated as follows: $\hat{\mu}_{k}=\hat{m}_{k}\left(\hat{e}_{k}^{*}\right)^{-1}$
$q$ is a column vector of total commodity outputs classified by commodity.
$R$ is a matrix calculated as follows: $R=\left[I-D\left(I-\hat{\mu}_{0}\right) B\right]^{-1} D$
$\left[R_{11}: R_{12}\right]$ is a matrix derived by partitioning matrix $R$ as described
$\left.\dot{R}_{21}: \dot{R}_{22}\right]$ in Section $A .5$.
$\sum \quad$ is the summation sign.
$S$ is a matrix containing the primary inputs of industries classified by category of primary input and by industry. /1/
$S_{f}$ is a matrix containing: (i) the primary inputs associated with the expenditures of categories of final demand, classified by category of primary input and by category of final demand; (ii) a column of primary inputs associated with imports, each element of which is multiplied by minus one (see Table A and Diagram 4 of Section 4.2). /2/
$u_{j}$ is a column vector containing the intermediate inputs of industry j classified by commodity.
$U$ is a matrix containing the intermediate inputs of industries classified by commodity and by industry.
/1/, /2/ See footnote on p. 159.
$V$ is a matrix containing the outputs of industries classified by industry and by commodity.
$\mathrm{V}_{\mathrm{j}}$ is a matrix containing domestically produced commodities used by the fth industry for intermediate purposes, classified by producing industry and by commodity.
$V_{k}$ is a matrix containing the domestically produced commodities purchased by the kth category of final demand, classified by producing industry and by commodity. It should be noted that $\sum_{j} V_{j}+\sum_{k} V_{k}=V$.
$x$ is a column vector of total exports classified by commodity.
$x_{m}$ is a column vector of re-exports classified by commodity.
$y^{\prime}$ is a row vector of the total primary inputs of industries. classified by industry. Vector $y^{\prime \prime}$ is calculated as follows: $y^{\prime}=i^{\prime}(p)^{S}$
$y_{e}$ is a scalar representing the total primary inputs associated with the expenditures of all categories of final demand less imports. It is equal to the sum of the elements of matrix $S_{f}$ and is calculated as follows: /1/ ${ }^{y} e=i^{\prime}(p)^{S_{f}}(n)$
$Y$ is a matrix containing the primary input coefficients of industries classified by category of primary input and by industry. It is calculated as follows: $\mathrm{Y}=\mathrm{S}(\hat{\mathrm{g}})^{-1}$
$Y_{c}$ is a matrix of coefficients representing the consumer expenditure, generated by the personal incomes of each industry per unit of output of the industry, classified by category of personal expenditure and by industry (see Section A.10).

[^30]$Y_{E}$ is a matrix containing: (i) the primary input coefficients associated with the expenditures of categories of final demand, classified by category of primary input and by category of final demand; (ii) a column of primary input coefficients associated with imports. Matrix $Y_{E}$ is calculated as follows: /1/ $Y_{E}=S_{f}\left(\hat{f}^{\prime}\right)^{-1}$

[^31]
## LIST OF REFERENCES

A. Publications of the Dominion Bureau of Statistics (Ottawa: Queen's Printer)

No. 12-501 Standard Industrial Classification Manual (1960).
No. 12-502 Standard Commodity Classification Manual - Vol. 1: The Classification (1959).
No. 12-521 Export Commodity Classification - Vol. 1: The Classification (1961).
No. 12-524 Import Commodity Classification - Vol. 1: The Classification (1964).
No. 13-201 National Accounts, Income and Expenditure (annual).
No. 13-502 National Accounts, Income and Expenditure, 1926-1956 (1962).
No. 13-513 Supplement to the Interindustry Flow of Goods and Services, Canada, 1949 (1960).
No. 42-211 Railroad Rolling Stock Industry, 1962 (1965).
No. 61-203 Federal Government Enterprise Finance (annual).
No. 61-204 Provincial Government Enterprise Finance (annual).
No. 61-506 Real Domestic Product by Industry, 1961 Base (1968).
No. 65-004 Trade of Canada - Exports by Commodities (monthly).
No. 65-007 Trade of Canada - Imports by Commodities (monthly).
No. 67-201 Canadian Balance of International Payments and International Investment Position (annual).

## B. Other References

Chenery, H. B. and P.G. Clark, Interindustry Economics (New York: John Wiley and Sons, 1959).
Gigantes, Terry, "The Representation of Technology in Input-Output Systems," to appear in A.P. Carter and A. Brady (editors), Contributions to Input-Output Analysis (Amsterdam: North-Holland Publishing Co., 1969 forthcoming).

## LIST OF REFERENCES (Cont'd)

Gigantes, Terry and Paul Pitts, "An Integrated Input-Output Framework and Some Related Analytical Models," a Paper presented to the Canadian Political Science Association Conference on Statistics, University of British Columbia, Vancouver, B.C., June 12-13, 1965 (mimeographed).
Leontief, Wassily, "An Alterative to Aggregation in Input-Output Analysis and National Accounts," Review of Economics and Statistics, Vol. XLIX, No. 3 (Aug., 1967), 412-419.
Matuszewski, T.I. et al., Rapport intérimaire sur le système de comptabilité économique du Québec, Vol. I et Vol. 1 annexe, Bureau de la Statistique du Québec et Laboratoire d'économétrie, Université Laval (1967).
Matuszewski, T.I., P.R. Pitts and J.A. Sawyer, "L'ajustement periodique des systèmes de relations inter-industrielles, Canada 1949-1958," Econometrica, Vol. 31, No. 1-2 (Jan.-Apr., 1963), 90-110.

Matuszewski, T.I., P.R. Pitts and J.A. Sawyer, "Linear Programming Estimates of Changes in Input Coefficients," The Canadian Journal of Economics and Political Science, Vol. XXX, No. 2 (May, 1964), 203-210.
Schweitzer, Thomas T., "Elasticities of Canadian Consumer Items," Economic Council of Canada (1967), (mimeographed).
Stone, Richard (ed.), Input-Output Relationships, 1954-1966, No. 3 in A Programme for Growth, Department of Applied Economics, University of Cambridge (London: Chapman and Hall, 1963).
Stone, R. and J.A.C. Brown, "A Long Term Growth Model for the British Economy," in R.C. Geary (ed.), Europe's Future in Figures (Amsterdam: NorthHolland Publishing Co., 1962).
United Nations: Department of Economic and Social Affairs, Statistical Office of the United Nations, A System of National Accounts, Studies in Methods, Series F, No. 2, Rev. 3 (New York: 1968).

$$
\underline{A} \underline{P} \underline{P} \underline{E} \underline{N} \underline{D} \underline{X} \underline{X} \quad \underline{B}
$$

## INDUSTRY AND COMMODITY CLASSIFICATIONS

PAGE
IOIC-W - Classification of 187 Input-Output Industries ..... 168
IOIC-S - Classification of 16 Input-Output Industries ..... 176
IOIC-M - Classification of 65 Input-Output Industries ..... 178
IOIC-L - Classification of 110 Input-0utput Industries ..... 182
IOCC-N - C1assification of 644 Input-Output Commodities ..... 187
IOCC-S - Classification of 40 Input-Output Commodity Groups ..... 237
IOCC-M - Classification of 65 Input-Output Commodity Groups ..... 244
IOCC-L - Classification of 197 Input-Output Commodity Groups ..... 251

## CLASSIFICATION OF 187 INPUT-OUTPUT INDUSTRIES

IOIC-W

INDUSTRY TITLES AND DEFINITIONS

| Input-Output <br> Industry Number | Input-0utput Industry Title | Standard Industrial Classification Number |
| :---: | :---: | :---: |
| 1. | Agriculture | $\begin{aligned} & 001,003,006,011, \\ & 013,015,017,019 \\ & 021 \end{aligned}$ |
| 2. | Forestry | 031,039 |
| 3. | Fishing, Hunting, Trapping | 041,045,047 |
| 4. | Base Metal and Other Metal Mines | $\begin{aligned} & 053,054,055,056, \\ & 059 \end{aligned}$ |
| 5. | (Blank) |  |
| 6. | Uranium Mines | 057 |
| 7. | Iron Mines | 058 |
| 8. | Gold Mines | 051,052 |
| 9. | Coal Mines | 061 |
| 10. | Petroleum \& Gas Wells | 063,065,066 |
| 11. | (Blank) |  |
| 12. | Asbestos Mines | 071 |
| 13. | Gypsum Mines | 073 |
| 14. | Salt Mines | 077 |
| 15. | Other Non-Metal Mines | 079 |
| 16. | Quarries \& Sand Pits | 083,087 |
| 17. | Services Incidental to Mining | $\begin{aligned} & 092,094,096,098, \\ & 099 \end{aligned}$ |
| 18. | Slaughtering and Meat Processors | 101 |
| 19. | Poultry Processors | 103 |
| 20. | Dairy Factories | 105 |

Input-Output
Industry Number
21.
22.
23.
24.
25.
26.
27.
28.
29.
30.
31.
32.
33.
34.
35.
36.
37.
38.
39.
40.
41.
42.
43.
44.
45.
46.
47.
48.
49.
50.

Input-Output Industry Title
Process Cheese Manufacturers
Fish Products Industry
107

Fruit \& Vegetable Canners and 111 112 Preservers

Standard Industrial Classification Number

Feed Manufacturers 123
Flour Mills 124
Breakfast Cereal Manufacturers 125

Biscuit Manufacturers 128

Bakeries 129
Confectionery Manufacturers 131
Sugar Refineries 133
Vegetable Oil Mills 135
Miscellaneous Food Industries 139
Soft Drink Manufacturers 141
Distilleries 143
Breweries 145
Wineries 147
Leaf Tobacco Processing 151
Tobacco Products Manufacturers 153
Rubber Footwear Manufacturers 161
Tire \& Tube Manufacturers 163
Other Rubber Industries 169
Leather Tanneries 172
Shoe Factories 174
Leather Glove Factories 175
Luggage, Handbag \& Small Leather 179 Goods Manufacturers
Cotton Yarn and Cloth Mills 183
Wool Yarn Mills 193
Wool Cloth Mills 197
Synthetic Textile Mills 201
Fibre Preparing Mills 211

| Input-Output <br> Industry Number | Input-Output Industry Title | Standard Industrial Classification Number |
| :---: | :---: | :---: |
| 51. | Thread Mills | 212 |
| 52. | Cordage \& Twine Industry | 213 |
| 53. | Narrow Fabric Mills | 214 |
| 54. | Pressed \& Punched Felt Mills | 215 |
| 55. | Carpet, Mat \& Rug Industry | 216 |
| 56. | Textile Dyeing and Finishing Plants | 218 |
| 57. | Linoleum \& Coated Fabrics Industry | 219 |
| 58. | Canvas Products Industry | 221 |
| 59. | Cotton and Jute Bag Industry | 223 |
| 60. | Miscellaneous Textile Industries | 229 |
| 61. | Hosiery Mills | 231 |
| 62. | Other Knitting Mills | 239 |
| 63. | Clothing Industries | $\begin{aligned} & 242,243,244,245, \\ & 246,247,248,249 \end{aligned}$ |
| 64. | Sawnills | 251 |
| 65. | Veneer and Plywood Mills | 252 |
| 66. | Sash \& Door \& Planing Mills | 254 |
| 67. | Wooden Box Factories | 256 |
| 68. | Coffin and Casket Industry | 258 |
| 69. | Miscellaneous Wood Industries | 259 |
| 70. | Household Furniture Industry | 261 |
| 71. | Office Furniture Industry | 264 |
| 72. | Other Furniture Industries | 266 |
| 73. | Electric Lamp and Shade Industry | 268 |
| 74. | Pulp and Paper Mills | 271 |
| 75. | Asphalt Roofing Manufacturers | 272 |
| 76. | Paper Box \& Bag Manufacturers | 273 |
| 77. | Other Paper Converters | 274 |
| 78. | Printing \& Publishing | 286,288,289 |
| 79. | Engraving, Stereotyping and Allied Industries | 287 |
| 80. | Iron and Steel Mills | 291 |


| Input-Output Industry Number | Input-Output Industry Title | Standard Industrial Classification Number |
| :---: | :---: | :---: |
| 81. | Steel Pipe \& Tube Mills | 292 |
| 82. | Iron Foundries | 294 |
| 83. | Smelting \& Refining | 295 |
| 84. | Aluminum Rolling, Casting \& Extruding | $\begin{aligned} & 296 \\ & 296 \end{aligned}$ |
| 85. | Copper \& Alloy Rolling, Casting and Extruding | 297 |
| 86. | Metal Rolling, Casting and Extruding, n.e.s. | 298 |
| 87. | Boiler \& Plate Works | 301 |
| 88. | Fabricated Structural Metal Industry | 302 |
| 89. | Ornamental \& Architectural Metal Industry | 303 |
| 90. | Metal Stamping, Pressing and Coating Industry | 304 |
| 91. | Wire \& Wire Products Manufacturers | 305 |
| 92. | Hardware, Tool \& Cutlery Manufacturers | rs 306 |
| 93. | Heating Equipment Manufacturers | 307 |
| 94. | Machine Shops | 308 |
| 95. | Miscellaneous Metal Fabricating Industries | 309 |
| 96. | Agricultural Implement Industry | 311 |
| 97. | Miscellaneous Machinery \& Equipment Manufacturers | 315 |
| 98. | Commercial Refrigeration \& Air Conditioning Equipment Manufacturers | 318 |
| 99. | Office \& Store Machinery Manufacturers | s 318 |
| 100. | Aircraft \& Parts Manufacturers | 321 |
| 101. | Motor Vehicle Manufacturers | 323 |
| 102. | Truck Body \& Trailer Manufacturers | 324 |
| 103. | Motor Vehicle Parts and Accessories Manufacturers | 325 |
| 104. | Railroad Rolling Stock Industry | 326 |

Input-Output

Industry Number $\quad$| Standard Industrial |  |
| :--- | :--- |
| 105. | Input-Output Industry Title |
| 106. | Shipbuilding and Repair |

| Input-Output Industry Number | Input-Output Industry Title | Standard Industrial Classification Number |
| :---: | :---: | :---: |
| 130. | Explosives and Ammunition Manufacturers | 371 |
| 131. | Manufacturers of Mixed Fertilizers | 377. |
| 132. | Manufacturers of Plastics and Synthetic Resins | 373 |
| 133. | Manufacturers of Pharmaceuticals and Medicines | 374 |
| 134. | Paint and Varnish Manufacturers | 375 |
| 135. | Manufacturers of Soap and Cleaning Compounds | 376 |
| 136. | Manufacturers of Toilet Preparations | 377 |
| 137. | Manufacturers of Industrial Chemicals | 378 |
| 138. | Other Chemical Industries | 379 |
| 139. | Scientific \& Professional Equipment Manufacturers | 381 |
| 140. | Jewelry \& Silverware Manufacturers | 382 |
| 141. | Broom, Brush and Mop Industry | 383 |
| 142. | Venetian Blind Manufacturers | 384 |
| 143. | Plastic Fabricators, n.e.s. | 385 |
| 144. | Sporting foods \& Toy Industry | 393 |
| 145. | Fur Dressing \& Dyeing Industry | 395 |
| 146. | Signs \& Displays Industry | 397 |
| 147. | Miscellaneous Manufacturing Industries, n.e.s. | 399 |
| 148. | Construction Industry | 404,406,409,421 |
| 149. | Air Transport | 501 |
| 150. | Services Incidental to Transportation | 502,505,517,519 |
| 151. | Water Transport | 504 |
| 152. | Railway Transport | 506 |
| 153. | Truck Transport | 507 |
| 154. | Bus Transport, Interurban and Rural | 508 |
| 155. | Urban Transit Systems | 509 |
| 156. | Taxicab Operations | 512 |
| 157. | Pipeline Transport | 515 |

## Input-Output Industry Number

158. 
159. 
160. 
161. 
162. 
163. 
164. 
165. 
166. 
167. 
168. 
169. 
170. 
171. 
172. 
173. 
174. 
175. 
176. 
177. 
178. 
179. 
180. 

Input-Output Industry Title

Highway and Bridge Maintenance
Storage
Radio \& Television Broadcasting
Communication Industries, n.e.s.
Post Office
Electric Power
Gas Distribution
Water \& Other Utilities
Wholesale Trade

Retail Trade

Finance, Insurance and Real Estate

Education and Related Services

Hospitals
Health Services
(B1ank)
Motion Picture Theatres and Film Exchanges

Other Recreational Services
Professional Services to Business Management

Advertising Services
Laundries, Cleaners and Pressers
Hotels and Restaurants
Other Personal Services

Photography

572
574

862
874
Standard Industrial Classification Number

516
524,527
543
544,545
548

576,579
$602,604,606,608$, 611, 613,614,615, 616,617,618,619, $621,622,623,624$, $625,626,627,629$
$631,642,647,649$, 652,654,656,658, $663,665,667,669$, 673,676,678,681, 691,692,693,694, 695,696,697,699

702,704,731,735, 737

801, 803, 805,807,
809
821
$823,825,827$

851

853,859
861,864,866

875,876
$871,872,877,878$, 879

893

| Input-Output Industry Number | Input-Output Industry Title | Standard Industrial Classification Number |
| :---: | :---: | :---: |
| 181. | Miscellaneous Repair \& Maintenance | 894,896,897 |
| 182. | Miscellaneous Services to Business and Persons | 869,899 |
| 183. | Machinery Maintenance and Minor , Repair Supplies |  |
| 184. | Office Supplies ) |  |
| 185. | Food Distribution and Cafeteria , Requirements |  |
| 186. | Building Maintenance, Cleaning, ) <br> Medical \& Safety Supplies | Dummy <br> Industries |
| 187. | Laboratory Supplies ) |  |
| 188. | Travel \& Entertainment ) |  |
| 189. | (Blank) ) |  |
| 190. | Advertising ) |  |
| 191. | Machinery Repair Services ) |  |

Note that Input-Output Industry Code Numbers 5, 11, 172 and 189 are blank.

## CLASSIFICATION OF 16 INPUT-OUTPUT INDUSTRIES

## IOIC-S

## INDUSTRY TITLES \& DEFINITIONS

16 Industry Aggregation No.
1.
2. Mines and Quarries, excluding Coal Mines

Mineral Fuel Mines and Wells
Food, Feed, Beverage, and Tobacco Industries
5.

Textile Industries
6.
7.
8.

Input-Output
16 Industry Aggregation Title
Agriculture, Forestry, Fishing and Trapping

Input-Output Worksheet Industry Number

001,002,003

004,006,007,008, 012,013,014,015, 016

009,010,017
018,019,020,021, 022,023,024,025, 026,027,028,029, 030,031,032,033, 034,035,036,037, 038
042,043,044,045, 046,047,048,049, 050,051, 052, 053, 054,055,056,057, 058,059,060,061, 062,063

064,065,066,067, 068,069,070,071, 072,073 074,075,076,077 080,081,082,083, 084,085,086,087, 088,089,090,091, 092,093,094,095, 097,098,099

## 16 Industry Aggregation No.

9. 
10. 
11. 
12. 
13. 
14. 
15. 
16. 

T

Input-Output 16 Industry Aggregation Title

Transportation and Electric Equipment Manufacturers

Chemical, Rubber \& Petroleum Products Industries

Other Manufacturing Industries

Construction Industries
Transportation, Storage and Trade Industries

Electric Power, Gas and Water Utilities

Communications and Other Service Industries

Miscellaneous Operating Costs Dummy Industry

Input-Output Worksheet Industry Number
$096,100,101,102$,
$103,104,105,106$,
$107,108,109,110$,
$111,112,113,114$
$039,040,041,128$,
$129,130,131,132$,
$133,134,135,136$,
137,138
$078,079,115,116$,
$117,118,119,120$,
$121,122,123,124$,
$125,126,127,139$,
$140,141,142,143$,
$144,145,146,147$

148
$149,150,151,152$, 153,154,155,156, $157,158,159,166$, 167
$163,164,165$
$160,161,162,168$, 169,170,171,172, $173,174,175,176$, $177,178,179,180$, 181,182
$183,184,185,186$, $187,188,190,191$

## INDUSTRY TITLES AND DEFINITIONS

65 Industry Aggregation No.
1.
2.
3.
4.
5.
6.
7.
8.
9.
10.
11.
12.
13.
14.
15.
16.
17.
18.
19.
20.
21.

Input-Output
65 Industry Aggregation Title
Agriculture
Forestry
Fishing, Hunting, Trapping
Metal Mines
Non-Metal Mines

Coal Mines
Petroleum,Gas \& Services Incidental to Mining

Meat \& Poultry Processors
Dairy Factories
Fruit \& Vegetables Canners and Preservers
Feed, Flour, Cereal Manufacturers
Biscuit \& Bakery Industries
Sugar, Confectionery Manufacturers
Other Food Industries
Soft Drink Manufacturers
Alcoholic Beverage Manufacturers
Tobacco Products Industries
Rubber Products Manufacturers
Leather Products Manufacturers
Synthetic Textile Mills
Cotton, Yarn and Cloth Mills

Input-Output Worksheet Industry Number

001
002
003
004,006,007,008
012,013,014,015, 016

009
010,011,017
018,019
020,021
023

024,025,026
027,028
029,030
022,031,032
033
034,035,036
037,038
039,040,041
042,043,044,045
049
046

65 Industry Aggregation No.

Input-Output
65 Industry Aggregation Title

Input-Output Worksheet Industry Number
22.
23.
24.
25.
26.
27.
28.
29.
30.
31.
32.
33.
34.
35.
36.
37.
38.
39.
40.

Knitting Mills
Clothing Industries
Other Textiles Industries

Sawnills
Furniture \& Fixture Industries
Other Wood Industries

Pulp \& Paper Mills
Other Paper Industries
Printing and Publishing
Iron \& Steel Mills
Smelting \& Refining
Other Primary Metal Industries
Fabricated Structural Metal Industry
Metal Stamping,Pressing and Coating Industry
Other Metal Working Industries

Manufacturers of Machinery (n.e.s.)
Aircraft and Parts Manufacturers
Motor Vehicles and Trailer Manufacturers

Motor Vehicle Parts Manufacturers

087,089,091,092, 093,094,095 096,097,098,099 100 101,102
061,062
063
047,048, 050, 051, 052,053,054,055, 056,057,058, 059, 060

064
070,071,072,073
065,066,067,068, 069
074
075,076,077
078,079
080
083
081,082,084,085, 086 088
090 , 103

| 65 Industry Aggregation No. | Input-Output <br> 65 Industry Aggregation Title | Input-Output Worksheet <br> Industry Number |
| :---: | :---: | :---: |
| 41. | Other Transportation <br> Equipment Manufacturers | 104,105,106 |
| 42. | Electrical Appliance Manufacturers | 107,108 |
| 43. | Manufacturers of Electric Industrial Equipment | 111 |
| 44. | Manufacturers of Communication Equipment Including Wire | 110,113 |
| 45. | Other Electrical Products Manufacturers | $109,112,114$ |
| 46. | Manufacturers of Clay, Lime \& Cement | $\begin{aligned} & 115,116,117,118, \\ & 119,120,121,122 \end{aligned}$ |
| 47. | Manufacturers of Non-Metal Mineral Products, n.e.s. | $\begin{aligned} & 123,124,125,126, \\ & 127 \end{aligned}$ |
| 48. | Petroleum \& Coal Products Industries | 128,129 |
| 49. | Plastic Manufacturers \& Synthetic Resins | 132 |
| 50. | Paint \& Varnish Manufacturers | 134 |
| 51. | Pharmaceutical, Soap \& Toiletry Products Manufacturers | 133,135,136 |
| 52. | Other Chemical Industries | $130,131,137,138$ |
| 53. | Miscellaneous Manufacturing Industries | $\begin{aligned} & 139,140,141,142, \\ & 143,144,145,146, \\ & 147 \end{aligned}$ |
| 54. | Construction | 148 |
| 55. | Wholesale \& Retail Trade | 166,167 |
| 56. | Transport \& Storage | $\begin{aligned} & 149,150,151,152, \\ & 153,154,155,156 \\ & 157,158,159 \end{aligned}$ |
| 57. | Communications | 160,161,162 |
| 58. | Utilities | 163,164,165 |
| 59. | Finance, Insurance \& Real Estate | 168 |
| 60. | Business Services | 175,176 |
| 61. | Hotels and Restaurants | 178 |


62.
63.
64.
65.

Input-Output
65 Industry Aggregation Title
Other Services

Office Supplies
Advertising \& Travel
Repair \& Operating Supplies

Input-Output Worksheet Industry Number

169,170,171,172, 173,174,177,179, 180,181,182

184
$188,189,190$
$183,185,186,187$, 191

## CLASSIFICATION OF 110 INPITT-OUTPUT INDUSTRIES

## IOIC-L

INDUSTRY TITLES \& DEFINITIONS

110 Industry Aggregation No.
1.
2.
3.
4.
5.
6.
7.
8.
9.
10.
11.
12.
13.
14.
15.
16.
17.
18.
19.
20.
21.
22.
23.
.
.

Input-Output
110 Industry Aggregation Title
Agriculture
Forestry
Fishing, Hunting, TrappingIron Mines

001
002

Iron Mines 003

Base Metal Mines 007

Uranium Mines
004,005
006
Other Metal Mines 008
Coal Mines 009
Petroleum, Gas \& Services 010,011,017 Incidental to Mining

## Asbestos Mines

012
Other Non-Metal Mines
Slaughtering \& Meat Processors
013,014,015,016

Poultry Processors 018

Dairy Factories 020 019

Process Cheese Manufacturers021
Fish Products Industry ..... 022
Fruit \& Vegetable Canners and ..... 023
Preservers
Feed Mills ..... 024
Flour Mills ..... 025
Breakfast Cereal Manufacturers ..... 026
Biscuit Manufacturers ..... 027
Bakeries ..... 028
Confectionery Manufacturers ..... 029

| 110 Industry Aggregation No. | Input-Output <br> 110 Industry Aggregation Tit1e | Input-Output Worksheet Industry Number |
| :---: | :---: | :---: |
| 24. | Sugar Refineries | 030 |
| 25. | Vegetable 011 Mills | 031 |
| 26. | Miscellaneous Food Industries | 032 |
| 27. | Soft Drink Manufacturers | 033 |
| 28. | Distilleries | 034 |
| 29. | Breweries \& Wineries | 035,036 |
| 30. | Leaf Tobacco Processing | 037 |
| 31. | Tobacco Products Manufacturers | 038 |
| 32. | Rubber Footwear Manufacturers | 039 |
| 33. | Tire \& Tube Manufacturers | 040 |
| 34. | Other Rubber Industries | 041 |
| 35. | Leather Tanneries | 042 |
| 36. | Shoe Factories | 043 |
| 37. | Glove \& Luggage Manufacturers | 044,045 |
| 38. | Cotton Yarn \& Cloth Milis | 046 |
| 39. | Wool Yarn \& Cloth Mills | 047,048 |
| 40. | Synthetic Textile Mills | 049 |
| 41. | Carpet, Mat \& Rug Industry | 055 |
| 42. | Linoleum \& Coated Fabrics Industry | 057 |
| 43. | Textile Bags \& Canvas Products Industry | 058,059 |
| 44. | Other 'rextile Industries | $\begin{aligned} & 050,051,052,053, \\ & 054,056,060 \end{aligned}$ |
| 45. | Hosiery Mills | 061 |
| 46. | Other Knitting Mills | 062 |
| 47. | Clothing Industries | 063 |
| 48. | Sawmills | 064 |
| 49. | Veneer \& Plywood Mills | 065 |
| 50. | Sash \& Door and Planing Mills | 066 |
| 51. | Other Wood Industries | 067,068,069 |
| 52. | Household Furniture Industry | 070 |
| 53. | Other Furniture Industries | 071,072,073 |


| 110 Industry | Input-Output |  |
| :--- | :--- | :--- |
| Aggregation No. | Il0 Industry Aggregation Title | Input-nutput Worksheet |
| 54. | Industry Number |  |


| 110 Industry Aggregation No. | Input-Output <br> 110 Industry Aggregation Title | Indut-Output Worksheet <br> Industry Number |
| :---: | :---: | :---: |
| 80. | Manufacturers of Communications Equipment, including Wire | 110,113 |
| 81. | Manufacturers of Electrical Industrial Equipment | 111 |
| 82. | Other Electrical Products Manufacturers | 109,112,114 |
| 83. | Cement \& Lime Products Manufacturers | 115,116 |
| 84. | Concrete \& Gypsum Products Manufacturers | 117,118,119 |
| 85. | Clay, Stone \& Refractory Products Manufacturers | 120,121,122 |
| 86. | Glass \& Glass Products Manufacturers | - 125 |
| 87. | Other Non-Metal Mineral Products Industries | $123,124,126,127$ |
| 88. | Petroleum \& Coal Products Industries | 128,129 |
| 89. | Explosives \& Ammunition Manufacturers | 130 |
| 90. | Manufacturers of Mixed Fertilizers | 131 |
| 91. | Manufacturers of Plastic Resins | 132 |
| 92. | Manufacturers of Pharmaceuticals and Medicines | 133 |
| 93. | Paints \& Varnishes Manufacturers | 134 |
| 94. | Manufacturers of Soap and Cleaning Compounds | 135 |
| 95. | Manufacturers of Toilet Preparations | - 136 |
| 96. | Industrial \& Other Chemical Industries | 137,138 |
| 97. | Miscellaneous Manufacturing Industries | $\begin{aligned} & 139,140,141,142, \\ & 143,144,145,146, \\ & 147 \end{aligned}$ |
| 98. | Construction | 148 |
| 99. | Wholesale and Retail Trade | 166,167 |
| 100. | Transportation \& Storage | $\begin{aligned} & 149,150,151,152, \\ & 153,154,155,156, \\ & 157,158,159 \end{aligned}$ |

110 Industry
Aggregation No.
101.
102.

103,
104.
105.
106.
107.
108.
109.
110.

Input-Output
110 Industry Aggregation Title
Communications
Utilities
Finance, Insurance \& Real Estate
Health \& Education Industries
Business Services
Hotels, Restaurants
Personal \& Other Services

Office Supplies 184
Advertising \& Travel
Repair \& Operating Supplies

160,161,162

175,176
178
$169,172,173,174$,
$177,179,180,181$,
$169,172,173,174$,
$177,179,180,181$, 182
Input-Output Worksheet Industry Number

163,164,165
168
170,171

188,190
183,185,186,187, 191

## CLASSIFICATION OF 644 INPUT-OUTPUT COMMODITIES

IOCC-W

## COMMODITY TITLES AND DEFINITIONS

| Input-Output Commodity Classif. No. | Input-Output <br> Commodity <br> Title | Standard Commodity Classif. | Import <br> Commodity Classif. | Export <br> Commodity Classif. |
| :---: | :---: | :---: | :---: | :---: |
| 1-001 | Cattle and calves. | 00110-90 | 00119,99 | 00119-90 |
| 1-002 | Sheep and lambs. | 00219,49 | 00249 | 00219,49 |
| 1-003 | Hogs. | 00319,49 | 00349 | 00319,49 |
| 1-004 | Poultry | 00619-99 | 00630-99 | 00630,99 |
| 1-005 | Fur bearing animals. | 00710-99 | 00739,99 | 00739,99 |
| 1-006 | Other live animals. | $\begin{aligned} & 00419-49 ; \\ & 00905-99 \end{aligned}$ | $\begin{aligned} & 00419-49 ; \\ & 00910-99 \end{aligned}$ | $\begin{aligned} & 00425-49 ; \\ & 00999 \end{aligned}$ |
| 1-007 | Rice, unmilled. | 06144,49 | 06144,49 | 06175,99s |
| 1-008 | Wheat, unmilled. | 06161,69 | 06199s | 06161-69 |
| 1-009 | Barley, oats, rye, corn and other cereals, unmilled. | $\begin{aligned} & 06111-39, \\ & 59,99 \end{aligned}$ | $\begin{aligned} & 06129,39, \\ & 99 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 06119-59, \\ & 99 \mathrm{~s} \end{aligned}$ |
| 1-010 | Milk, whole, fluid, unprocessed. | 05108s | 05119s | 05119s,99s |
| 1-011 | Eggs in the she11. | 05305-19 | 05319 | 05309,19 |
| 1-012 | Honey and beeswax. | 05500; 39405 | 05509; 39405 | 05509; 39849s |
| 1-013 | Nuts for food, not shelled. | 08110-99 | 08110-99 | 08099s |
| 1-014 | Fruits and berries, fresh or chilled, excluding tropical. | $\begin{aligned} & 07103,06,12, \\ & 18,30-36,42 \\ & 45,51-99 \end{aligned}$ | $\begin{aligned} & 07103,06,11, \\ & 12,17,18,30- \\ & 36,42,45,50 \\ & 51,59 \mathrm{~s}, 63-89 \end{aligned}$ | $\begin{aligned} & 07103-51,59 \mathrm{~s}, \\ & 63-89 \end{aligned}$ |
| 1-015 | Vegetables, fresh or chilled. | 09105-99 | 09105-99 | 09135-99 |
| 1-016 | Hay, forage and straw | 15110-50 | 15572 | 15119-50 |


| Input-Output <br> Commodity <br> Classif. No. | Input-Output <br> Commodity <br> Title | Standard <br> Commodity <br> Classif. | Import <br> Commodity <br> Classif. | Export <br> Commodity <br> Classif. |
| :---: | :---: | :---: | :---: | :---: |
| 1-017 | Grass and other seeds for sowing, excluding seed grades of cereal, potatoes and oil seeds which are included in their respective commodities. | 21101-99 | 21101-99 | 21101-99 |
| 1-018 | Nursery and greenhouse stock and related materials. | 21303-99 | 21303-99 | 21329-99 |
| 1-019 | Oil seeds, oil nuts and oil kernels. | 21210-99 | 21230-99 | 21230-99 |
| 1-020 | Hops, including lupulin. | 14415 | 14415 | 14499 s |
| 1-021 | Tobacco, raw. | 18110-18299s | 18110-18299s | 18005-99s |
| 1-022 | Mink skins, ranch, undressed. | 20238 | 20239s | 20238 |
| 1-023 | Wool in the grease. | 24203-07 | 24209 | 24209 |
| 1-024 | Services incidental to agriculture. | N/A | N/A | N/A |
| 2-025 | Logs and bolts. | $\begin{aligned} & 23102-79 ; \\ & 23329,79 \end{aligned}$ | $\begin{aligned} & 23129-79 \\ & 23859 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 23112-59 \text {; } \\ & 23399 \end{aligned}$ |
| 2-026 | Poles, pit props, fence-posts and other round timber. | 23405-99 | 23855,59s | 23407-99 |
| 2-027 | Pulpwood. | 23624-60 | 23869 s | 23624-79 |
| 2-028 | Other crude wood materials. | 23909-99 | 23899 | 23909-99 |
| 2-029 | Custom forestry. | N/A | N/A | N/A |
| 3-030 | Fish landings. | 03102-04990s | 03021-04999s | 03106-04999s |
| 3-031 | Fur skins, undressed, excluding ranch mink. | $\begin{aligned} & 20203-36, \\ & 40-99 \end{aligned}$ | $\begin{aligned} & 20220-36,39 \mathrm{~s}, \\ & 45-89 \end{aligned}$ | 20203-33,40-89 |


| Input-Output <br> Commodity <br> Classif. No. | Input-Output <br> Commodity <br> Title | Standard Commodity Classif. | Import Commodity Classif. | Export Commodity Classif. |
| :---: | :---: | :---: | :---: | :---: |
| 4-032 | Metal ores and concentrates, n.e.s. | $\begin{aligned} & 25210,30 ; \\ & 25310 ; 25410 ; \\ & 25510 ; 25650 ; \\ & 25710 ; 25903 ; \\ & 06,12-35,40-50 \\ & 60-90 \end{aligned}$ | $\begin{aligned} & 25210,30 ; \\ & 25339 \mathrm{~s} ; 25825, \\ & 40,75,78 \mathrm{~s}, 99 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 25229 ; 25310 ; \\ & 25410 \mathrm{~s} ; 25520 \mathrm{~s}, \\ & 25650 ; 25710 \mathrm{~s} ; \\ & 25920,65,75,98 \end{aligned}$ |
| 6-033 | Radio-active ores and concentrates. | 25955 | 25899s | 25955 |
| 7-034 | Iron ores and concentrates. | 25109,19 | 25120 | 25109,19 |
| 8-035 | Gold and platinum ores and concentrates. | 25610,20,29 | 25899s | 25629 |
| 8-036 | Gold and gold alloys in primary form. | 45509 | N/A | N/A |
| 9-037 | Coal. | 26105-60 | 26105-69 | 26169 |
| 10-038 | Crude mineral oils. | 26210-30 | 26410,99s | 26410,99s |
| 10-039 | Natural gas. | 26310 | 26431 | 26431; 43609 |
| 10-040 | Other crude bituminous substances. | 26349 | 26499s | 26499s |
| 10-041 | Sulphur, crude and refined. | 27977 | 27977s | 27977 |
| 12-042 | Asbestos, unmanufactured, crude, and fibrous. | 27110-40 | 27903 | 27110-40 |
| 13-043 | Gypsum. | 27940 | 27940 | 27940 |
| 14-044 | Salt. | 27970,71 | 27968,70 | 27970 |
| 15-045 | Peatmoss. | 21930 | 21999s | 21930 |
| 15-046 | Clay and other crude refractory materials. | 27210-99 | 27210-99 | 27249,99 |
| 15-047 | Natural abrasives and industrial diamonds. | 27410-99 | 27410-99 | 27410-99 |


| Input-Output <br> Commodity <br> Classif. No. | Input-Output <br> Commodity <br> Title | Standard <br> Commodity <br> Classif. | Import <br> Commodity Classif. | Export <br> Commodity <br> Classif. |
| :---: | :---: | :---: | :---: | :---: |
| 15-048 | Other crude nonmetallic minerals. | $\begin{aligned} & 26320 ; 27310, \\ & 20 ; 27905-35, \\ & 45-65,75,80- \\ & 99 \end{aligned}$ | $\begin{aligned} & 26432 ; 27905- \\ & 30,52,65,77 \mathrm{~s}, \\ & 80,85,99 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 26499 \mathrm{~s} ; \\ & 27905-30,55, \\ & 75,90,99 \end{aligned}$ |
| 16-049 | Sand and gravel. | 27510-40 | 27510,49 | 27529,40 |
| 16-050 | Stone, crude. | 27610-99 | 27610-99 | 27649-99 |
| 17-051 | Services incidental to mining. | N/A | N/A | N/A |
| 18-052 | Beef, veal, mutton and pork, fresh, chilled or frozen. | $\begin{aligned} & 01105-29,55, \\ & 59 \end{aligned}$ | 01109-55,59s | $\begin{aligned} & 01109-29,55, \\ & 59 \end{aligned}$ |
| 18-053 | Horse meat, fresh, chilled or frozen. | 01135 | 01159s | 01135 |
| 18-054 | Meat, cured. | 01309-99 | 01309-99 | 01309-99 |
| 18-055 | Meat and meat preparations, ready cooked, not canned. | $\begin{aligned} & 01505-69,89, \\ & 99 \end{aligned}$ | $\begin{aligned} & 01519,95, \\ & 99 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 01519,25, \\ & 99 \mathrm{~s} \end{aligned}$ |
| 18-056 | Meat and meat preparations, canned. | $\begin{aligned} & 01702-39,55- \\ & 99 \end{aligned}$ | $\begin{aligned} & 01703,09,80, \\ & 99 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 01730,39, \\ & 69,99 \mathrm{~s} \end{aligned}$ |
| 18-057 | Animal oils and fats and lard. | $\begin{aligned} & 12300 ; 39105- \\ & 99 \end{aligned}$ | $\begin{aligned} & 12099 ; 39115- \\ & 99 \end{aligned}$ | $\begin{aligned} & 12099 ; \\ & 39120-99 \end{aligned}$ |
| 18-058 | Margerine, shortening and similar products. | 12100, 12200 | 12049 | 12049 |
| 18-059 | Sausage casings, natural and synthetic. | 14440-50 | 14440-50 | 14449 s |
| 18-060 | Primary tankage. | 20305-99 | 20973 | 20319-99 |
| 18-061 | Feeds of animal origin, n.e.s. | 15605-30,99 | 15699s | $\begin{aligned} & 15610,29 \\ & 99 \mathrm{~s} \end{aligned}$ |
| 18-062 | Hides and skins, raw, n.e.s. | 20110-99 | 20110-99 | 20110-99 |


| Input-Output Commodity Classif. No. | Input-Output <br> Commodity <br> Tit1e | Standard <br> Commodity <br> Classif. | Import Commodity Classif. | Export <br> Commodity <br> Classif. |
| :---: | :---: | :---: | :---: | :---: |
| 18-063 | Animal materials for drugs and perfumes and crude animal products, n.e.s. | $\begin{aligned} & 20630,99 ; \\ & 20750,99 ; \\ & 20905,99 \end{aligned}$ | 20976s,99s | $\begin{aligned} & 20699 \mathrm{~s} ; \\ & 20999 \mathrm{~s} \end{aligned}$ |
| 18-064 | Custom meat packing. | N/A | N/A | N/A |
| 19-065 | Poultry, fresh, chilled or frozen. | 01165-99 | 01165-98 | 01199 |
| 19-066 | Poultry, canned. | 01749 | 01799 s | 01799s |
| 20-067 | Milk, whole, fluid, processed. | 05108s | 05119s | 05119s,99s |
| 20-068 | Cream, fresh. | 05102 | 05119s | 05119s,99s |
| 20-069 | Butter. | 05122,24 | 05129s | 05129s |
| 20-070 | Cheese, cheddar and milk. | 05130-34 | 05139s | 05130,39s |
| 20-071 | Milk, evaporated. | 05166,68 | 05169s | 05167 |
| 20-072 | Ice cream. | 05176 | 05199s | 05199 s |
| 20-073 | Other dairy products | $\begin{aligned} & 05104,10-18, \\ & 26,42-64,70, \\ & 72,78-99 ; \\ & 10145 ; 20910 \end{aligned}$ | $\begin{aligned} & 05119 \mathrm{~s}, 29 \mathrm{~s}, \\ & 39 \mathrm{~s}, 46,59, \\ & 69 \mathrm{~s} ; 10149 \mathrm{~s}, \\ & 20910 \end{aligned}$ | $\begin{aligned} & 05129 \mathrm{~s}, 39 \mathrm{~s}, 50, \\ & 52,59,63,75, \\ & 99 \mathrm{~s} ; 10150 \mathrm{~s} ; \\ & 20910 \end{aligned}$ |
| 21-074 | Process cheese. | 05136-40 | 05139 s | 05139s |
| 21-075 | Mustard, mayonnaise, salad dressings and sandwich spreads | 09710,80,90 | 09999 s | 09999 s |
| 22-076 | Fish and marine animals processed for human consumption, fish meal, marine oil and other fish products. | $\begin{aligned} & 03102-04990 \mathrm{~s} ; \\ & 15645-70 ; \\ & 20660 ; 20920- \\ & 95 ; 21925,35, \\ & 40 ; 39206-99 ; \\ & 39440 \end{aligned}$ | $\begin{aligned} & 03021-04999 \mathrm{~s} ; \\ & 15660,99 \mathrm{~s} ; \\ & 20970,76 \mathrm{~s} \\ & 99 \mathrm{~s} ; 21999 \mathrm{~s} ; \\ & 39229,99 ; \\ & 39449 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 03106-04999 \mathrm{~s} ; \\ & 15655,60,70 ; \\ & 20660,99 \mathrm{~s} ; \\ & 20920,99 \mathrm{~s} ; \\ & 21939 \mathrm{~s}, 99 \mathrm{~s} ; \\ & 39208-99 ; \\ & 39849 \mathrm{~s} ; 41603 \end{aligned}$ |


| Input-Output <br> Commodity <br> Classif. No. | Input-0utput <br> Commodity Title | Standard <br> Commodity Classif. | Import <br> Commodity <br> Classif. | Export <br> Commodity <br> Classif. |
| :---: | :---: | :---: | :---: | :---: |
| 23-077 | Fruits and berries frozen, dried and dehydrated and fruit juices, unconcentrated and concentrated. | 07203-07651 | 07212-07659 | $\begin{aligned} & 07263-07499 ; \\ & 07799 \mathrm{~s} \end{aligned}$ |
| 23-078 | Fruits and preparations, canned. | 07803-99 | 07806-99 | 07803-99 |
| 23-079 | Fruit, crystallized and glace. | 07655-99 | 07699 | 07799s |
| 23-080 | Vegetables, frozen, dried, and preserved. | 09206-09449 | 09205-09799 | 09299-09799 |
| 23-081 | Vegetables and preparations, canned. | 09504-99 | 09805-99 | 09810-99 |
| 23-082 | Soups, canned. | 14110-29 | 14159s | 14110,59s |
| 23-083 | Infant and junior foods, canned. | 14210-39 | 14299s | 14299 s |
| 23-084 | Pickles, relishes and other sauces. | 09720-70 | $\begin{aligned} & 09915-70 ; \\ & 09999 \mathrm{~s} \end{aligned}$ | 09925,99s |
| 23-085 | Vinegar. | 11710-90 | 11749 | 11079 |
| 23-086 | Other food preparations, pre-cooked and frozen, or canned. | $\begin{aligned} & 06510 ; 14320- \\ & 99 ; 14613 ; \\ & 17199 ; 17270 \end{aligned}$ | $\begin{aligned} & 06549 \mathrm{~s} ; 14320- \\ & 29 ; 14399 ; \\ & 14699 \mathrm{~s} ; 17199 \mathrm{~s} ; \\ & 17299 \end{aligned}$ | $\begin{aligned} & 06549 \mathrm{~s} ; 14699 \mathrm{~s} \\ & 17199 \mathrm{~s} ; 17299 \mathrm{~s} \end{aligned}$ |
| 24-087 | Primary or concentrated feeds. | 15805-99 | 15799s | 15799 s |
| 24-088 | Secondary feeds for commercial livestock. | $\begin{aligned} & 15905-59,72- \\ & 85 \end{aligned}$ | 15709,99s | 15709,49,99s |
| 24-089 | Chopped and scratch feeds, hulls of grains and seeds, barley and oat by-products, and oat groats. | $\begin{aligned} & 15205-30,49- \\ & 59 \end{aligned}$ | 15577 s | $\begin{aligned} & 15210,19,39 \mathrm{~s}, \\ & 59,99 \mathrm{~s} \end{aligned}$ |


| Input-Output <br> Commodity <br> Classif. No. | Input-output <br> Commodity <br> Title | Standard Commodity Classif. | Import <br> Commodity Classif. | Export <br> Commodity <br> Classif. |
| :---: | :---: | :---: | :---: | :---: |
| 24-090 | Legume and grass meal and feeds of vegetable origin, n.e.s. | $\begin{aligned} & 15509,15,99 \text {; } \\ & 15675 \end{aligned}$ | $\begin{aligned} & 15519,99 \mathrm{~s} ; \\ & 15675 \end{aligned}$ | $\begin{aligned} & 15519,99 \mathrm{~s}, \\ & 15699 \mathrm{~s} \end{aligned}$ |
| 24-091 | Pet feeds. | $15963-69,90$ | 15769,99s | 15769,99s |
| 25-092 | Wheat flour. | 06260,70 | 06299 s | 06265,67,69 |
| 25-093 | Mea1 and flour of other cereals and vegetables. | $\begin{aligned} & 06205-25,40- \\ & 55 ; 06910,30- \\ & 99 \end{aligned}$ | $\begin{aligned} & 06215-50,99 \mathrm{~s} ; \\ & 06930-99 \end{aligned}$ | $\begin{aligned} & 06215,45,99 \mathrm{~s} \\ & 06899 \mathrm{~s} \end{aligned}$ |
| 25-094 | Wheat bran, shorts and middlings and other grain feeds, n.e.s. | 15262,99 | 15577 s | 15269,99s |
| 26-095 | Breakfast cereal products. | 06610-30,99 | 06630,99s | 06830,99s |
| 27-096 | Biscuits, ice cream cones and similar products. | 06415-25,99 | $\begin{aligned} & 06417,19,55, \\ & 99 \mathrm{~s} \end{aligned}$ | 06420,99s |
| 28-097 | Bread and rolls. | 06405,10 | 06499 s | 06409 |
| 28-098 | Other bakery products. | $\begin{aligned} & 01579 ; 06430- \\ & 50 \end{aligned}$ | $\begin{aligned} & 01599 \mathrm{~s} ; 06430, \\ & 99 \mathrm{~s} \end{aligned}$ | 01599s;06499s |
| 29-099 | Cocoa and chocolate. | 11120-99 | 11140-99 | 11019 |
| 29-100 | Nuts, kernels and seeds for food, shelled or prepared. | $\begin{aligned} & 08210-25,40- \\ & 99 \end{aligned}$ | $\begin{aligned} & 08210-25,40- \\ & 99 \end{aligned}$ | 08099s |
| 29-101 | Chocolate confectionery. | 10410-20 | 10416,20 | 10420 |
| 29-102 | Other confectionery. | $\begin{aligned} & 10405,25-60, \\ & 99 \end{aligned}$ | 10402,05,99s | 10499s |
| 30-103 | Beet pulp. | 15525 | 15599s | 15525 |


| Input-Output Commodity Classif. No. | Input-Output <br> Commodity <br> Title | Standard Commodity Classif. | Import Commodity Classif. | Export <br> Commodity <br> Classif. |
| :---: | :---: | :---: | :---: | :---: |
| 30-104 | Sugar (sucrose), refined. | 10125,29 | 10149s | 10150s |
| 30-105 | Molasses and other sugar refinery products. | $\begin{aligned} & 10133,49-69, \\ & 90 \end{aligned}$ | 10168,70,91s | 10150s, 99s |
| 31-106 | Oilseed meal and cake. | 15310-99 | 15320-99 | 15330-99 |
| 31-107 | Vegetable oils and fats, crude. | $\begin{aligned} & 39303,07,11, \\ & 15,19,23,27, \\ & 31,35,39,43, \\ & 47,51,55,59, \\ & 63,80,87 \end{aligned}$ | $\begin{aligned} & 39308 \mathrm{~s}, 12 \mathrm{~s}, \\ & 16 \mathrm{~s}, 20 \mathrm{~s}, 24 \mathrm{~s}, \\ & 36 \mathrm{~s}, 40 \mathrm{~s}, 44 \mathrm{~s}, \\ & 48 \mathrm{~s}, 52 \mathrm{~s}, 60 \mathrm{~s}, \\ & 85 \mathrm{~s}, 99 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 39328 \mathrm{~s}, 56 \mathrm{~s}, \\ & 60 \mathrm{~s}, 99 \mathrm{~s} \end{aligned}$ |
| 31-108 | Oils, fats and waxes, oxidized, blown, boiled or otherwise chemically modified. | 39505-59 | 39559,99s | 39859s |
| 31-109 | Nitrogen function compounds, n.e.s. | $\begin{aligned} & 41103-26,40, \\ & 47-53,63-99 \end{aligned}$ | 41163-81,99s | 41459s |
| 32-110 | Malt, malt flour and wheat starch. | $\begin{aligned} & 06230,35,72 \text {, } \\ & 99 \end{aligned}$ | 06299s | 06230,998 |
| 32-111 | Maple sugar and syrup, invert sugar, glucose and corn syrup. | $\begin{aligned} & 10105,09,36, \\ & 39,80 \end{aligned}$ | 10110,91s | $\begin{aligned} & 10105,09,50 \mathrm{~s}, \\ & 99 \mathrm{~s} \end{aligned}$ |
| 32-112 | Prepared cake and similar mixes. | 06640 | 06699s | 06899s |
| 32-113 | Soups, dried, and soup mixes and bases. | 14149 | 14159s | 14159s |
| 32-114 | Coffee, roasted, ground or prepared. | 11220-49 | 11220-49 | 11029 |
| 32-115 | Tea. | 11310-49 | 11310-49 | 11039 |
| 32-116 | Potato chips, flakes, frills and similar products. | 14681 | 14681 | 14699 s |


| Input-Output <br> Commodity <br> Classif. No. | Input-Output <br> Commodity <br> Title | Standard Commodity Classif. | Import <br> Commodity Classif. | Export <br> Commodity Classif. |
| :---: | :---: | :---: | :---: | :---: |
| 32-117 | Miscellaneous Products and by-products of food manufacturers, n.e.s. | $\begin{aligned} & 05325-49 ; \\ & 06520-49 ; \\ & 06920 ; 08230 ; \\ & 10470 ; 11405- \\ & 99 ; 14249,90 ; \\ & 14405,10,20, \\ & 25,30,35,65, \\ & 75,99 ; 14605- \\ & 12,15-50,60- \\ & 79,85,99 ; \\ & 15235 ; 15550- \\ & 60 ; 15680 ; \\ & 39320 ; 42973, \\ & 74 \end{aligned}$ | $\begin{aligned} & 05359,69 ; \\ & 06520,49 \mathrm{~s} ; \\ & 06920 ; 08230 ; \\ & 10499 \mathrm{~s} ; 11420- \\ & 99 ; 14299 \mathrm{~s} ; \\ & 14409,10,20 \\ & 31,35,76,99 ; \\ & 14636,46,50 \\ & 99 \mathrm{~s} ; 15577 \mathrm{~s} \\ & 99 \mathrm{~s} ; 15699 \mathrm{~s} ; \\ & 39320 \mathrm{~s} ; \\ & 42999 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 05359,69 ; \\ & 06520,49 \mathrm{~s} ; \\ & 06899 \mathrm{~s} ; \\ & 08099 \mathrm{~s} ; \\ & 10499 \mathrm{~s} ; \\ & 11049 ; \\ & 14299 \mathrm{~s} ; 14476, \\ & 99 \mathrm{~s} ; 14649,99 \mathrm{~s} ; \\ & 15239 \mathrm{~s} ; 15550 \\ & 59 \mathrm{~s} ; 15699 \mathrm{~s} ; \\ & 39399 \mathrm{~s} ; 42999 \end{aligned}$ |
| 33-118 | Concentrates and syrups for soft drinks. | 10475 | 10499 s | 10499 s |
| 33-119 | Carbonated beverages, soft drinks, and mineral waters. | 17150,80 | 17199 s | 17199 s |
| 34-120 | Alcoholic beverages, distilled. | 17310-80 | $\begin{aligned} & 17310-60, \\ & 99 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 17320,40, \\ & 99 \mathrm{~s} \end{aligned}$ |
| 34-121 | Neutral spirits and wine spirits. | 17390 | 17399s | 17399 |
| 34-122 | Ethyl alcohol. | 40701,03 | 40799s | 41429s |
| 34-123 | Brewers' and distillers' grains and solubles. | 15530-40 | 15539 | 15539 |
| 35-124 | Ale, beer, stout and porter. | 17220 | 17220 | 17220 |
| 36-125 | Grape wines. | 17230,50 | 17230,50 | 17299 s |
| 37-126 | Tobacco, processed, but unmanufactured. | 18110-18299s | 18110-18299s | 18005-99s |
| 38-127 | Cigarettes. | 18350 | 18350 | 18350 |


| Input-Output Commodity <br> Classif. No. | Input-Output Commodity Title | Standard <br> Commodity Classif. | Import <br> Commodity Classif. | Export <br> Commodity <br> Classif. |
| :---: | :---: | :---: | :---: | :---: |
| 38-128 | Tobacco, manufactured, other than cigarettes. | $\begin{aligned} & 18310-30, \\ & 70-99 \end{aligned}$ | 18325, 30,99 | 18399 |
| 39-129 | Footwear, rubber and plastic. | 79404-90 | 79040-49 | 79049 |
| 40-130 | Tires and tubes, including rebuilt tires and used tires, for passenger cars. | $\begin{aligned} & 62102,04 ; \\ & 62204 ; \\ & 62404,10 \end{aligned}$ | $\begin{aligned} & 62105 \text {; } \\ & 62529 \text {; } \\ & 62549 \end{aligned}$ | $\begin{aligned} & 62005 ; \\ & 62019 \mathrm{~s} ; \\ & 62025 \end{aligned}$ |
| 40-131 | Tires and tubes, for trucks and buses. | $\begin{aligned} & 62108,10 ; \\ & 62208,10 \end{aligned}$ | 62109; 62529s | 62009; 62029s |
| 40-132 | Tires and tubes, for airplanes. | 6211s; 62212 | $\begin{aligned} & \text { 62149s; } \\ & 62529 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & \text { 62019s; } \\ & \text { 62029s } \end{aligned}$ |
| 40-133 | Tires and tubes, for tractors and implement. | 62115; 62215 | 62115; 62529s | 62015;62029s |
| 40-134 | Tire retreading, tire and tube repair material and kits, and solid and cushion tires. | $\begin{aligned} & 32404-12 ; \\ & 62303-90 ; \\ & \mathrm{d} 94584 \end{aligned}$ | $\begin{aligned} & 32549 ; 62539 ; \\ & 94999 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 32049 ; 62039 \text {; } \\ & 96099 \mathrm{~s} \end{aligned}$ |
| 41-135 | Rubber compounds and reclaimed rubber. | 42260-90 | 42260,90 | 42499s |
| 41-136 | Rubber belts and belting and rubber coated fabrics and belting. | $\begin{aligned} & 32104-24 ; \\ & 38732-39 \end{aligned}$ | $\begin{aligned} & 32104,15,19 ; \\ & 38732,36,39 \end{aligned}$ | $\begin{aligned} & 32015,19 \text {; } \\ & 38499 \mathrm{~s} \end{aligned}$ |
| 41-137 | Rubber sheeting, shoe stock and findings, and miscellaneous rubber fabricated materials. | $\begin{aligned} & 32304-16 ; \\ & 32504-52 ; \\ & 49100 ; 49203, \\ & 09,12,21,24 \end{aligned}$ | $\begin{aligned} & 32304,13,16 ; \\ & 32509,16,20, \\ & 32,36,40,46, \\ & 99 ; 49210,21, \\ & 40 \mathrm{~s} ; 49691 \end{aligned}$ | $\begin{aligned} & 32099 \mathrm{~s} ; \\ & 49055 \mathrm{~s} \text {; } \\ & 49099 \mathrm{~s} \end{aligned}$ |
| 41-138 | Hose and tubing, main1y rubber. | $\begin{aligned} & 49304,08,16- \\ & 28 \end{aligned}$ | $\begin{aligned} & 49314,16,29, \\ & 39 \mathrm{~s} \end{aligned}$ | 49060s |
| 41-139 | Flooring, tiling, and wall covering, of rubber or plastic. | 49432-56 | $\begin{aligned} & 49449 \mathrm{~s}, 85, \\ & 89 \mathrm{~s} \end{aligned}$ | 49099s |


| Input-Output <br> Commodity <br> Classif. No. | Input-Output <br> Commodity <br> Title | Standard <br> Commodity Classif. | Import <br> Commodity <br> Classif. | Export <br> Commodity <br> Classif. |
| :---: | :---: | :---: | :---: | :---: |
| 41-140 | Tires and tubes, pneumatic, n.e.s. | $\begin{aligned} & 62120-90 ; \\ & 62220-90 \end{aligned}$ | $\begin{aligned} & 62120,29 \mathrm{~s} \\ & 49 \mathrm{~s} ; 62525 \end{aligned}$ | $62019 \mathrm{~s} ; 62029 \mathrm{~s}$ |
| 41-141 | Rubber stationery <br> goods, pressure sens- <br> itive tape, and <br> thermo-fax paper. | $\begin{aligned} & 90428,44 ; \\ & 91604 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 90499 \mathrm{~s} ; \\ & 91564 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 90099 \mathrm{~s} ; \\ & 91099 \mathrm{~s} \end{aligned}$ |
| 4-142 | Rubber waste and scrap. | 29185 | 29185 | 29185 |
| 41-143 | Rubber end products, n.e.s. | $\begin{aligned} & 78682 ; 84383 \\ & 85 ; 96204-90 \end{aligned}$ | $\begin{aligned} & 78685 \mathrm{~s} ; 84492 \text {; } \\ & 96118,25,29 \end{aligned}$ | $\begin{aligned} & 78069 \mathrm{~s} ; \\ & 84039 \mathrm{~s} ; 96082 \end{aligned}$ |
| 42-144 | Leather. | $\begin{aligned} & 29160 ; 30110- \\ & 30699 \end{aligned}$ | $\begin{aligned} & 29199 s ; 30110- \\ & 30699 \end{aligned}$ | $\begin{aligned} & 29160,65 ; \\ & 30012,19,35, \\ & 39 \mathrm{~s}, 49,99 \mathrm{~s} \end{aligned}$ |
| 43-145 | Footwear, other than rubber and plastic. | $\begin{aligned} & 79110-60 ; \\ & 79300 ; 79810- \\ & 30,80-99 \end{aligned}$ | 79012-39,99 | 79024-39,99s |
| 44-146 | Leather gloves and mittens, excluding athletic and playing equipment. | 78680 | 78680 | 78067 |
| 45-147 | Leather belting, shoe stock and findings, and other leather fabricated materials. | $\begin{aligned} & 30810-99 \\ & 49206,15,18 \text {, } \\ & 27-72 \end{aligned}$ | $\begin{aligned} & 30820,99 ; \\ & 49220,40 \mathrm{~s}, \\ & 47,72 \end{aligned}$ | $\begin{aligned} & 30039 \mathrm{~s}, 99 \mathrm{~s} ; \\ & 49055 \mathrm{~s} \end{aligned}$ |
| 45-148 | Luggage. | 86404-90 | 86404,99 | 86049 |
| 45-149 | Leather handbags, billfolds and wallets, coin purses, tobacco pouches, and other leather end products. | $\begin{aligned} & 78952-64 ; \\ & 86618 ; 86716 s ; \\ & 96104,49 \end{aligned}$ | $\begin{aligned} & 78952,59 ; \\ & 86640 \mathrm{~s} ; \\ & 86716 \mathrm{~s} ; \\ & 96104,09 \end{aligned}$ | $\begin{aligned} & 78099 \mathrm{~s} ; \\ & 86099 \mathrm{~s} ; \\ & 96080 \end{aligned}$ |
| 46-150 | Yarn, cotton. | 36402, 11-67 | 36402,11-99 | 36139 s |


| Input-0utput <br> Commodity <br> Classif. No. | Input-Output <br> Commodity <br> Title | Standard Commodity Classif. | Import Commodity Classif. | Export Commodity Classif. |
| :---: | :---: | :---: | :---: | :---: |
| 46-151 | Yarns, mixed and blended, containing cotton, wool and man-made fibres, and cotton waste. | $\begin{aligned} & 24440,90,99 \\ & 36701-49 \end{aligned}$ | $\begin{aligned} & 24440,99 ; \\ & 36719,89 \mathrm{~s} \end{aligned}$ | 24499;36199s |
| 46-152 | Fabrics, broad woven of cotton. | 37302-99 | 37302-98 | 37730,39 |
| 46-153 | Tire cord and tire fabrics. | 38141-49 | 38149 | 38999s |
| 46-154 | Nets and netting. | $\begin{aligned} & 38151-59 ; \\ & 96504-12 \end{aligned}$ | $\begin{aligned} & 38156,59 ; \\ & 96151,59 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 38999 \mathrm{~s} ; 96030 \\ & 88 \mathrm{~s} \end{aligned}$ |
| 46-155 | Bed sheets, crib and non-wool blankets, towels, wash cloths, and dish and scrub cloths. | $\begin{aligned} & 84630 \mathrm{~s}, 40,45 ; \\ & 84810,15,20 ; \\ & 84904 \end{aligned}$ | $\begin{aligned} & 84633 \mathrm{~s}, 39 \mathrm{~s}, \\ & 45 ; 84805, \\ & 07,10 \mathrm{~s}, 39 \mathrm{~s} ; \\ & 84999 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 84065 \mathrm{~s}, 69 \mathrm{~s} \\ & 89 \mathrm{~s}, 99 \mathrm{~s} \end{aligned}$ |
| 47-156 | Yarn of wool and hair. | 36302-89 | 36320-90 | 36119 |
| 48-157 | Fabrics, broad woven, of wool, hair, and wool mixture. | $\begin{aligned} & 37202-89 ; \\ & 37702-89 \end{aligned}$ | $\begin{aligned} & 37203-49 ; \\ & 37703-49 \end{aligned}$ | 37719 |
| 48-158 | Papermakers' felts. | 38171-75 | 38176 | 37710 |
| 48-159 | Woollen blankets. | 84630s;96564 | $\begin{aligned} & 84633 \mathrm{~s}, 39 \mathrm{~s} ; \\ & 96154 \end{aligned}$ | $\begin{aligned} & 84065 \mathrm{~s} ; \\ & 96088 \mathrm{~s} \end{aligned}$ |
| 49-160 | Man made fibres. | 24602-99 | 24617-99 | 24699 |
| 49-161 | Polyamide resins (nylon). | 42314 | 42349 s | 42499 |
| 49-162 | Yarns and mixture yarns, spun or filament, of man-made fibre and glass. | $\begin{aligned} & 36616-93 ; \\ & 36761-79 \end{aligned}$ | $\begin{aligned} & 36609 \mathrm{~s}, 19,39, \\ & 99 \mathrm{~s} ; 36789 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 36159 \mathrm{~s} ; \\ & 36199 \mathrm{~s} \end{aligned}$ |
| 49-163 | Tire yarns. | 36803-33 | 36795 | 36199 s |


| Input-Output Commodity Classif. No. | Input-Output <br> Commodity <br> Title | Standard Commodity Classif. | Import Commodity Classif. | Export Commodity Classif. |
| :---: | :---: | :---: | :---: | :---: |
| 49-164 | Fabrics, broad woven, of man-made elastic, paper, and glass fibres and yarns. | $\begin{aligned} & 37509-99 ; \\ & 37901-29 ; \\ & 38181,89,91 \end{aligned}$ | ```37509-99; 37799; 38189, 91``` | 37759,99s |
| 49-165 | Fabrics, broad woven, of man-made fibre mixture, and blends. | 37809-86 | 37759-89 | 37789 |
| 49-166 | Silk. | $\begin{aligned} & 24110-40 ; \\ & 36210-49 ; \\ & 37108-49 \end{aligned}$ | $\begin{aligned} & 24340 ; 36259 ; \\ & 37107,49 \end{aligned}$ | $\begin{aligned} & 24349 \mathrm{~s} \\ & 36199 \mathrm{~s} \\ & 37799 \mathrm{~s} \end{aligned}$ |
| 49-167 | Rags and waste, of cotton and textile material. | 29110,15 | 29119 | 29119 |
| 50-168 | Wool and fine animal hair suitable for spinning. | 24213-99 | 24219-99 | 24219-99 |
| 50-169 | Batts, batting and wadding, stuffing and insulation, bonded non-woven fabrics prepared of textile fibres. | $\begin{aligned} & 36011-49 ; \\ & 38101-09 ; \\ & 38943,45 \end{aligned}$ | $\begin{aligned} & 36021,49 ; \\ & 38109 ; 38999 \mathrm{~s} \end{aligned}$ | 38999s |
| 51-170 | Thread, of cotton fibres. | 36405 | 36405 | 36139s |
| 51-171 | Thread, of man-made fibres. | 36602-12 | 36609s | 36159s |
| 52-172 | Yarn and thread, of other vegetable fibres. | 36510-49 | 36505-49 | 36199s |
| 52-173 | Baler and binder twine. | 36903, 05 | 36903,05 | 36903,05 |
| 52-174 | Other cordage, twine and rope. | 36911-99 | 36914-99 | 36919,99 |


| Input-Output Commodity Classif. No. | Input-Output <br> Commodity <br> Title | Standard Commodity Classif. | Import <br> Commodity <br> Classif. | Export Commodity Classif. |
| :---: | :---: | :---: | :---: | :---: |
| 53-175 | Narrow fabrics. | 38302-99 | 38319-99 | 38429 |
| 53-176 | Fabrics of lace, bobbinet and net, for apparel. | $\begin{aligned} & 38603-09,35, \\ & 39 \end{aligned}$ | 38609,39 | 38469s |
| 53-177 | Shoe and similar laces. | 78984 | 78999 s | 78099s |
| 54-178 | Carpet cushion felt. | 36123 | 36089s | 38929s |
| 54-179 | Felt, n.e.s. | $\begin{aligned} & 36101-21, \\ & 25-49 \end{aligned}$ | 36089s | 38929s |
| 55-180 | Carpeting and fabric rugs, mats, runners, floor covering and matting. | $\begin{aligned} & 84102-90 ; \\ & 84202-90 ; \\ & 84303-39,90 \end{aligned}$ | 84412-85,99s | 84039 s |
| 56-181 | Textile dyeing and finishing service. | N/A | N/A | N/A |
| 57-182 | Fabrics, coated and impregnated, excluding rubber-coated. | $\begin{aligned} & 38702-29,52- \\ & 99 \end{aligned}$ | $\begin{aligned} & 38702-29, \\ & 60-95 \end{aligned}$ | 38495,99s |
| 57-183 | Tiling, flooring and wall covering, of 1inoleum and felt base. | $\begin{aligned} & 49462-99 ; \\ & 84355,71 \end{aligned}$ | $\begin{aligned} & 49447,49 \mathrm{~s}, 87, \\ & 89 \mathrm{~s} ; 84499 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 49099 \mathrm{~s} \text {; } \\ & 84039 \mathrm{~s} \end{aligned}$ |
| 58-184 | Awnings, of cloth and plastic. | 74740s | 74099s | 74099s |
| 58-185 | Tents, hammocks, sleeping bags, and sails. | 96516-28 | 96157 s | 96088s |
| 58-186 | Tarpaulins and other covers. | 96580,82 | 96157s, 59 s | 96088s |
| 59-187 | Textile containers. | 95169,72,75 | 95075,72 | 95075 |
| 60-188 | Vegetable textile fibres n.e.s. | $\begin{aligned} & 24510-99 \\ & 49620,40 \end{aligned}$ | $\begin{aligned} & 24510-99 ; \\ & 49620,40 \end{aligned}$ | $\begin{aligned} & 24530,99 ; \\ & 49099 \mathrm{~s} \end{aligned}$ |


| Input-Output Commodity Classif. No. | Input-Output <br> Commodity <br> Title | Standard <br> Commodity <br> Classif. | Import <br> Commodity <br> Classif. | Export Commodity Classif. |
| :---: | :---: | :---: | :---: | :---: |
| 60-189 | Fabrics, foamlaminated, quilted, or embroidered, textile belting, not coated, and fabrics of other vegetable fibres | $\begin{aligned} & 37411-49 ; \\ & 38111-18,33- \\ & 39,61,69 ; \\ & 38613-19 \end{aligned}$ | $\begin{aligned} & 37415,40,49 ; \\ & 38119,61,69, \\ & 99 ; 38619 \end{aligned}$ | $\begin{aligned} & 37799 \mathrm{~s} ; \\ & 38999 \mathrm{~s} \\ & 38469 \mathrm{~s} \end{aligned}$ |
| 60-190 | Miscellaneous textile <br> fabricated materials <br> including wiping rags. | $\begin{aligned} & 38921,32,34, \\ & 81,99 ; 49644 \end{aligned}$ | $\begin{aligned} & 38999 \mathrm{~s}, 79 \text {; } \\ & 49699 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 38999 \mathrm{~s} ; \\ & 49099 \mathrm{~s} \end{aligned}$ |
| 60-191 | Shades and blinds of coated fabrics. | 74748s | 74074 s | 74099 s |
| 60-192 | Household textiles including bedding, tableware, curtains, bath supplies and miscellaneous furnishings, n.e.s. | $\begin{aligned} & 74748 \mathrm{~s} ; \\ & 84501,10 ; \\ & 84601-20,50- \\ & 90 ; 84701,15, \\ & 25-35 ; 84830 \\ & 84908-20,90 \\ & 86704 \end{aligned}$ | $\begin{aligned} & 74074 \mathrm{~s} ; 84501, \\ & 03,05,10 ; \\ & 84601,50,99 ; \\ & 84711 \mathrm{~s}, 15,28, \\ & 39 ; 84839 \mathrm{~s} ; \\ & 84999 \mathrm{~s} ; \\ & 86739 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 74099 \mathrm{~s} ; \\ & 84065 \mathrm{~s}, 69 \mathrm{~s} \\ & 79 \mathrm{~s}, 89 \mathrm{~s}, 99 \mathrm{~s} ; \\ & 86099 \mathrm{~s} \end{aligned}$ |
| 60-193 | Other textile end products, including some surgical and medicinal supplies, water life saving equipment and parachutes. | $\begin{aligned} & 60404 ; 72304, \\ & 08 ; 78904 ; \\ & 88104-12,20- \\ & 90 ; 88116 s ; \\ & 96532-60,68- \\ & 76,86-90 \end{aligned}$ | $\begin{aligned} & 60599 \mathrm{~s} ; \\ & 72039 \mathrm{~s} ; \\ & 78902,04 ; \\ & 88010,19 \mathrm{~s}, \\ & 12,27 \mathrm{~s} ; \\ & 96159 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 60099 \mathrm{~s} ; \\ & 77919 \mathrm{~s} ; \\ & 78099 \mathrm{~s} ; \\ & 88017 \mathrm{~s}, 29 ; \\ & 96088 \mathrm{~s} \end{aligned}$ |
| 61-194 | Hosiery. | $\begin{aligned} & 78501-81 ; \\ & 88540 \end{aligned}$ | $\begin{aligned} & 78522-49 ; \\ & 88054 \end{aligned}$ | $\begin{aligned} & 78055,59 ; \\ & 88069 \mathrm{~s} \end{aligned}$ |
| 62-195 | Fabrics, knitted and netted, of elastic. | 38511 | 38511 | 38449s |
| 62-196 | Fabrics, knitted, n.e.s. | $\begin{aligned} & 38503-05, \\ & 12-79 \end{aligned}$ | $\begin{aligned} & 38539,49, \\ & 59,99 \end{aligned}$ | 38449s |
| 62-197 | Underwear and sleepwear, knitted. | $\begin{aligned} & 78151-72,86 ; \\ & 78251-81 \end{aligned}$ | 78149s,99s | 78009s,19s |
| 62-198 | Outerwear, knitted. | $\begin{aligned} & 78401-90 ; \\ & 78651 \end{aligned}$ | $\begin{aligned} & 78465-99 ; \\ & 78651 \end{aligned}$ | 78045,49,69s |


| Input-Output Commodity Classif. No. | Input-Output <br> Commodity <br> Title | Standard Commodity Classif. | Import Commodity Classif. | Export Commodity Classif. |
| :---: | :---: | :---: | :---: | :---: |
| 63-199 | Underwear, n.e.s. | $\begin{aligned} & 78101-41,79, \\ & 93,99 \end{aligned}$ | 78119; 78149s | 78009 s |
| 63-200 | Sleepwear, of woven fabric. | 78201-41 | 78199s | 78019s |
| 63-201 | Coats and raincoats. | 78319,37 | 78319,36,37 | 78039 s |
| 63-202 | Outerwear, n.e.s. | $\begin{aligned} & 78301-16,22- \\ & 34,40-90 \end{aligned}$ | $\begin{aligned} & 78304-14,23- \\ & 35,41-99 \end{aligned}$ | 78022-34,39s |
| 63-203 | Headwear, gloves and mittens, excluding knitted, rubber, leather, or fur gloves and mittens. | $\begin{aligned} & 78601-45,65, \\ & 84 \end{aligned}$ | $\begin{aligned} & 78618-49,64, \\ & 65,85 \mathrm{~s}, 89 \end{aligned}$ | 78065,69s |
| 63-204 | Apparel accessories and other miscellaneous apparel and material for apparel. | $\begin{aligned} & 38902-14,23- \\ & \text { s25; 49604; } \\ & 78810-90 ; \\ & 78912-48 ; 90 \end{aligned}$ | $\begin{aligned} & 38902,11,19, \\ & 99 \mathrm{~s} ; 49601, \\ & 04 ; 78876,77, \\ & 99 ; 78921,99 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 38999 \mathrm{~s} ; \\ & 49099 \mathrm{~s} ; \\ & 78099 \mathrm{~s}, 93,94 \end{aligned}$ |
| 63-205 | Furs, dressed. | 31103-99 | 31039-89 | 31039-89 |
| 63-206 | Fur plates, mats and 1inings. | 31300 | 31099 | 31099 |
| 63-207 | Fur goods, appare 1 including artificial fur. | 78710-90 | 78809 | 78079 |
| 63-208 | Custom tailoring. | N/A | N/A | N/A |
| 64-209 | Pulpwood chips. | 23680,90 | 23869s | 23699 |
| 64-210 | Lumber and timber, soft, hard and exotic species. | $\begin{aligned} & 33102-99 \text {; } \\ & 33810-49 \end{aligned}$ | $\begin{aligned} & 33104-95 ; \\ & 33999 \end{aligned}$ | $\begin{aligned} & 33112-95 ; \\ & 33908 \end{aligned}$ |
| 64-211 | Railway ties. | 33309-59 | 33439 | 33338,69 |
| 64-212 | Shingles, lath, pales, blanks for window blind rollers, and spool wool. | 33403-50 | 33409,99s | 33403-50 |


| Input-Output Commodity Classif. No. | Input-Output <br> Commodity <br> Title | Standard Commodity Classif. | Import Commodity Classif. | Export Commodity Classif. |
| :---: | :---: | :---: | :---: | :---: |
| 64-213 | Wood waste. | 29171-79 | 29199s | 29199s |
| 64-214 | Custom wood working and millwork. | N/A | N/A | N/A |
| 65-215 | Veneer and plywood. | 33503-94 | 33513-99 | 33505-72,79s |
| 66-216 | Millwork (woodwork). | 33605-99 | 33609,35,99 | 33609,99 |
| 66-217 | Wood fabricated materials for structures. | 33959 | 33999 s | 33999s |
| 66-218 | Prefabricated buildings and structures of wood. | 94110 s | 94911s | 96099 s |
| 67-219 | Containers, closures and pallets of wood. | 95160,63,66 | 95066 | 95066 |
| 68-220 | Caskets, coffins and part and other morticians' goods. | $\begin{aligned} & 94304-12, \\ & 20,28 \end{aligned}$ | 94933, 39 s | 96099 s |
| 69-221 | Miscellaneous wood fabricated materials. | $\begin{aligned} & 33460,90-99 \text {; } \\ & 33595 ; 33710- \\ & 99 ; 33901-49, \\ & 75-99 \end{aligned}$ | $\begin{aligned} & 33499 \mathrm{~s} ; \\ & 33595 ; 33902- \\ & 91,99 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 33490-99 ; \\ & 33579 \mathrm{~s} ; \\ & 33904-75,99 \mathrm{~s} \end{aligned}$ |
| 69-222 | Barrels and kegs of wood. | 95154,57 | 95055 | 95055 |
| 69-223 | Wood end products, n.e.s. | $\begin{aligned} & 76220 \mathrm{~s} ; \\ & 76324 \mathrm{~s} ; \\ & 86110 ; 90276 ; \\ & 96304,90 \end{aligned}$ | $\begin{aligned} & 69899 \mathrm{~s} ; \\ & 76389 \mathrm{~s}, 99 \mathrm{~s} ; \\ & 90299 \mathrm{~s}, 96139 \end{aligned}$ | $\begin{aligned} & 69899 \mathrm{~s} ; \\ & 77999 \mathrm{~s} ; \\ & 90029 \mathrm{~s} ; \\ & 96084 \end{aligned}$ |
| 70-224 | Household furniture including camp, lawn and veranda furniture. | $\begin{aligned} & 74103-69 ; \\ & 74304,08 \end{aligned}$ | 74012-19, 32 | 74019 |
| 71-225 | Office furniture and visible record equipment. | 74204-90 | 74029 | 74099s |


| Input-0utput Commodity Classif. No. | Input-Output <br> Commodity <br> Title | Standard Commodity Classif. | Import Commodity Classif. | Export <br> Commodity <br> Classif. |
| :---: | :---: | :---: | :---: | :---: |
| 72-226 | Special purpose furniture including church, school, theatre, hotel, laboratory, hospital furniture and restaurant, store and office fixtures. | $\begin{aligned} & 74312-90 ; \\ & 74400 \end{aligned}$ | $\begin{aligned} & 74038,39,42, \\ & 49 \end{aligned}$ | 74099s |
| 72-227 | Miscellaneous furniture and fixtures including picture frames and mouldings, bed and box springs, curtain rods and poles and decorative accessories. | $\begin{aligned} & 74604,08 ; \\ & 74704-32,56, \\ & 90 ; 86720 ; \\ & 86216 \end{aligned}$ | $\begin{aligned} & 74069,72,76 \text {, } \\ & 99 \mathrm{~s} ; 86216 ; \\ & 86720 \end{aligned}$ | $\begin{aligned} & 74009,99 \mathrm{~s} ; \\ & 86099 \mathrm{~s} \end{aligned}$ |
| 73-228 | Portable lamps residential incandescent type, floor and table models, including lamp shades and parts. | 68127,30,31, interim,33, 95 interim | 68143 s | 68029s |
| 74-229 | Pulp. | $\begin{aligned} & 34110-99 \text {; } \\ & 34200 \end{aligned}$ | 34019-95 | 34019-99 |
| 74-230 | Newsprint paper. | 35109 | 35199s | 35109 |
| 74-231 | Other paper for printing. | 35115-99 | 35181,84,99s | 35115-99 |
| 74-232 | Fine paper. | 35205-99 | 35233-99 | 35249,99 |
| 74-233 | Tissue and sanitary paper. | 35305-99 | 35325-99 | 35369,99 |
| 74-234 | Wrapping paper. | 35410-99 | 35440,71,99 | 35410,39,99 |
| 74-235 | Paper board. | 35602-99 | 35610-99 | 35619-99 |
| 74-236 | Building paper, not coated or impregnated, rigid insulating board and hardboard, and other building board. | $\begin{aligned} & 35705-19, \\ & 60-79 \end{aligned}$ | 35719, 60,79 | $\begin{aligned} & 35749 \mathrm{~s}, 57 \\ & 60,79 \end{aligned}$ |


| Input-Output Commodity Classif. No. | Input-Output Commodity Title | Standard <br> Commodity <br> Classif. | Import <br> Commodity <br> Classif. | Export Commodity Classif. |
| :---: | :---: | :---: | :---: | :---: |
| 74-237 | Towels, napkins and toilet paper. | $\begin{aligned} & 84720 ; 84801 ; \\ & 84924 \end{aligned}$ | $\begin{aligned} & 84720 ; 84810 \mathrm{~s} ; \\ & 84924 \end{aligned}$ | $\begin{aligned} & 84079 \mathrm{~s}, 89 \mathrm{~s}, \\ & 95 \end{aligned}$ |
| 74-238 | Cigarette-paper books and tubes. | 86632 | 86632 | 86099s |
| 74-239 | Vanillin. | 40856 | 40856 | 40859s |
| 74-240 | Miscellaneous industrial materials of paper, chemical byproducts, and paper waste. | $\begin{aligned} & 29130,40 \text {; } \\ & 35510-80 \text {; } \\ & 35810-49 \text {; } \\ & 39915,45 \mathrm{~s} ; \\ & 49409 \end{aligned}$ | $\begin{aligned} & 29139 ; 35540, \\ & 49,91 \\ & 35805-49 ; \\ & 39915,45 \mathrm{~s}, \\ & 49409 \end{aligned}$ | $\begin{aligned} & 29130,40 ; \\ & 35549,99 \mathrm{~s} ; \\ & 35849 ; 39945 \mathrm{~s}, \\ & 99 \mathrm{~s} ; 49099 \mathrm{~s} \end{aligned}$ |
| 75-241 | Building paper, coated or impregnated. | 35724-49 | 35749 | 35749s |
| 75-242 | Tiles and flagstones, of vinyl-asbestos and asphalt. | $\begin{aligned} & 47942 ; \\ & 49412-16 \end{aligned}$ | $\begin{aligned} & 49440,44 ; \\ & 47999 s \end{aligned}$ | $\begin{aligned} & 47999 \mathrm{~s} ; \\ & 49099 \mathrm{~s} \end{aligned}$ |
| 76-243 | Paper cartons, bags, cans and bottles, including accessories, and plastic bags. | $\begin{aligned} & 86716 s ; 95112, \\ & 39-46,77,96,99 \end{aligned}$ | $\begin{aligned} & 86716 \mathrm{~s} ; 95040 \\ & 44,49 \mathrm{~s}, 79 \mathrm{~s}, 96 \\ & 99 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 86099 \mathrm{~s} ; 95044, \\ & 49 \mathrm{~s}, 99 \mathrm{~s} \end{aligned}$ |
| 77-244 | Coated cover paper and bristol board. | 35590 | 35591s | 35599s |
| 77-245 | Converted paper, gummed, waxed or printed. | 35909-99 | 35911-99 | 35970,99 |
| 77-246 | Converted aluminum foil. | 46904 | 46904 | 46999s |
| 77-247 | Facial tissues, handkerchiefs of paper and sanitary napkins. | $\begin{aligned} & 36697 ; 78908 ; \\ & 88116 s \end{aligned}$ | $\begin{aligned} & 36699 \mathrm{~s} ; \\ & 78999 \mathrm{~s} ; \\ & 88019 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 36199 \mathrm{~s} ; \\ & 78099 \mathrm{~s} ; \\ & 88017 \mathrm{~s} \end{aligned}$ |
| 77-248 | Paper containers, n.e.s., paper bottle caps, and aluminum foil containers. | $\begin{aligned} & 95148,49,81, \\ & 90,93 \end{aligned}$ | $\begin{aligned} & 95047,49 \mathrm{~s}, \\ & 89 \mathrm{~s}, 99 \mathrm{~s}, \end{aligned}$ | 95049s,99s |
| 77-249 | Stationery and paper office supplies. | $\begin{aligned} & 90104-32,40, \\ & 90 ; 90424 ; \\ & 91604 \mathrm{~s}, 20 \end{aligned}$ | $\begin{aligned} & 90119,24,28, \\ & 49 ; 90423,24 ; \\ & 91564 \mathrm{~s}, 69 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 90014,19 \mathrm{~s}, \\ & 99 \mathrm{~s} ; 91099 \mathrm{~s} \end{aligned}$ |


| $\begin{aligned} & \text { Input-Output } \\ & \text { Commodity } \\ & \text { Classif. No. } \end{aligned}$ | Input-Output Commodity Title | Standard Commodity Classif. | Import <br> Commodity <br> Classif. | Export Commodity Classif. |
| :---: | :---: | :---: | :---: | :---: |
| 77-250 | Paper end products. | $\begin{aligned} & 85612 ; \\ & 96404-90 \end{aligned}$ | 85066;96149 | 85069s;96086 |
| 78-251 | Newspapers, magazines and periodicals. | 89104-89212 | 89104,08,29 | 89029 |
| 78-252 | Books, pamphlets, maps and pictures. | $\begin{aligned} & 89304-20 ; \\ & 89404-90 \end{aligned}$ | $\begin{aligned} & 89304-49 \text {; } \\ & 89403-90 \end{aligned}$ | 89039,49 |
| 78-253 | Banknotes, bonds, bills of exchange, cheques, drafts, stamps and similar matter. | 89504 | 89599 s | 89099s |
| 78-254 | Printing n.e.s. | $\begin{aligned} & 83404 ; \\ & 89508-90 \mathrm{~s} ; \\ & 89900 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 83701 ; \\ & 89520-99 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 83079 \mathrm{~s} ; \\ & 89090 \mathrm{~s}, 99 \mathrm{~s} \end{aligned}$ |
| 78-255 | Custom printing and related printing work. | $\begin{aligned} & 89508-90 \mathrm{~s} ; \\ & 89900 \mathrm{~s} \end{aligned}$ | 89520-99s | 89090s,99s |
| 78-256 | Net revenue from advertising. | N/A | N/A | N/A |
| 78-257 | Specialized publishing service. | N/A | N/A | N/A |
| 79-258 | Printing services, mainly printing plates, set type, and bookbinding. | 52652 | $\begin{aligned} & 52646,50,51, \\ & 53,55,59 \end{aligned}$ | 52960,69s |
| 80-259 | Ferro-alloys. | 44105-99 | 44109-99 | 44109-99 |
| 80-260 | Pig iron and stee 1 ingots. | 44205-59 | 44219-55 | 44219-49 |
| 80-261 | Steel blooms, billets and slabs. | 44260-92 | 44260,90 | 44299 |
| 80-262 | Steel castings. | 44340-60 | 44355,59 | 44359 |
| 80-263 | Steel bars and rods. | 44405-99 | 44505-99 | 44530-99 |
| 80-264 | Steel plates, not fabricated. | 44502-16 | 44502-16,20s | 44520s |


| Input-Output Commodity Classif. No. | Input-Output <br> Commodity <br> Title | Standard <br> Commodity Classif. | Import Commodity Classif. | Export Commodity Classif. |
| :---: | :---: | :---: | :---: | :---: |
| 80-265 | Carbon steel for pipes and tubes. | 44525-27 | 44524-27 | 44530s,99s |
| 80-266 | Carbon steel sheet and strip, not coated. | 44530,39 | 44532-38 | $44530 \mathrm{~s}, 99 \mathrm{~s}$ |
| 80-267 | Tinplate. | 44551,52 | 44551 | 44599 s |
| 80-268 | Galvanized steel sheet and strip. | 44555 | 44555 | 44599 s |
| 80-269 | Beams, wide flanged, structural shapes larger than bar size, and bar size shapes of carbon steel. | 44610-30 | 44605-30,75 | 44699 S |
| 80-270 | Rails and railway track material, of steel. | 44710-90 | 44739,69,99 | 44739,99 |
| 80-271 | Coal tar. | 43935,40 | 43941 | 43941 |
| 80-272 | Natural and synthetic graphite and carbon basic products. | 47704-32 | 47714-32 | 47929,99s |
| 81-273 | Mechanical steel tubing. | 44826,28 | 44827-29 | 44899 S |
| 81-274 | Oil country goods, including well casing and well tubing of steel. | $-44836$ | 44836 | 44899 s |
| 81-275 | Line pipe, for transmission of natural gas or oil, of steel. | 44839 | 44839 | 44899 s |
| 81-276 | Steel pipes and tubes, n.e.s. | $\begin{aligned} & 44821,22,31, \\ & 41-72 \end{aligned}$ | $\begin{aligned} & 44823,31,45 \\ & 79,87,88,99 \mathrm{~s} \end{aligned}$ | 44899s |
| 82-277 | Grinding balls, ingot moulds and stools, and castings, of grey iron alloy and malleabie iron | $44302-30$ | 44302-50 | 44302,29 |


| Input-Output <br> Commodity <br> Classif. No. | Input-Output <br> Commodity <br> Title | Standard Commodity Classif. | Import Commodity Classif. | Export Commodity Classif. |
| :---: | :---: | :---: | :---: | :---: |
| 82-278 | Pipe and fittings, of cast and wrought iron. | $\begin{aligned} & 44802-09 ; \\ & 46851-59 \end{aligned}$ | $\begin{aligned} & 44807,99 \mathrm{~s} ; \\ & 46851-59 \end{aligned}$ | $\begin{aligned} & 44807,99 \mathrm{~s} ; \\ & 46860 \end{aligned}$ |
| 83-279 | Nicke1 in primary <br> forms, including ingots, matte, speiss and oxides. | $\begin{aligned} & 25520,30 ; \\ & 45404 \end{aligned}$ | $\begin{aligned} & 25899 \mathrm{~s} ; \\ & 45415 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 25520 \mathrm{~s}, 30 \\ & 45415 \mathrm{~s} \end{aligned}$ |
| 83-280 | Copper and copper alloys, in primary forms, including blister and anode copper. | 45202,04,74 | 45204, 75 s | 45204,79s |
| 83-281 | Lead and lead alloys in primary forms. | 45302,04,06 | 45309,49s | 45309,49s |
| 83-282 | Zinc and zinc alloys in primary forms, including zinc dust. | 45704,08 | 45704,10s | 45729 |
| 83-283 | Aluminum and aluminum alloys in primary forms, including pigs, ingots, and shot. | 45108 | 45109 s | 45109s |
| 83-284 | Tin and tin alloys in primary forms, including anodes. | 45604,08 | 45608 | 45979s,99s |
| 83-285 | Precious metal and alloys, in primary forms, excluding gold, and gold alloys. | 45506, 10-99 | 45512-99 | 45529-99 |
| 83-286 | Other non-ferrous base metals and al1oys in primary forms. | 45905-89 | 45940-99 | $\begin{aligned} & 45925-45,79 \mathrm{~s}, \\ & 99 \mathrm{~s} \end{aligned}$ |
| 83-287 | Aluminum fluorides and sodium aluminum fluorides. | 40307,09 | 40499 s | 40499 s |
| 83-288 | Inorganic bases and metallic oxides, | $\begin{aligned} & 40205,09-33 \\ & 46,51,61-99 \end{aligned}$ | $\begin{aligned} & 40205,09-31, \\ & 61-99 \end{aligned}$ | 40221,46,99s |


| Input-Output Commodity Classif. No. | Input-Output Commodity Title | Standard Commodity Classif. | Import Commodity Classif. | Export Commodity Classif. |
| :---: | :---: | :---: | :---: | :---: |
| 83-289 | Scrap and waste materials, n.e.s. | $\begin{aligned} & 25124-65 ; \\ & 25249 ; 25320- \\ & 90 ; 25420,30 ; \\ & 25540 ; 25630, \\ & 39,90,99 ; \\ & 25720,30 ; \\ & 25909,37,95, \\ & 99 ; 29155,99 \end{aligned}$ | $\begin{aligned} & 25199 ; 25249 ; \\ & 25339 \mathrm{~s} ; \\ & 25878 \mathrm{~s}, 99 \mathrm{~s} ; \\ & 29199 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 25165,99 ; \\ & 25249 ; 25320- \\ & 90 ; 25410 \mathrm{~s} ; \\ & 39 ; 25540 ; \\ & 25639,99 ; \\ & 25710 \mathrm{~s}, 39 ; \\ & 25999 ; 29199 \mathrm{~s} \end{aligned}$ |
| 84-290 | Aluminum and aluminum alloys, cast, rolled and extruded. | $\begin{aligned} & 45102,04,10- \\ & 40,49 \end{aligned}$ | $\begin{aligned} & 45105,09 \mathrm{~s}, \\ & 19-40,49 \end{aligned}$ | $\begin{aligned} & 45109 \mathrm{~s}, 29,32, \\ & 49 \mathrm{~s} \end{aligned}$ |
| 85-291 | Copper products, cast, rolled and extruded. | 45208-49 | 45208-18,99s | 45208-18,99s |
| 85-292 | Copper alloy products, cast, rolled and extruded. | 45278-99 | $\begin{aligned} & 45275 \mathrm{~s}, 78,85, \\ & 88,99 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 45279 \mathrm{~s}, 85,88, \\ & 99 \mathrm{~s} \end{aligned}$ |
| 86-293 | Lead and lead alloy products, cast, rolled and extruded. | 45310-49 | 45349s | 45349s |
| 86-294 | Nickel and nickel alloy fabricated materials. | 45408-99 | 45415s, 69,99 | 45415s, 99 |
| 86-295 | Tin and tin alloy fabricated materials. | 45612,49 | 45649 | 45979s,99s |
| 86-296 | Zinc die casting and other zinc and zinc alloy fabricated materials. | 45712-49 | 45710s, 30-49 | 45749 |
| 86-297 | Solders including block, rods, wire, plates and sticks. | 46759 | 46759 | 46980s |
| 87-298 | Plates, steel, fabricated. | 44519 | 44518,19,22 | 44520s |


| Input-Output Commodity Classif. No. | Input-Output Commodity Title | Standard Commodity Classif. | Import Commodity Classif. | Export Commodity Classif. |
| :---: | :---: | :---: | :---: | :---: |
| 87-299 | Tanks. | 46260-99 | 46972 | 46999s |
| 87-300 | Power boilers. | 50102-45 | 50119,49 | 50019 |
| 87-301 | Boilers, marine type. | 59204-08 | 59299s | 59029s |
| 87-302 | Package boiler units, under 15 lbs , pressure and steam heating boilers, n.e.s. | 65102,12 | 65103s, 29s | 65049 s |
| 88-303 | Basic steel products, structural and miscellaneous, punched, drilled or otherwise fabricated. | $\begin{aligned} & 44650-90 ; \\ & 46999 \end{aligned}$ | $\begin{aligned} & 44650,80,90 \text {; } \\ & 46910,63,60 \text {, } \\ & 99 \end{aligned}$ | $\begin{aligned} & \text { 44699s; } \\ & 46999 \mathrm{~s} \end{aligned}$ |
| 88-304 | Scaffolding equipment, demountable. | 52268 | 52299s | 52929s |
| 88-305 | Prefabricated buildings and structures, metal or mainly metal. | 94110s, 50 | 94911s, 15 | 96099s |
| 89-306 | Metal fences, doors, windows and structural and architectural metal products, n.e.s. | $\begin{aligned} & 46103-29-98 \text {, } \\ & 99 \end{aligned}$ | 46113-29,99s | 46965s |
| 90-307 | Steel sheet and strip coated or fabricated, n.e.s. | 44542,59-95 | $\begin{aligned} & 44520 \mathrm{~s}, 29,42, \\ & 59-99 \end{aligned}$ | 44599s |
| 90-308 | Culvert pipe, of corrugated metal. | 44811 | 44811 | 44899s |
| 90-309 | Metal basic products, stamped, pressed, or perforated, and range boilers. | $\begin{aligned} & 46908,12 ; \\ & 65390 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 46908,12,67 \\ & 65371 \mathrm{~s}, 89 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 46999 \mathrm{~s} \text {; } \\ & 65049 \mathrm{~s} \end{aligned}$ |
| 90-310 | Furnace pipes and fittings, sheet metal work for buildings and metal weatherstrip. | $\begin{aligned} & 46132-79 \text {; } \\ & 65224 \end{aligned}$ | $\begin{aligned} & 46135-50,73, \\ & 99 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 46965 \mathrm{~s} \text {; } \\ & 65049 \mathrm{~s} \end{aligned}$ |


| Input-Output Commodity Classif. No. | Input-Output <br> Commodity <br> Title | Standard <br> Commodity <br> Classif. | Import Commodity Classif. | Export Commodity Classif. |
| :---: | :---: | :---: | :---: | :---: |
| 90-311 | Awnings, ash and garbage cans, pails, portable laundry tubs, and wash boilers, of metal. | $\begin{aligned} & 74740 \mathrm{~s} ; 76216, \\ & 20 \mathrm{~s} ; 86112 \end{aligned}$ | $\begin{aligned} & 69899 \mathrm{~s} ; \\ & 74099 \mathrm{~s} ; \\ & 76389 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 69899 \mathrm{~s} ; \\ & 74099 \mathrm{~s} ; \\ & 77999 \mathrm{~s} \end{aligned}$ |
| 90-312 | Utensils for cooking and food preparation, ironing boards, and vacuum bottles and jugs. | $\begin{aligned} & 85104-24 ; 90 ; \\ & 85208 ; 86120 ; \\ & 86716 s ; \\ & 94551 \end{aligned}$ | $\begin{aligned} & 69875 ; 85007, \\ & 11,13,19,39 \mathrm{~s} ; \\ & 86716 \mathrm{~s} ; \\ & 94958 \end{aligned}$ | $\begin{aligned} & 69899 \mathrm{~s} ; \\ & 85049 \mathrm{~s} ; \\ & 86099 \mathrm{~s} ; \\ & 96099 \mathrm{~s} \end{aligned}$ |
| 90-313 | Containers and bottle caps of metal. | $\begin{aligned} & 95103-09,18- \\ & 27,84,87 \end{aligned}$ | $\begin{aligned} & 95005,19,24, \\ & 29,89 \mathrm{~s} \end{aligned}$ | $95029 \mathrm{~s}, 99 \mathrm{~s}$ |
| 91-314 | Wire and wire rope, of steel. | 44905-55 | 44911-69 | 44920-59 |
| 91-315 | Wire fencing, screening and netting. | 46304-99 | 46315-99 | 46341-99 |
| 91-316 | Chain, excluding automobile tire chains and power transmission chain. | 46630-90 | 46620-99 | 46999s |
| 91-317 | Rods, wire, and electrodes for welding. | 46703-39 | 46710-39 | 46980s |
| 91-318 | Springs, coil and flat, for upholstery and miscellaneous vehicles. | $\begin{aligned} & \text { 46940-59; } \\ & 61192,93 \end{aligned}$ | $\begin{aligned} & 46952,59 \text {; } \\ & 61199 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 46999 \mathrm{~s} \text {; } \\ & 61199 \mathrm{~s} \end{aligned}$ |
| 91-319 | Bolts, nuts, screws, washers, wire nails, cut nails, tacks, staples and rivets. | 46502-49,99s | 46502-49,99s | 46529,36,99s |
| 91-320 | Fasteners, clips, thumbtacks, staples and paper fastener washers. | 90420 | 90499s | 90099s |


| $\begin{aligned} & \text { Input-Output } \\ & \text { Commodity } \\ & \text { Classif. No. } \end{aligned}$ | Input-Output Commodity Title | Standard Commodity Classif. | Import <br> Commodity <br> Classif. | Export Commodity Classif. |
| :---: | :---: | :---: | :---: | :---: |
| 91-321 | Household equipment, mainly wire fabricated. | $\begin{aligned} & 85204 ; 86732- \\ & 90 \end{aligned}$ | $\begin{aligned} & 85024 ; 86732, \\ & 39 \mathrm{~s}, 92,99 \end{aligned}$ | $\begin{aligned} & 85049 \mathrm{~s} ; \\ & 86099 \mathrm{~s} \end{aligned}$ |
| 91-322 | Display stands. | 94216 | 94929 s | 96099 s |
| 92-323 | Builders' hardware. | 46553-69 | 46553-69 | 46559,99s |
| 92-324 | Fittings for furniture, cabinets, and caskets. | 46578,81 | 46582 | 46599s |
| 92-325 | Basic hardware,n.e.s. | $\begin{aligned} & 46572,84,87, \\ & 99 \mathrm{~s} \end{aligned}$ | 46599 s | 46599 s |
| 92-326 | Cutting and forming tools for metal working machinery and metal working accessories. | 52371-96 | 52377-96 | 52399 s |
| 92-327 | Band and circular sawing machines and blades. | 52406-12 | 52425 s | 52945 s |
| 92-328 | Edge tools, hand. | 75204-90 | 75204-99 | 75020-29 |
| 92-329 | Mechanics' measuring tools. | 75404-90 | 75408-49 | 75059 s |
| 92-330 | Hand tools, n.e.s. | 75304-48;75590 | 75510-95 | 75035,59s |
| 92-331 | Scissors, shears, and miscellaneous industrial cutlery. | $\begin{aligned} & 75604-16 ; \\ & 75804-12,24, \\ & 90 ; 85620 ; \\ & 86219 \end{aligned}$ | $\begin{aligned} & 75817 \mathrm{~s}, 22,23, \\ & 65,66,99 ; \\ & 85069 ; 86219 \end{aligned}$ | $\begin{aligned} & 75085 \mathrm{~s}, 99 \\ & 85069 \mathrm{~s} \\ & 86099 \mathrm{~s} \end{aligned}$ |
| 92-332 | Safety razors and blades. | 75816,20 | $75817 \mathrm{~s}, 20$ | 75085 s |
| 92-333 | Domestic equipment, n.e.s. | $\begin{aligned} & 76308,90 \\ & 86116,90 \end{aligned}$ | $\begin{aligned} & 69899 \mathrm{~s} ; 76308 ; \\ & 76399 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 69899 \mathrm{~s} ; \\ & 77945 \mathrm{~s}, 99 \mathrm{~s} \end{aligned}$ |



| Input-Output <br> Commodity <br> Classif. No. | Input-Output <br> Commodity <br> Title | Standard <br> Commodity <br> Classif. | Import <br> Commodity <br> Classif. | Export <br> Commodity <br> Classif. |
| :---: | :---: | :---: | :---: | :---: |
| 95-345 | Fire fighting equipment, traffic control equipment and safes and vaults. | $\begin{aligned} & 72404-90 ; \\ & 72504,20-90 ; \\ & 74504,08 \end{aligned}$ | $\begin{aligned} & 72044,49 ; \\ & 54,59 \mathrm{~s} ; \\ & 74059 \end{aligned}$ | $\begin{aligned} & 74099 \mathrm{~s} ; \\ & 77919 \mathrm{~s} \end{aligned}$ |
| 95-346 | Taxi meters, parking meters, tackle blocks and metal ladders. | $\begin{aligned} & 76312,16,24 \mathrm{~s}, \\ & 28 \end{aligned}$ | 76399s | 77999s |
| 95-347 | Firearms and military hardware. | $\begin{aligned} & 93101-51 \text {; } \\ & 93205-95 \text {; } \\ & 93310-90 \end{aligned}$ | 93001-16,99s | 93015,99s |
| 95-348 | Kitchen appliances, hand operated, and fireplace fixtures. | $\begin{aligned} & 85404-90 ; \\ & 86724 \end{aligned}$ | $\begin{aligned} & 85044-49 ; \\ & 86724 \end{aligned}$ | $\begin{aligned} & 85049 \mathrm{~s} \\ & 86099 \mathrm{~s} \end{aligned}$ |
| 95-349 | Collapsible tubes, metal. | 95115 | 95015 | 95029 s |
| 96-350 | Tractors, farm and garden type. | 55104-90 | 55103-99 | 55119-99 |
| 96-351 | Other agricultural machinery. | $\begin{aligned} & 54102-54690 ; \\ & 54700 \text { interim } \end{aligned}$ | 54109-54699 | 54109-54999 |
| 97-352 | Mechanical power transmission equipment and bearings. | $\begin{aligned} & 46610 ; 50492- \\ & 90 \end{aligned}$ | $\begin{aligned} & 46605,09 ; \\ & 50401-99 \end{aligned}$ | $\begin{aligned} & 46999 \mathrm{~s} ; \\ & 50045,49 \end{aligned}$ |
| 97-353 | Engines, marine and general purpose, steam, gasoline, diesel and semi-diesel, and turbines, marine and hydraulic. | $\begin{aligned} & 50202,04,10-30 \\ & 80,90 ; 59212-90 \end{aligned}$ | $\begin{aligned} & 50209 \mathrm{~s}, 18-29, \\ & 39 \mathrm{~s}, 99 \mathrm{~s} ; \\ & 59227-55,99 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 50025 \mathrm{~s}, 29 \mathrm{~s} ; \\ & 59029 \mathrm{~s} \end{aligned}$ |
| 97-354 | Pumps, compressors (air and gas), blowers, and vacuum pumps. | $\begin{aligned} & 50704-69 \\ & 50804-95 \end{aligned}$ | $\begin{aligned} & 50733-99 ; \\ & 50804-95 \end{aligned}$ | 50079,89 |
| 97-355 | Conveyors, escalators, elevators and hoisting machinery, general purpose. | $\begin{aligned} & 51104-90 \\ & 51204-12 \\ & 51304-90 \end{aligned}$ | 51019-39 | 51019,39,99s |


| Input-Output Commodity Classif. No. | Input-Output <br> Commodity <br> Title | Standard Commodity Classif. | Import Commodity Classif. | Export Commodity Classif. |
| :---: | :---: | :---: | :---: | :---: |
| 97-356 | Industrial trucks, tractors, trailers and stackers, power and hand driven. | $\begin{aligned} & 51402-30 \\ & 51902-90 \end{aligned}$ | 51042-99 | 51049,99s |
| $97-357$ | Fans, air circulators, and forced air units, household and commercial. | $\begin{aligned} & 65220 ; \\ & 69604-39 \end{aligned}$ | $\begin{aligned} & 65249 \mathrm{~s} ; \\ & 69762,69 \end{aligned}$ | $\begin{aligned} & 65049 \mathrm{~s} ; \\ & 69999 \mathrm{~s} \end{aligned}$ |
| 97-359 | Packaging machinery, lubrication equipment, and other miscellaneous, general purpos industrial machinery. | $\begin{aligned} & 50904-90 ; \\ & 69214,28,32 ; \\ & 73704,90 \end{aligned}$ | $\begin{aligned} & 50904-40,79- \\ & 99 ; 69215 \mathrm{~s}, \\ & 29 \mathrm{~s}, 32 ; 73099 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 50093,99 ; \\ & 69999 \mathrm{~s} ; \\ & 77919 \mathrm{~s}, 29 \mathrm{~s} \end{aligned}$ |
| 97-359 | Industrial furnaces, kilns and ovens. | 50504-90 | 50509-95 | 50059 |
| $97-360$ | Machinery, industryspecific and special purpose. | $\begin{aligned} & 50232 ; 50612- \\ & 89 ; 52204-64, \\ & 90,52301-39 ; \\ & 52402,04,16-90 ; \\ & 52504-60 ; \\ & 52604-44,56 ; \\ & 52704-52990 ; \\ & 72602-73300 ; \\ & 73504,16,90 ; \\ & 73608-90 \end{aligned}$ | $\begin{aligned} & 50239 \mathrm{~s} ; \\ & 50969 ; 52101- \\ & 99 ; 52204-52, \\ & 99 \mathrm{~s} ; 52301-69 ; \\ & 52414,15,25 \mathrm{~s}, \\ & 48-99 ; 52515- \\ & 90 ; 52604-45, \\ & 48,57,69 ; \\ & 52706-52999 ; \\ & 72069 ; 73019, \\ & 29,59 \mathrm{~s}, 63-99 \end{aligned}$ | $\begin{aligned} & 50025 \mathrm{~s}, 69 ; \\ & 52119-99 ; \\ & 52308-29,99 \mathrm{~s} ; \\ & 52929 \mathrm{~s}, 41 \\ & 45 \mathrm{~s}, 49,59 \\ & 69 \mathrm{~s}, 79-99 ; \\ & 77919 \mathrm{~s}, 29 \mathrm{~s} \end{aligned}$ |
| $97-362$ | Power driven hand tools. | 75102-90 | 75102-98 | 75019 |
| 97-362 | Metal end products, n.e.s. | 96604-90 | 96168,69 | 96090 |
| 98-363 | Refrigeration and air conditioning equipment, excluding household refrigerators, freezers and combinations. | $\begin{aligned} & 65503-29 \\ & 49-95 \end{aligned}$ | $\begin{aligned} & 65506-28, \\ & 54-90,99 \mathrm{~s} \end{aligned}$ | 650695,99 |


| Input-Output <br> Comonodity <br> Classif. No. | Input-0utput <br> Commodity <br> Title | Standard Commodity Classif. | Import <br> Commodity <br> Classif. | Export <br> Commodity <br> Classif. |
| :---: | :---: | :---: | :---: | :---: |
| 99-364 | Scales and balances. | 70804-90 | $\begin{aligned} & 70982,89, \\ & 93 \mathrm{~s}, 25 \mathrm{~s}, 25 \mathrm{~s}, \\ & 99 \mathrm{~s} \end{aligned}$ | $70079 \mathrm{~s}, 79 \mathrm{~s}$ |
| 99-365 | Vending machines. | 73404-90 | 73040-49 | 77929 s |
| 99-366 | Office machines and equipment. | 77104-90 | 77104-99 | 77108-99 |
| 99-367 | Rental of data processing equipment. | N/A | N/A | N/A |
| 100-368 | Aircraft, all types. | 60102-42 | 60151-59 | 60019 |
| 100-369 | Aircraft engines. | 60304-24 | 60329-49 | 60039 |
| 100-370 | Specialized aircraft equipment. | $\begin{aligned} & 60202-80 ; \\ & 60408-95 \end{aligned}$ | 60599 s | 60099 s |
| 100-371 | Modifications, conversions, servicing, overhaul, and repairs to aircraft and engines. | N/A | $\mathrm{N} / \mathrm{A}$ | N/A |
| 101-372 | Passenger automobiles and chassis. | 58104-42 | 58104-49 | 58017,19 |
| 101-373 | Trucks, truck chassis and truck tractors, commercial. | 58.304-32 | 58304-38 | 58031,39 |
| 101-374 | Buses and chassis. | 58204-20 | 58729 | 58095s |
| 101-375 | Military motor vehicles, motorcycles, and special purpose motor vehicles. | $\begin{aligned} & 58703-83,90 \mathrm{~s} \\ & 58604-36 ; \\ & 58905-95 \end{aligned}$ | 58739;99s | 58095 s |
| 102-376 | Trailers, cabin or house type. | 58454 | 58454 | 58049s |
| 102-377 | Other trailers and semi-trailers, commercial. | 58410-49,90 | 58447,48,99 | 58049s |



| $\begin{aligned} & \text { Input-Output } \\ & \text { Commodity } \\ & \text { Classif. No. } \end{aligned}$ | Input-Output <br> Commodity <br> Title | Standard Commodity Classif. | Import Commodity Classif. | Export Commodity Classif. |
| :---: | :---: | :---: | :---: | :---: |
| 107-391 | Small electrical appliances, domestic, including water tank heaters, flat irons, hair dryers and clippers, vacuum cleaners, floor polishers and sanders, hot plates, electric blankets and razors. | $\begin{aligned} & 65332,33,56- \\ & 68,90 \mathrm{~s}, 95 \mathrm{~s} ; \\ & 66116-24,40- \\ & 95 ; 69104-12 ; \\ & 69204-12,16-24, \\ & 49 ; 69424-32 ; \\ & 69708-90 ; \\ & 73508,12 \end{aligned}$ | $\begin{aligned} & 65331,69 ; \\ & 66159,89 \mathrm{~s}, 95, \\ & 99 \mathrm{~s} ; 69209 \\ & 15 \mathrm{~s}, 19,29 \mathrm{~s} ; \\ & 69704,19,71 \\ & 72,99 ; 69835 ; \\ & 73059 \end{aligned}$ | $\begin{aligned} & \text { 65049s; } \\ & 66019 \mathrm{~s} ; \\ & 69899 \mathrm{~s} ; \\ & 77929 \mathrm{~s} \end{aligned}$ |
| 108-392 | Space heaters, heating stoves, and base board electric heating units. | $\begin{aligned} & 65304-24,90 \mathrm{~s}, \\ & 95 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 65324,29,53, \\ & 71 \mathrm{~s}, 89 \mathrm{~s}, 92- \\ & 99 \end{aligned}$ | 65049 s |
| 108-393 | Refrigerators,freezers and combinations, domestic. | 65541-47 | 65541-46,99s | 65069 s |
| 108-394 | Gas ranges and electric stoves, domestic. | $\begin{aligned} & \text { 66104-12; } \\ & 66204-16 ; \\ & 66300 \end{aligned}$ | $\begin{aligned} & 66115,89 \mathrm{~s}, 99 \mathrm{~s} ; \\ & 66211,19,89 \mathrm{~s} \\ & 99 \mathrm{~s} \end{aligned}$ | 66019s,99s |
| 108-395 | Sewing machines, dishwashers, garbage disposal units, laundry equipment, and power lawnmowers, domestic. | $\begin{aligned} & 69404-20,90 ; \\ & 69504,08 ; \\ & 76304 ; 86104- \\ & 08,24 ; 86204- \\ & 12 \end{aligned}$ | $\begin{aligned} & 69754,58 ; \\ & 69805-29,56, \\ & 99 \mathrm{~s} ; 76303, \\ & 06 ; 86209,12 \end{aligned}$ | $\begin{aligned} & 69809,19, \\ & 99 \mathrm{~s} ; 69999 \mathrm{~s} ; \\ & 77945 \mathrm{~s} ; \\ & 86099 \mathrm{~s} \end{aligned}$ |
| 109-396 | Television and radio receiving sets and combination. | $\begin{aligned} & 63333-69,74- \\ & 83,99 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 63699 \mathrm{~s} ; \\ & 63936,37 \end{aligned}$ | 63035,39s |
| 109-397 | Record players, amplifiers, tape recorders, and other sound recording and reproducing equipment. | 636.04-32,90 | $\begin{aligned} & 63603-25,88, \\ & 89,99 \mathrm{~s} \end{aligned}$ | 63060,69s |
| 110-398 | Telephone and telegraph line apparatus and equipment. | $\begin{aligned} & 63109-39 ; \\ & 63204-90 \end{aligned}$ | 63919,29 | 63019,29 |


| Input-Output <br> Commodity <br> Classif. No. | Input-Output <br> Commodity <br> Title | Standard <br> Commodity Classif. | Import <br> Commodity Classif. | Export <br> Commodity <br> Classif. |
| :---: | :---: | :---: | :---: | :---: |
| 110-399 | Radio and television broadcasting and transmitting equipment and other related services. | $\begin{aligned} & 63309,19,71, \\ & 72,85,96,99 s \end{aligned}$ | 63699 s | 63039 s |
| 110-400 | Radar equipment and related devices. | 63404-90 | 63949 | 63049 |
| 110-401 | Electronic tubes and semi-conductors, excluding X -Ray tubes and fluorescent lamps. | 63504-49 | 63519-49 | 63059 |
| 110-402 | Electronic equipment components. | 63704-95 | 63972-99 | 63099 |
| 110-403 | Interior signal, alarm and clock systems and complete installation. | 72508,12,16 | 72059 s | 77919 s |
| 111-404 | Pole line hardware. | 49516 | 49516 | 49070 s |
| 111-405 | Welding machinery and equipment. | 52341-49 | 52345,49 | 52399 s |
| 111-406 | Motors and generators, electric and turbines, steam and gas. | $\begin{aligned} & 50206,40 ; \\ & 50301-79 \end{aligned}$ | $\begin{aligned} & 50209 \mathrm{~s}, 99 \mathrm{~s} ; \\ & 50309-79 \end{aligned}$ | 50029s, 33-39 |
| 111-407 | Transformers and converters, excluding telephone and telegraph. | $\begin{aligned} & 68303-95 ; \\ & 68771-95 \end{aligned}$ | $\begin{aligned} & 68326,79,95 ; \\ & 68879 \end{aligned}$ | 68039,79 |
| 111-408 | Electrical equipment, industrial, n.e.s. | $\begin{aligned} & 68402-08,24- \\ & 36,81,90 ; \\ & 68502-90 ; \\ & 70204-18,90 \end{aligned}$ | $\begin{aligned} & 68423,29 \mathrm{~s} \\ & 49 \mathrm{~s}, 81,99 \mathrm{~s} ; \\ & 68859 ; \\ & 70927 \mathrm{~s}, 28 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 68049 \mathrm{~s}, 59 ; \\ & 70029 \mathrm{~s} \end{aligned}$ |
| 112-409 | Batteries. | 69304-95 | 69329-95 | 69935,39 |
| 113-410 | Wire and cable, insulated. | 46404-99 | 46975 | 46975 |


| Input-0utput <br> Commodity <br> Classif. No. | Input-0utput <br> Commodity <br> Title | Standard <br> Commodity <br> Classif. | Import <br> Commodity <br> Classif. | Export <br> Commodity <br> Classif. |
| :---: | :---: | :---: | :---: | :---: |
| 113-411 | Wire and cable, of aluminum, not insulated. | 45144,46 | 45147 | 45149 s |
| 114-412 | Enclosed safety switches and circuit breakers, fuses and cut outs, plugs, cords and other wiring devices, industrial and residential. | $\begin{aligned} & 49520-99 ; \\ & 68412,18,37- \\ & 41 ; 68602-70 \end{aligned}$ | $\begin{aligned} & 49542-99 ; \\ & 68429 \mathrm{~s}, 49 \mathrm{~s}, \\ & 99 \mathrm{~s} ; 68869 \end{aligned}$ | $\begin{aligned} & 49070 \mathrm{~s} ; \\ & 68049 \mathrm{~s}, 69 \end{aligned}$ |
| $114-413$ | Electric light bulbs and tubes, including photo. | $\begin{aligned} & 68202-90 ; \\ & 91908-10 \end{aligned}$ | $\begin{aligned} & 68202-90 \\ & 91908,10 \end{aligned}$ | $\begin{aligned} & \text { 68029s; } \\ & 91099 \mathrm{~s} \end{aligned}$ |
| 114-414 | Electric lighting fixtures, fluorescent and incandescent, and portable lamps, excluding residential incandescent. | $\begin{aligned} & 68104-24,42- \\ & 90 \end{aligned}$ | $\begin{aligned} & 68119,43 \mathrm{~s}, \\ & 63-99 \end{aligned}$ | 68029 s |
| 115-415 | Cement. | 47504-12 | 47503-12 | 47504,99s |
| 116-416 | Lime. | 47972,75 | 47976 | 47976 |
| 117-417 | Plasters and other gypsum basic products. | 47903-21 | 47907,22 | 47999s |
| 118-418 | Concrete basic products. | 47520-99 | 47599s | 47599s |
| 118-419 | Sand lime bricks and blocks. | 47978,81,84 | 47999s | 47999s |
| 119-420 | Ready-mix concrete. | 47516 | 47599s | 47599 s |
| 120-421 | Bricks and tiles, clay. | 47204-49 | 47202-49 | $\begin{aligned} & 47204,49,62 \mathrm{~s}, \\ & 99 \mathrm{~s} \end{aligned}$ |
| 120-422 | Insulators and electrical fittings, of porcelain. | 49504-12 | 49505,09 | 49067,70s |


| Input-Output Commodity Classif. No. | Input-Output Commodity Title | Standard Commodity Classif. | Import Commodity Classif. | Export Commodity Classif. |
| :---: | :---: | :---: | :---: | :---: |
| 120-423 | Plumbing equipment, of vitreous china, and tableware and houseware of china or porcelain. | $\begin{aligned} & 47963,66 ; \\ & 67148,52,58, \\ & 62,72 ; 67290 ; \\ & 85304,08 ; \\ & 85604,08 ; \\ & 86728 \end{aligned}$ | $\begin{aligned} & 47966,99 \mathrm{~s} ; \\ & 67199 \mathrm{~s}, 60 \mathrm{~s}, 68, \\ & 73 \mathrm{~s} ; 67299 \mathrm{~s} ; \\ & 85034 ; 85061, \\ & 62 ; 86728 \end{aligned}$ | $\begin{aligned} & 47999 \mathrm{~s} ; \\ & 77909 \mathrm{~s} ; \\ & 85049 \mathrm{~s} ; \\ & 85069 \mathrm{~s} ; \\ & 86099 \mathrm{~s} \end{aligned}$ |
| 121-424 | Refractories. | 47253-99 | 47251-99 | 47262s,99s |
| 122-425 | Natural stone basic products, chiefly structural. | 47104-49 | 47104-49 | 47919 |
| 122-426 | Stone, clay and concrete end products, n.e.s. | 96804-90 | 96189 | 96094 |
| 123-427 | Mineral wool and thermal insulation materials, n.e.s. | 47945,48 | 47945,99s | 47999s |
| 124-428 | Asbestos basic products. | $\begin{aligned} & 47404-44, \\ & 66-99 \end{aligned}$ | $\begin{aligned} & 47420-40, \\ & 69 \mathrm{~s}, 99 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 47440,69 \mathrm{~s}, \\ & 99 \mathrm{~s} \end{aligned}$ |
| 124-429 | Asbestos-cement products. | 47448-64 | $\begin{aligned} & 47454,56,69 \mathrm{~s}, \\ & 99 \mathrm{~s} \end{aligned}$ | 47469s,99s |
| 125-430 | Plate, sheet, structural and ornamental glass. | 47303-38 | 47303-35,99s | 47305,99s |
| 125-431 | Glass wool, glass tubing, and other fabricated glass shapes. | 47353-99 | 47353-91,99s | 47399 s |
| 125-432 | Glass containers. | 95130-36 | 95032,36 | 95036 |
| 125-433 | Tableware and houseware of glass, and glass end products, n.e.s. | 85126; 85610; 86730; 95204, 08; 96704-90 | $\begin{aligned} & 85015,63,64 ; \\ & 86730 ; 96174, \\ & 79 \end{aligned}$ | $\begin{aligned} & 85049 \mathrm{~s}, 69 \mathrm{~s} ; \\ & 86099 \mathrm{~s} ; \\ & 96092 \end{aligned}$ |
| 126-434 | Abrasive basic products. | 47604-99 | 47609-99 | 47619-99 |


| Input-Output <br> Commodity <br> Classif. No. | Input-Output <br> Commodity <br> Title | Standard <br> Commodity <br> Classif. | Import <br> Commodity <br> Classif. | Export <br> Commodity <br> Classif. |
| :---: | :---: | :---: | :---: | :---: |
| 127-435 | Non-metallic mineral basic products, n.e.s. | $\begin{aligned} & 47924-36,39 \\ & 51-60,69,99 \end{aligned}$ | $\begin{aligned} & 47933,36,39, \\ & 69,99 \mathrm{~s} \end{aligned}$ | $47936,99 \mathrm{~s}$ |
| 128-436 | Aviation gasoline. | 43109 | 43109 | 43199 s |
| 128-437 | Motor gasoline. | 43149 | 43149 | 43199 s |
| 128-438 | Fuel oil. | 43209-99 | 43209-59 | 43249-69 |
| 128-439 | Lubricating oils and greases. | 43305-49 | 43329,49 | 43349 |
| 128-440 | Benzene, toluene and xylene. | 40621-23 | 40621-23 | 41419 s |
| 128-441 | Butane, propane, and other liquefied petroleum gasses. | 43620-49 | 43965,99s | 43649 |
| 128-442 | Naphtha. | 43920 | 43920 | 43999 s |
| 128-443 | Asphalt. | 43907 | 43909 s | 43999 s |
| 128-444 | Petroleum wax and jelly. | 43945-59,99s | 43945-59,99s | 43999 s |
| 129-445 | Coal oils, creosote, briquettes, and other coal products, n.e.s. | $\begin{aligned} & 26170,80 \text {; } \\ & 43905,09,25- \\ & 29,99 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 26189 ; 43909 \mathrm{~s}, \\ & 29,99 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 26189 ; \\ & 43999 s \end{aligned}$ |
| 130-446 | Explosives, fuses and caps. | 41509-65 | 41509,30,69 | 42999s |
| 130-447 | Ammunition, nonmilitary. | 93190 | 93019 | 93019 |
| 130-448 | Ammunition and ordnance, military. | 93405-95 | 93099 s | 93099 s |
| 130-449 | Pyrotechnic articles and fireworks. | 94548 | 94956 | 96099s |
| 131-450 | Fertilizers and fertilizer materials, n.e.s. | $\begin{aligned} & 41610-29, \\ & 33,52-89 \end{aligned}$ | $\begin{aligned} & 41623,26, \\ & 33,52-89,99 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 41606,09,45 \mathrm{~s}, \\ & 47 \mathrm{~s}, 89,99 \end{aligned}$ |


| Input-Output <br> Commodity <br> Classif. No. | Input-Output Commodity Title | Standard <br> Commodity <br> Classif. | Import Commodity Classif. | Export Commodity Classif. |
| :---: | :---: | :---: | :---: | :---: |
| 132-451 | Plastic resins and plastic materials, not shaped. | $\begin{aligned} & 42302-12,16- \\ & 99 \end{aligned}$ | $\begin{aligned} & 42302-40,49 \mathrm{~s}, \\ & 52-99 \end{aligned}$ | 42418,99s |
| 132-452 | Film and sheet, of cellulosic plastic. | 42503 | $\begin{aligned} & 42453,54, \\ & 72,79 \end{aligned}$ | 42509s |
| 132-453 | Ethanolamines. | 41131-33 | 41134 | 41459s |
| 132-454 | Ethylene glycol, mono. | 40761 | 40761 | 41429s |
| 133-455 | Medicinal and pharmaceutical products. | 87110-87999 | 87120-87999 | 87019-99 |
| 134-456 | Paints and related products. | 42805-89 | 42816-99 | 42835-99 |
| 135-457 | Vegetable oils, other than corn oil, refined | $\begin{aligned} & 39304,08,12, \\ & .16,24,28,32, \\ & 36,40,44,48, \\ & 52,56,60,64 \\ & 84,88,99 \end{aligned}$ | $\begin{aligned} & 39308 \mathrm{~s}, 12 \mathrm{~s}, 16 \mathrm{~s}, \\ & 24 \mathrm{~s}, 36 \mathrm{~s}, 40 \mathrm{~s}, \\ & 44 \mathrm{~s}, 48 \mathrm{~s}, 52 \mathrm{~s}, \\ & 60 \mathrm{~s}, 85 \mathrm{~s}, 99 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 39328 \mathrm{~s}, 56 \mathrm{~s}, \\ & 60 \mathrm{~s}, 99 \mathrm{~s} \end{aligned}$ |
| 135-458 | Glycerin, refined. | 42949 | 42947s,49 | 42999s |
| 135-459 | Dentifrices, a11 kinds. | 80500 | 80049 s | 80059 s |
| 135-460 | Soap and detergents. | 80604-93 | 80061-68 | 80069 |
| 135-461 | Cleaning and scouring powders, pastes and cakes, and other washing and cleansing preparations. | 80704,08 | 80073 | 80099 s |
| 135-462 | Jave1 water. | 80832 | 80089 s | 80099 s |
| 136-463 | Toilet preparations and cosmetics. | 80104-80490 | 80019,49s | 80059 s |
| 137-464 | Chlorine. | 40003 | 40003 | 40003 |


| Input-Output Commodity $\qquad$ | Input-0utput Commodity Title | Standard <br> Commodity <br> Classif. | Import Commodity Classif. | Export Commodity Classif. |
| :---: | :---: | :---: | :---: | :---: |
| 137-465 | Oxygen. | 40035 | 40099s | 40099s |
| 137-466 | Phosphorus. | 40043 | 40099s | 40099s |
| 137-467 | Chemical elements, n.e.s. | $\begin{aligned} & 40005-11,31- \\ & 33,37-41,46- \\ & 99 \end{aligned}$ | $\begin{aligned} & 40008,51, \\ & 81,99 \mathrm{~s} \end{aligned}$ | 40037,61,99s |
| 137-468 | Sulphuric acid. | 40115 | 40115 | 40115 |
| 137-469 | Carbon dioxide (gas and dry ice). | 40151,52 | 40199s | 40199s |
| 137-470 | Boric acid. | 40131 | 40131 | 40199s |
| $137-471$ | Inorganic acids and oxygen compounds of non-metals or metalloids. | $\begin{aligned} & 40103-11, \\ & 17-29,35-45, \\ & 62,99 \end{aligned}$ | 40162,99s | 40127,99s |
| 137-472 | Ammonia, anhydrous and aqua. | 40201, 02 | 40202 | 40299s |
| 137-473 | Caustic soda (sodium hydroxide), dry. | 40206 | 40206 | 40299s |
| 137-474 | Calcium chloride. | 40322 | 40322 | 40499s |
| 137-475 | Sodium chlorate. | 40341 | 40499s | 40499s |
| 137-476 | Aluminum sulphate. | 40373 | 40373 | 40499s |
| $137-477$ | Sodium tripoly phosphate. | 40398 | 40399s | 40499s |
| 137-478 | Sodium phosphates, other. | 40393-97,99 | 40395,99s | 40499s |
| 137-479 | Sodium carbonate (soda ash). | 40416 | 40416 | 40499s |
| 137-480 | Sodium cyanide. | 40441 | 40441 | 40499s |
| 137-481 | Sodium silicate. | 40451-54 | 40450 | 40499 s |


| Input-Output <br> Commodity <br> Classif. No. | Input-Output <br> Commodity <br> Title | Standard <br> Commodity <br> Classif. | Import <br> Commodity C1assif. | Export <br> Commodity <br> Classif. |
| :---: | :---: | :---: | :---: | :---: |
| 137-482 | Metallic salts and peroxysalts of inorganic acids, n.e.s. | $\begin{aligned} & 40303,11,21 \\ & 24-38,43-71 \\ & 75-90 ; \\ & 40403-15,17- \\ & 28,32,42-47 \\ & 55-99 \end{aligned}$ | $\begin{aligned} & 40328-71,79- \\ & 88,99 \mathrm{~s} ; 40401, \\ & 06,17-27,45, \\ & 56-66,99 \mathrm{~s} \end{aligned}$ | $40462,99 \mathrm{~s}$ |
| 137-483 | ```Inorganic chemicals, n.e.s.``` | $\begin{aligned} & 40503-19 \\ & 31-99 \end{aligned}$ | $\begin{aligned} & 40508,45, \\ & 99,32 \mathrm{~s} \end{aligned}$ | 40535s, 99 |
| 137-484 | Ethylene. | 40605 | 40699 s | 41419 s |
| 137-485 | Butylenes. | 40607 | 40607 | 41419 s |
| 137-486 | Butadiene. | 40609 | 40609 | 41419 s |
| 137-487 | Acetylene. | 40611 | 40699 s | 41419 s |
| 137-488 | Styrene monomer. | 40629 | 40699s | 41419 s |
| 137-489 | Carbon tetrachloride. | 40649 | 40699s | 41419 s |
| 137-490 | Vinylchloride monomer. | 40651 | 40699 s | 41419 s |
| 137-491 | Trichloroethylene. | 40653 | 40653 | 41419 s |
| 137-492 | Perchloroethylene. | 40655 | 40699 s | 41419 s |
| 137-493 | Ch1orof1uorohydrocarbons, n.e.s. | 40659 | 40659 | 41419 s |
| 137-494 | Hydrocarbons and their derivatives, (halogenated, suphonated, nitrated, or nitrosated), n.e.s. | $\begin{aligned} & 40606,13,25 \\ & 31-47,61-99 \end{aligned}$ | $\begin{aligned} & 40613,31-42 \\ & 64-91,99 \mathrm{~s} \end{aligned}$ | 41419 s |
| 137-495 | Methyl alcohol. | 40705 | 40705 | 41429 s |
| 137-496 | Propyl and isopropyl alcohols. | 40711,13 | 40799 s | 41429 s |
| 137-497 | Buty1 and isobuty1 alcohols. | 40721,23 | 40721,99s | 41429 s |


| Input-Output Commodity Classif. No. | Input-Output Commodity Title | Standard Commodity Classif. | Import Commodity Classif. | Export Commodity Classif. |
| :---: | :---: | :---: | :---: | :---: |
| 137-498 | Pentaerythritol. | 40771 | 40799s | 41429s |
| 137-499 | Alcohols and their derivatives, (helogenated, sulphonated, nitrated, or nitrosated), n.e.s. | $\begin{aligned} & 40731-56, \\ & 63,73-99 \end{aligned}$ | $\begin{aligned} & 40763,65,78, \\ & 80,99 \mathrm{~s} \end{aligned}$ | 41429s |
| 137-500 | Phenol. | 40802 | 40802 | 40840s |
| 137-501 | Phenols, phenol alcohols, and their derivatives, n.e.s. | 40803-19 | $\begin{aligned} & 40803,04, \\ & 11,15,18,19 \end{aligned}$ | 40840s |
| 137-502 | Ethers, alcohol peroxides, ether peroxides, epoxides, acetals, hemiacetals, and derivatives. | 40823-39 | 40839 | 40840s |
| 137-503 | Formaldehyde. | 40842 | 40845s | 40859s |
| 137-504 | Acetone. | 40873 | 40889s | 40889 s |
| 137-505 | Methyl-ethyl and methyl-isobutyl ketone. | 40875,79 | 40875,89s | 40889s |
| 137-506 | Aldehyde-function, ketone-function, and guinone-function compounds, n.e.s. | $\begin{aligned} & 40844-54,59 ; \\ & 40883-89 \end{aligned}$ | 40845s, 59,89s | 40859s,89s |
| 137-507 | Acetic acid. | 40904 | 40999s | 41449s |
| $137-508$ | Acetic anhydride. | 40928 | 40999s | 41449 s |
| 137-509 | Stearic acid. | 40942 | 40942 | 41449s |
| 137-510 | Adipic acid. | 40964 | 40999s | 41449s |
| 137-511 | Phthalates. | 40974-79 | 40979 | 41449s |
| 137-512 | Citric acid. | 40987 | 40999s | 41449s |


| Input-Output Commodity Classif. No. | Input-Output <br> Commodity <br> Title | Standard <br> Commodity <br> Classif. | Import Commodity Classif. | Export Commodity Classif. |
| :---: | :---: | :---: | :---: | :---: |
| 137-513 | Organic acids, their anhydrides, nolides, peroxide, peracids, and derivatives. | $\begin{aligned} & 40902,06-22, \\ & 32-34, \quad 44-62, \\ & 65-71,81-86, \\ & 88-99 \end{aligned}$ | $\begin{aligned} & 40902,32,50- \\ & 65,75,82-94, \\ & 99 \mathrm{~s} \end{aligned}$ | 41449s |
| 137-514 | Hexamethylenediamine. | 41129 | 41129 | 41459s |
| 137-515 | Sodium glutamate, mono. | 41145 | 41145 | 41459 s |
| 137-516 | Guanidines. | 41161 | 41199s | 41459s |
| 137-517 | Organo-inorganic compounds, heterocyclic compounds and inorganic esters. | 41204-99 | 41204-99 | 41479 |
| 137-518 | Organic chemicals, n.e.s. | 41302-99 | 41312-99 | 41499 |
| 137-519 | Titanium dioxide. | 40248; 42772 | 40248;4277s | $\begin{aligned} & \text { 40299s; } \\ & 42799 \mathrm{~s} \end{aligned}$ |
| 137-520 | Black, acetylene and carbon. | 40021-27 | 40025 | 40099s |
| 137-521 | Pigments, lakes and toners, proper. | $\begin{aligned} & 42702-62, \\ & 75-99 \end{aligned}$ | $\begin{aligned} & 42709-62, \\ & 75-99 \end{aligned}$ | 42799s |
| 137-522 | Pigments, lakes and toners, n.e.s. | $\begin{aligned} & 40241-44,55, \\ & 57 ; 40431 \end{aligned}$ | $\begin{aligned} & \text { 40240,57; } \\ & 40499 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 40240,99 \mathrm{~s} ; \\ & 40499 \mathrm{~s} \end{aligned}$ |
| 137-523 | Urea, calcium cyanide, ammonium nitrate, ammonium phosphates, ammonium sulphate, and nitrogen phosphate fertilizers, n.e.s. | 41631,37-48 | $\begin{aligned} & 41631,39, \\ & 48,99 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 41645 \mathrm{~s}, 47 \mathrm{~s}, \\ & 48 \end{aligned}$ |
| 137-524 | Synthetic rubber. | 42210-50 | 42210,50 | 42499s |
| 137-525 | Antifreeze compounds. | 42906 | 42911s | 42999s |
| 137-526 | Additives for mineral oils, n.e.s. | 42902,08 | 42907, 08,99s | 42999s |


| Input-0utput <br> Commodity <br> Classif. No. | Input-0utput Commodity Title | Standard <br> Commodity <br> Classif. | Import <br> Commodity Classif. | Export Commodity Classif. |
| :---: | :---: | :---: | :---: | :---: |
| 137-527 | Glycerine, crude. | 42948 | 42947s,48 | 42999s |
| 137-528 | Rubber and plastics compounding agents. | 42972 | 42972 | 42999s |
| 138-529 | Crude vegetable materials and extracts including turpentine, resins, rosins, bark and herbs. | $\begin{aligned} & 21410-90 ; \\ & 21710-99 ; \\ & 21905-19,45- \\ & 99 ; 39905,10, \\ & 20-40,45 \mathrm{~s}, \\ & 50-99 \end{aligned}$ | $\begin{aligned} & 21703-99 ; \\ & 21945-75,99 \mathrm{~s} ; \\ & 39905-10,20 \text {; } \\ & 35,45 \mathrm{~s}, 99 \end{aligned}$ | $\begin{aligned} & 21430,99 ; \\ & 21799 ; \\ & 21939 \mathrm{~s}, 99 \mathrm{~s} ; \\ & 39945 \mathrm{~s}, 99 \mathrm{~s} \end{aligned}$ |
| 138-530 | Phthalic anhydride. | 40972 | 40972 | 41449 s |
| 138-531 | Crop and seed treatments. | 41703-79 | 41830-79 | 41899 s |
| 138-532 | Herbicides. | 41781-99 | 41882-89 | 41899 s |
| 138-533 | Insecticides and rodenticides, n.e.s. | 41903-79 | 41899 | 41899 s |
| 138-534 | Adhesives. | 42105-99 | 42119-99 | 42119,99 |
| 138-535 | Automotive chemicals, excluding antifreeze. | 42910 | 42911 s | 42999s |
| 138-536 | Anti-acid additives for cements. | 42905 | 42999s | 42999 s |
| 138-537 | Boiler chemicals. | 42912 | 42999 s | 42999 s |
| 138-538 | Compound catalysts. | 42922 | 42922 | 42999s |
| 138-539 | Metal working compounds. | 42952 | 42952 | 42999s |
| 138-540 | Printing ink. | 42966 | 42966 | 42999 s |
| 138-541 | Rotogravure ink. | 42968 | 42968 | 42999s |
| 138-542 | Textile specialty chemicals. | 42982 | 42982 | 42999s |



| Input-Output Commodity Classif. No. | Input-Output <br> Commodity <br> Title | Standard Commodity Classif. | Import Commodity Classif. | Export Commodity Classif. |
| :---: | :---: | :---: | :---: | :---: |
| 139-555 | Miscellaneous measuring and controlling instruments including thermometers, thermostats and barometers. | $\begin{aligned} & 70304-40,44- \\ & 56,60,62,90 \end{aligned}$ | $\begin{aligned} & 70325,28,44 \mathrm{~s}, \\ & 48,62,90,95 \mathrm{~s} \end{aligned}$ | 70099s |
| 139-556 | Medical and related instruments, apparatus and supplies. | $\begin{aligned} & 70604-70720 ; \\ & 79870 ; \\ & 88204-16,90 ; \\ & 88304-88400 ; \\ & 88504-36,42-90 \end{aligned}$ | $\begin{aligned} & 70613-70729 ; \\ & 70954 \mathrm{~s} ; \\ & 79099 \mathrm{~s} ; \\ & 88024,27 \mathrm{~s}, 34- \\ & 49,52,59 \end{aligned}$ | $\begin{aligned} & 70069,79 \mathrm{~s} ; \\ & 79099 \mathrm{~s} ; \\ & 88035,39, \\ & 69 \mathrm{~s}, 29 \mathrm{~s} \end{aligned}$ |
| 139-557 | Industrial, military and civil defence safety equipment. | $\begin{aligned} & 72108 ; \\ & 72204,90 \end{aligned}$ | 72039 s | 77919s |
| 139-558 | Watches, clocks, chronometers, including parts and movements. | 82104-82400 | 82007-89 | 82019,29,99 |
| 139-559 | Photographic equipment and supplies, including film. | $\begin{aligned} & 91104-91532 \text {; } \\ & 91804-90 ; \\ & 91904,90 \end{aligned}$ | $\begin{aligned} & \text { 91111-49; } \\ & 91204-19 ; \\ & 91513-39,69 \mathrm{~s} ; \\ & 91813,39: \\ & 91939-49,99 \end{aligned}$ | 91019-89,99s |
| 140-560 | Jewelry, jewelry findings, dental metal and gem ornamental stones. | $\begin{aligned} & 47804-24 ; \\ & 81104-81320 ; \\ & 81900 ; 88220 \end{aligned}$ | $\begin{aligned} & \text { 47804,25; } \\ & 81017-33 ; \\ & 88027 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 47985,89 ; \\ & 81029 ; 880295 \end{aligned}$ |
| 140-561 | Silverware and plated ware, kitchen and table cutlery, and metal flat ware. | $\begin{aligned} & 81404-90 ; \\ & 85504-16,90 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 81049 ; 85052, \\ & 59 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 81049 ; \\ & 85059 \text { s } \end{aligned}$ |
| 141-562 | Brooms, brushes, mops and other non-electric cleaning equipment and toilet brushes. | $\begin{aligned} & 76104-90 ; \\ & 76204,08,12, \\ & 90 ; 86504-20 \end{aligned}$ | $\begin{aligned} & 76113,24,49 ; \\ & 76389 \mathrm{~s} ; \\ & 86504,20 \end{aligned}$ | $77935,39 \text {; }$ |
| 142-563 | Venetian blinds and shades and blinds of bamboo and wood. | 74744,48s | 74074 s | 74099s |


| Input-Output Commodity Classif. No. | Input-Output Commodity Title | Standard Commodity Classif. | Import Commodity Classif. | Export Commodity C1assif. |
| :---: | :---: | :---: | :---: | :---: |
| 143-564 | Plastic film and sheet, n.e.s. and other basic shapes and forms of plastics. | 42504-99 | $\begin{aligned} & 42416-29,77, \\ & 99 ; 42512-99 \end{aligned}$ | 42509s,99 |
| 143-565 | Plastic containers, n.e.s. and plastic bottle caps. | $\begin{aligned} & 95178,79,88 ; \\ & 95212,90 \end{aligned}$ | $\begin{aligned} & 95078,79 \mathrm{~s}, \\ & 88,99 \mathrm{~s} \end{aligned}$ | 95099 s |
| 143-566 | Prefabricated buildings and structures, of plastic. | 94110 s | 94911 s | 96099 s |
| 143-567 | ```Plastic hose, pails, tablecloths, and plastic end products, n.e.s.``` | $\begin{aligned} & 49312,32 ; \\ & 67164 ; 76220 \mathrm{~s} ; \\ & 84710 ; 85590 \mathrm{~s} ; \\ & 85616 ; 86532, \\ & 40 ; 86712,16 \mathrm{~s} ; \\ & 86528 ; 96900 \end{aligned}$ | ```49339s; 67164; 76389s; 84711s; 85059s; 85068; 86532, 49;86712,16s; 96199``` | $\begin{aligned} & 49060 \mathrm{~s} ; \\ & 77909 \mathrm{~s}, 99 \mathrm{~s} ; \\ & 84079 \mathrm{~s} ; \\ & 85059 \mathrm{~s} ; \\ & 85069 \mathrm{~s} ; \\ & 86099 \mathrm{~s} ; \\ & 96096 \end{aligned}$ |
| 144-568 | Bicycles, children's vehicles and parts. | $\begin{aligned} & 61108-20 \\ & 83604-90 \end{aligned}$ | $\begin{aligned} & 61108,16,20 ; \\ & 83792,99 \end{aligned}$ | $\begin{aligned} & 61199 \mathrm{~s} ; \\ & 83079 \mathrm{~s} \end{aligned}$ |
| 144-569 | Sporting equipment, fishing and hunting equipment, and playground and shooting gallery equipment. | $\begin{aligned} & 83102-16 ; \\ & 83201-90 ; \\ & 83304-1 a \end{aligned}$ | 83215-99 | $\begin{aligned} & 83023-35, \\ & 99 \end{aligned}$ |
| 144-570 | Toys and game sets. | 83408-83590 | 83709-89 | 83055,79s |
| 145-571 | Fur dressing and dyeing services. | N/A | N/A | N/A |
| 146-572 | Signs and advertising displays. | 94204-12,20,90 | 94929 s, 28 | 96099 s |
| 146-573 | Custom work,miscellaneous. | N/A | N/A | N/A |
| 147-574 | Ice. | 27820 | 27999s | 27995s |


| Input-Output <br> Commodity <br> Classif. No. | Input-0utput <br> Commodity <br> Title | Standard <br> Commodity Classif. | Import <br> Commodity <br> Classif. | Export <br> Commodity <br> Classif. |
| :---: | :---: | :---: | :---: | :---: |
| 147-575 | Animal hair not suitable for spinning, feathers, quills, bristles and human hair. | $\begin{aligned} & 20510-80 ; \\ & 24310-30 \end{aligned}$ | $\begin{aligned} & 20529,49 ; \\ & 24310,20,30 \end{aligned}$ | $\begin{aligned} & 20529,49 ; \\ & 24320,49 s \end{aligned}$ |
| 147-576 | Miscellaneous fabricated materials, including bristles, button and buckle blanks, gaskets and basic jewelry parts. | $\begin{aligned} & 46916-28 ; \\ & 49608-16,28- \\ & 36,52,99 \end{aligned}$ | $\begin{aligned} & 46920,28 s, 99 s \\ & 49615,32,60 \\ & 99 s \end{aligned}$ | $\begin{aligned} & \text { 46999s; } \\ & \text { 49099s } \end{aligned}$ |
| 147-577 | Office, desk and writing equipment including carbon paper, stamp and stamp pads, stencils, typewriter ribbon, pens and pencils. | $\begin{aligned} & 90136 ; 90204- \\ & 60,80-92 ; \\ & 90304-44 ; \\ & 90416,32-40,98 \end{aligned}$ | $\begin{aligned} & 90136 ; 90204- \\ & 80,99 \mathrm{~s} ; \\ & 90432,89,99 \mathrm{~s} \end{aligned}$ | $\begin{aligned} & 90019 \mathrm{~s}, 23, \\ & 24,29 \mathrm{~s}, 99 \mathrm{~s} \end{aligned}$ |
| 147-578 | Inks and ink eradicators, office mucilage and library paste. | $90404-12$ | 90404,99s | 90099 s |
| 147-579 | ```Buttons, needles, pins and misce1laneous notions.``` | $\begin{aligned} & 86536 ; \\ & 94403-90 \end{aligned}$ | $\begin{aligned} & 86536 ; \\ & 94418-99 \end{aligned}$ | $\begin{aligned} & 86099 \mathrm{~s} ; \\ & 96005 \end{aligned}$ |
| 147-580 | Phonograph records, musical instruments, artist materials, umbrellas and smokers' supplies. | $\begin{aligned} & 63680 ; 78972, \\ & 76,80 ; 86612, \\ & 16,20,22-28, \\ & 36,40 ; 92104- \\ & 90 ; 90504-90 \end{aligned}$ | $\begin{aligned} & 63680 ; 78975, \\ & 99 \mathrm{~s} ; 86626, \\ & 27,40 \mathrm{~s} ; 90504- \\ & 49 ; 92124-99 \end{aligned}$ | $\begin{aligned} & 63069 \mathrm{~s} ; \\ & 78099 \mathrm{~s} ; \\ & 86099 \mathrm{~s} ; \\ & 90099 \mathrm{~s} ; \\ & 92135,49,99 \end{aligned}$ |
| 147-581 | Household ornamental objects and works of art. | $\begin{aligned} & 94503-47,54- \\ & 81,90 ; 94604- \\ & 40 \end{aligned}$ | $\begin{aligned} & 94604-40 ; \\ & 94952,54,66- \\ & 95,99 \mathrm{~s} \end{aligned}$ | 96010-25,995 |
| 148-582 | Construction. | N/A | N/A | N/A |
| 149-583 | Alr transportation. | N/A | N/A | N/A |
| 150-584 | Other transportation. | N/A | N/A | N/A |


| Input-Output Commodity Classif. No. | Input-Output <br> Commodity <br> Tit1e | Standard <br> Commodity <br> Classif. | Import Commodity Classif. | Export Commodity Classif. |
| :---: | :---: | :---: | :---: | :---: |
| 150-585 | Services incidental to transportation, n.e.s. | N/A | N/A | N/A |
| 151-586 | Water transportation. | N/A | N/A | N/A |
| 151-587 | Services incidental to water transportation. | N/A | N/A | N/A |
| 152-588 | Railway transportation. | N/A | N/A | N/A |
| 153-589 | Truck transportation. | N/A | N/A | N/A |
| 154-590 | Bus transportation, interurban and rural. | N/A | N/A | N/A |
| 155-591 | Urban transit. | N/A | N/A | N/A |
| 156-592 | Taxicab transportation. | N/A | N/A | N/A |
| 157-593 | Pipeline transportation. | N/A | N/A | N/A |
| 158-594 | Highway and bridge maintenance. | N/A | N/A | N/A |
| 159-595 | Storage. | N/A | N/A | N/A |
| 160-596 | Radio and television broadcasting. | N/A | N/A | N/A |
| 161-597 | Telephone and telegraph communication. | N/A | N/A | N/A |
| 162-598 | Postal services. | N/A | N/A | N/A |
| 163-599 | Electric power. | 49704 | 49697 | 49075 |
| 164-600 | Gas distribution. | N/A | N/A | N/A |
| 164-601 | Coke. | 43519-49 | 43530,49 | 43530,49 |
| 165-602 | Water and other utilities. | N/A | N/A | N/A |
| 166-603 | Wholesaling service. | N/A | N/A | N/A |


| Input-Output <br> Commodity <br> Classif. No. | Input-Output <br> Commodity <br> Title | Standard Commodity Classif. | Import <br> Commodity <br> Classif. | Export <br> Commodity <br> Classif. |
| :---: | :---: | :---: | :---: | :---: |
| 166-604 | Repair and service provided by wholesale establishments. | N/A | N/A | N/A |
| 166-605 | Rental of office equipment. | N/A | N/A | N/A |
| 167-606 | Retailing service. | N/A | N/A | N/A |
| 167-607 | Repair and service provided by retail establishments, including auto repair. | N/A | N/A | N/A |
| 168-608 | ```Real estate (non- rental) and financial services.``` | N/A | N/A | N/A |
| 168-609 | Insurance. | N/A | N/A | N/A |
| 168-610 | Rent of land, buildings and other durable structures. | N/A | N/A | N/A |
| 168-611 | Royalties. | N/A | N/A | N/A |
| 169-612 | Education and related services. | N/A | N/A | N/A |
| 170-613 | Hospital services. | N/A | N/A | N/A |
| 171-614 | Health services. | N/A | N/A | N/A |
| 173-615 | Motion picture entertainment. | N/A | N/A | N/A |
| 174-616 | Other recreational services. | N/A | N/A | N/A |
| 175-617 | Services to business management. | N/A | N/A | N/A |
| 176-618 | Advertising services. | N/A | N/A | N/A |


| Input-Output <br> Commodity Classif. No. | Input-Output Standard <br> Commodity Commodity <br> Title Classif. | Import <br> Commodity <br> Classif. | Export <br> Commodity <br> Classif. |
| :---: | :---: | :---: | :---: |
| 177-619 | Laundry, cleaning and N/A pressing services. | N/A | N/A |
| 178-620 | Accommodation services. N/A | N/A | N/A |
| 178-621 | Meals. N/A | N/A | N/A |
| 178-622 | Service margin on $\mathrm{N} / \mathrm{A}$ alcoholic beverages. | N/A | N/A |
| 179-623 | Personal services. N/A | N/A | N/A |
| 180-624 | Photographic services. N/A | N/A | N/A |
| 181-625 | Miscellaneous repair services, excluding repair to buildings and dwellings. | N/A | N/A |
| 181-626 | Services to buildings N/A and dwellings. | N/A | N/A |
| 182-627 | Other services to busi- N/A ness and persons. | N/A | N/A |
| 182-628 | Rental of automobiles N/A and trucks. | N/A | N/A |
| 182-629 | Trade association dues. N/A | N/A | N/A |
| 182-630 | ```Rental of all other N/A machinery and equipment including construction machinery.``` | N/A | N/A |
| 183-631 | ```Spare parts and maint- N/A enance supplies for machinery and equipment.``` | N/A | N/A |
| 184-632 | Office supplies. N/A | N/A | N/A |
| 185-633 | Cafeteria supplies. N/A | N/A | N/A |
| 186-634 | ```Cleaning, safety, medical N/A and miscellaneous building maintenance sup.``` | N/A | N/A |


| Input-0utput Commodity Classif. No. | Input-Output <br> Commodity <br> Title | Standard Commodity Classif. | Import <br> Commodity <br> Classif. | Export <br> Commodi <br> Classif |
| :---: | :---: | :---: | :---: | :---: |
| 187-635 | Laboratory equipment and supplies. | N/A | N/A | N/A |
| 188-636 | Travelling and entertainment. | N/A | N/A | N/A |
| 190-637 | Advertising. | N/A | N/A | N/A |
| 191-638 | Purchased repair services for machinery and equipment. | N/A | N/A | N/A |
| Specified Non-Competitive Commodities (Imnorted) |  |  |  |  |
| 000-639 | Cotton, raw and semiprocessed. | 24410-30 | 24410,30 | 24439 |
| 000-640 | Rubber, natural, latex and crude and rubber allied gums. | 21610-40 | 21610,20,49 | 21649 |
| 000-641 | Cane sugar, raw. | 10119 | 10115,19 | 10150s |
| 000-642 | Cocoa beans, unroated. | 11110 | 11110 |  |
| 000-643 | Green coffee. | 11210 | 11210 |  |
| 000-644 | Tropical fruit. | $\begin{aligned} & 07109,15,21- \\ & 27,39,48 \end{aligned}$ | $\begin{aligned} & 07109,15,24, \\ & 39,48,59 \mathrm{~s} \end{aligned}$ | 07159s |

## CLASSIFICATION OF 40 INPUT-OUTPUT COMMODITY GROUPS

IOCC-S

COMMODITY TITLES AND DEFINITIONS

Input-Output 40 Commodity Classification No.

1-001

1-002
1-003
1-004

1-005

2-006

2-007

3-008
3-009

4-010

Input-Output
40 Commodity Title
Live animals

Grain
Fish and fur
Forestry products

Other agricultural products

Metallic ores and concentrates

Non-metallic minerals

Coa1
Oil, gas and services incidental to mining

Meat, fish and dairy products
Groupings of 644
Input-Output Commodities
$1-001,1-002,1-003$,
$1-004,1-005,1-006$
$1-007,1-008,1-009$
$3-030,3-031$
$2-025,2-026,2-027$,
$2-028,2-029$
$1-010,1-011,1-012$,
$1-013,1-014,1-015$,
$1-016,1-017,1-018$,
$1-019,1-020,1-021$,
$1-022,1-023,1-024$
$4-032,6-033,7-034$,
$8-035,8-036$
$12-042,13-043,14-044$,
$15-045,15-046,15-047$,
$15-048,16-049,16-050$
$9-037$
$10-038,10-039,10-040$,
$10-041,17-051$
$18-052,18-053,18-054$,
$18-055,18-056,18-057$,
$18-058,18-059,18-060$,
$18-061,18-062,18-063$,
$18-064,19-065,19-066$,
$20-067,20-068,20-069$,
$20-070,20-071,20-072$,
$20-073,21-074,21-075$

Groupings of 644
Input-Output Commodities

$$
\begin{array}{lll}
1-001, & 1-002, & 1-003, \\
1-004, & 1-005, & 1-006 \\
1-007, & 1-008, & 1-009 \\
3-030, & 3-031 & \\
2-025, & 2-026, & 2-027, \\
2-028, & 2-029 & \\
1-010, & 1-011, & 1-012, \\
1-013, & 1-014, & 1-015, \\
1-016, & 1-017, & 1-018, \\
1-019, & 1-020, & 1-021, \\
1-022, & 1-023, & 1-024 \\
4-032, & 6-033, & 7-034, \\
8-035, & 8-036 &
\end{array}
$$

$$
15-045, \quad 15-046, \quad 15-047
$$

$$
15-048,16-049,16-050
$$

$$
9-037
$$

$$
10-038, \quad 10-039,10-040
$$

$$
10-041, \quad 17-051
$$

$$
18-052,18-053,18-054
$$

$$
18-055,18-056,18-057
$$

$$
18-058,18-059,18-060
$$

18-061, 18-062, 18-003,

$$
20-067,20-068,20-069
$$

$$
20-070,20-071,20-072
$$

$$
20-073,21-074,21-075
$$

Input-Output 40 Commodity Classification No.

4-011

4-012

4-013

5-014

Input-Output
40 Commodity Title
Fruit, vegetable, feed and miscellaneous food products

Beverages

Tobacco and tobacco products
Leather and textile products

Groupings of 644
Input-Output Commodities
22-076, 23-077, 23-078, $23-079,23-080,23-081$, 23-082, 23-083, 23-084, $23-085,23-086,24-087$, 24-088, 24-089, 24-090, 24-091, 25-092, 25-093, 25-094, 26-095, 27-096, 28-097, 28-098, 29-099, 29-100, 29-101, 29-102, 30-103, 30-104, 30-105, $31-106,31-107,31-108$, $31-109,32-110,32-111$, $32-112,32-113,32-114$, $32-115,32-116,32-117$
$33-118,33-119,34-120$, $34-121,34-122,34-123$, 35-124, 36-125
$37-126,38-127,38-128$

42-144, 43-145, 44-146, 45-147, 45-148, 45-149, $46-150,46-151,46-152$, 46-153, 46-154, 46-155, 47-156, 48-157, 48-158, 48-159, 49-160, 49-161, 49-162, 49-163, 49-164, 49-165, 49-166, 49-167, $50-168,50-169,51-170$, 51-171, 52-172, 52-173, 52-174, 53-175, 53-176, $53-177,54-178,54-179$, 55-180, 56-181, 57-182, $57-183,58-184,58-185$, $58-186,59-187,60-188$, 60-189, 60-190, 60-191, $60-192,60-193$
61-194, 62-195, 62-196, 62-197, 62-198, 63-199, 63-200, 63-201, 63-202, 63-203, 63-204, 63-205, $63-206,63-207,63-208$

| Input-Output |  |  |
| :---: | :---: | :---: |
| 40 Commodity | Input-Output | Groupings of 644 |
| Classification No. | 40 Commodity Title | Input-Output Commodities |
| 6-016 | Lumber \& sawmill products | $\begin{array}{ll} 64-209, & 64-210, \\ 64-212, & 64-213, \\ 64-211, \end{array}$ |
| 6-017 | Furniture \& fixtures | $\begin{aligned} & 70-224,71-225,72-226, \\ & 72-227,73-228 \end{aligned}$ |
| 6-018 | Other wood products | $\begin{array}{lll} 65-215, & 66-216, & 66-217, \\ 66-218, & 67-219, & 68-220, \\ 69-221, & 69-222, & 69-223 \end{array}$ |
| 7-019 | Paper and paper products | $\begin{array}{ll} 74-229, & 74-230, \\ 74-232, & 74-233, \\ 74-231, \\ 74-235, & 74-236, \\ 74-237, \\ 74-238, & 74-239, \\ 75-241, & 74-240, \\ 77-244, & 77-245, \\ 76-243, \\ 77-247, & 77-248, \\ 77-250 \end{array}$ |
| 8-020 | Iron and steel basic products |  |
| 8-021 | Non-ferrous metal basic products |  |


| Input-0utput <br> 40 Commodity <br> Classification No. | Input-Output <br> 40 Commodity Title | Groupings of 644 <br> Input-Output Commodities |
| :---: | :---: | :---: |
| 8-022 | Machinery and equipment (excl. agricultural) |  |
| 9-023 | Automobiles, trucks and parts | $\begin{array}{lll} 101-372, & 101-373, & 101-374, \\ 101-375, & 102-376, & 102-377, \\ 102-378, & 103-379, & 103-380, \\ 103-381, & 103-382 & \end{array}$ |
| 9-024 | Other transportation equipment (inc1. agriculture) | $\begin{aligned} & 96-350,96-351,100-368, \\ & 100-369,100-370,100-371, \\ & 104-383,104-384,104-385, \\ & 105-386,105-387,105-388, \\ & 106-389,106-390 \end{aligned}$ |
| 9-025 | Electrical and communications equipment | $\begin{array}{lll} 107-391, & 108-392, & 108-393, \\ 108-394, & 108-395, & 109-396 \\ 109-397, & 110-398, & 110-399 \\ 110-400, & 110-401, & 110-402, \\ 110-403, & 111-404, & 111-405, \\ 111-406, & 111-407, & 111-408, \\ 112-409, & 113-410, & 113-411, \\ 114-412, & 114-413, & 114-414 \end{array}$ |
| 10-026 | Rubber products | $\begin{array}{lll} 39-129, & 40-130, & 40-131, \\ 40-132, & 40-133, & 40-134, \\ 41-135, & 41-136, & 41-137, \\ 41-138, & 41-139, & 41-140, \\ 41-141, & 41-142, & 41-143 \end{array}$ |
| 10-027 | Petroleum \& coal products | $\begin{array}{ll} 128-436, & 128-437, \\ 128-439, & 128-438, \\ 128-442, & 128-443, \\ 129-445 & 128-441, \end{array}$ |

Input-Output 40 Commodity Classification No. 10-028


Input-Output
40 Commodity Title
Chemical products

Printing \& publishing products

## Groupings of 644 <br> Input-Output Commodities

$$
\begin{aligned}
& 130-446, \\
& 130-449, \\
& 131-447,
\end{aligned} 130-448,
$$ 137-476, 137-477, 137-478, 137-479, 137-480, 137-481, 137-482, 137-483, 137-484, 137-485, 137-486, 137-487, 137-488, 137-489, 137-490, 137-491, 137-492, 137-493, 137-494, 137-495, 137-496, 137-497, 137-498, 137-499, 137-500, 137-501, 137-502, 137-503, 137-504, 137-505, 137-506, 137-507, 137-508, 137-509, 137-510, 137-511, 137-512, 137-513, 137-514, 137-515, 137-516, 137-517, 137-518, 137-519, 137-520, 137-521, 137-522, 137-523, 137-524, 137-525, 137-526, 137-527, 137-528, 138-529, 138-530, 138-531, 138-532, 138-533, 138-534, 138-535, 138-536, 138-537, 138-538, $138-539$, 138-540, 138-541, 138-542, 138-543, 138-544, 138-545, 138-546, 138-547, $138-548,138-549,138-550$, 138-551, 138-552

$78-251,78-252,78-253$, 78-254, 78-255, 78-256, 78-257, 79-258

| Input-Output |  |
| :---: | :---: |
| 40 Commodity | Input-Output |
| Classification No. | 40 Commodity Title |
| 11-030 | Non-metallic mineral products |
| 11-031 | Miscellaneous manufactured commodities |
| 12-032 | Construction |
| 13-033 | Transportation, storage and trade |
| 14-034 | Utilities |
| 15-035 | Finance, insurance and real estate |
| 15-036 | Communications |
| 15-037 | Business services |
| 15-038 | Personal services |

Groupings of 644
Input-Output Commodities

$$
\begin{array}{lll}
115-415, & 116-416, & 117-417, \\
118-418, & 118-419, & 119-420, \\
120-421, & 120-422, & 120-423, \\
121-424, & 122-425, & 122-426, \\
123-427, & 124-428, & 124-429, \\
125-430, & 125-431, & 125-432, \\
125-433, & 126-434, & 127-435 \\
139-553, & 139-554, & 139-555, \\
139-556, & 139-557, & 139-558 \\
139-559, & 140-560, & 140-561, \\
141-562, & 142-563, & 143-564, \\
143-565, & 143-566, & 143-567, \\
144-568, & 144-569, & 144-570, \\
145-571, & 146-572, & 146-573, \\
147-574, & 147-575, & 147-576, \\
147-577, & 147-578, & 147-579, \\
147-580, & 147-581 &
\end{array}
$$

148-582

$$
\begin{array}{lll}
149-583, & 150-584, & 150-585, \\
151-586, & 151-587, & 152-588, \\
153-589, & 154-590, & 155-591, \\
156-592, & 157-593, & 158-594, \\
159-595, & 166-603, & 166-604, \\
166-605, & 167-606, & 167-607 \\
163-599, & 164-600, & 164-601, \\
165-602
\end{array}
$$

$$
168-608,168-609,168-610
$$

$$
168-611
$$

$$
160-596,161-597,162-598
$$

$$
175-617,176-618,178-620
$$

$$
178-621,178-622,182-628
$$

$$
182-630
$$

$$
169-612,170-613,171-614
$$

$$
173-615,174-616,177-619
$$

$$
179-623,180-624,181-625,
$$

$$
181-626,182-627,182-629
$$

| Input-Output |  |  |
| :---: | :---: | :---: |
| 40 Commodity | Input-output | Groupings of 644 |
| Classification No. | 40 Commodity Title | Input-Output Commodities |
| 16-039 | Advertising, travel \& entertainment | 188-636, 190-637 |
| 16-040 | Repair \& operating supplies and services | $\begin{aligned} & 183-631,184-632,185-633, \\ & 186-634,187-635,191-638 \end{aligned}$ |
|  | d Non-Competitive Commodit | (Imported) |
| 041 | Non-competitive imports | $\begin{array}{lll} 000-639, & 000-640, & 000-641 \\ 000-642, & 000-643, & 000-644 \end{array}$ |

## CLASSIFICATION OF 65 INPUT-OUTPUT COMMODITY GROUPS

IOCC-M

## COMMODITY TITLES AND DEFINITIONS

| Input-Output |  |  |
| :---: | :---: | :---: |
| 65 Commodity | Input-Output | Groupings of 644 |
| Classification No. | 65 Commodity Title | Input-Output Commodities |
| 1-001 | Agricultural products | $\begin{array}{ll} 1-001, & 1-002, \\ 1-004, & 1-005, \\ 1-006, \\ 1-007, & 1-008, \\ 1-009, \\ 1-010, & 1-011, \\ 1-013, & 1-014, \\ 1-015, \\ 1-016, & 1-017, \\ 1-019, & 1-020, \\ 1-022, & 1-023, \\ 1-024 \end{array}$ |
| 2-002 | Forestry products | $\begin{aligned} & 2-025,2-026,2-027 \\ & 2-028,2-029 \end{aligned}$ |
| 3-003 | Hunting, fishing,trapping products | 3-030, 3-031 |
| 4-004 | Metallic ores and concentrates | $\begin{aligned} & 4-032,6-033,7-034 \\ & 8-035,8-036 \end{aligned}$ |
| 5-005 | Non-metallic minerals | $\begin{aligned} & 12-042,13-043,14-044, \\ & 15-045,15-046,15-047, \\ & 15-048,16-049,16-050 \end{aligned}$ |
| 6-006 | Coal | 9-037 |
| 7-007 | 0il, gas \& services incidental to mining | $\begin{aligned} & 10-038,10-039,10-040 \\ & 10-041,17-051 \end{aligned}$ |
| 8-008 | Meat products | $\begin{aligned} & 18-052,18-053,18-054, \\ & 18-055,18-056,18-057, \\ & 18-058,18-059,18-060, \\ & 18-061, \\ & 18-064, \\ & 18-062, \\ & 18-065, \\ & 18-063 \end{aligned}$ |
| 9-009 | Dairy products | $\begin{array}{ll} 20-067,20-068, & 20-069 \\ 20-070,20-071, & 20-072, \\ 20-073, & 21-074, \\ 21-075 \end{array}$ |


| Input-0utput |  |  |
| :---: | :---: | :---: |
| 65 Commodity | Input-Output | Groupings of 644 |
| Classification No. | 65 Commodity Title | Input-Output Commodities |
| 10-010 | Fruit and vegetable products |  |
| 11-011 | Feed, flour, cereals | $\begin{array}{lll} 24-087, & 24-088, & 24-089, \\ 24-090, & 24-091, & 25-092, \\ 25-093, & 25-094, & 26-095 \end{array}$ |
| 12-012 | Biscuit \& bakery products | 27-096, 28-097, 28-098 |
| 13-013 | Sugar, confectionery | $\begin{array}{lll} 29-099, & 29-100, & 29-101, \\ 29-102, & 30-103, & 30-104 \\ 30-105 \end{array}$ |
| 14-014 | Other food products | $\begin{array}{lll} 22-076, & 31-106, & 31-107, \\ 31-108, & 31-109, & 32-110, \\ 32-111, & 32-112, & 32-113, \\ 32-114, & 32-115, & 32-116, \\ 32-117 \end{array}$ |
| 15-015 | Soft drinks | $33-118,33-119$ |
| 16-016 | Alcoholic beverages | $\begin{aligned} & 34-120,34-121,34-122, \\ & 34-123,35-124,36-125 \end{aligned}$ |
| 17-017 | Tobacco \& tobacco products | $37-126,38-127,38-128$ |
| 18-018 | Rubber products | $\begin{array}{ll} 39-129, & 40-130, \end{array} 39-131, ~ 子, ~ 40-134, ~ 子 133-132,40-133,41-137,$ |
| 19-019 | Leather products | $\begin{array}{lll} 42-144, & 43-145, & 44-146 \\ 45-147, & 45-148, & 45-149 \end{array}$ |
| 20-120 | Synthetic textiles | $\begin{aligned} & 49-160,49-161,49-162, \\ & 49-163,49-164,49-165, \\ & 49-166,49-167 \end{aligned}$ |
| 21-021 | Cotton, yarn \& cloth | $\begin{aligned} & 46-150,46-151, \\ & 46-153,46-154,46-152, \\ & 46-155 \end{aligned}$ |
| 22-022 | Knitted products | $\begin{aligned} & 61-194,62-195,62-196, \\ & 62-197,62-198 \end{aligned}$ |
| 23-023 | Clothing | $\begin{aligned} & 63-199, \\ & 63-202, \\ & 63-200, \\ & 63-205, \\ & 63-208 \end{aligned} \text { 63-206, } 63-204,$ |

Input-Output 65 Commodity Classification No.

24-024

25-025

26-026

27-027

28-028

29-029

30-030

31-031

32-032

| Input-Output | Groupings of 644 |
| :---: | :---: |
| 65 Commodity Title | Input-Output Commodities |
| Other textiles | $\begin{array}{lll} 47-156, & 48-157, & 48-158, \\ 48-159, & 50-168, & 50-169, \\ 51-170, & 51-171, & 52-172, \\ 52-173, & 52-174, & 53-175, \\ 53-176, & 53-177, & 54-178, \\ 54-179, & 55-180, & 56-181, \\ 57-182, & 57-183, & 58-184, \\ 58-185, & 58-186, & 59-187, \\ 60-188, & 60-189, & 60-190, \\ 60-191, & 60-192, & 60-193 \end{array}$ |
| Lumber \& sawmill products | $\begin{array}{ll} 64-209, & 64-210, \\ 64-212, & 64-213, \\ 64-211, \end{array}$ |
| Furniture \& fixtures | $\begin{aligned} & 70-224,71-225,72-226, \\ & 72-227,73-228 \end{aligned}$ |
| Other wood products | $\begin{array}{ll} 65-215, & 66-216, \\ 66-218, & 67-219, \\ 69-221, & 69-222, \\ 69-223, \end{array}$ |
| Pulp \& paper mill products | $\begin{array}{lll} 74-229, & 74-230, & 74-231, \\ 74-232, & 74-233, & 74-234, \\ 74-235, & 74-236, & 74-237, \\ 74-238, & 74-239, & 74-240 \end{array}$ |
| Other paper products | $\begin{aligned} & 75-241, \\ & 77-244,242, \\ & 77-245, \\ & 77-243, \\ & 77-247, \\ & 77-250 \end{aligned}$ |
| Printing \& publishing products | $\begin{aligned} & 78-251, \\ & 78-254, \\ & 78-252, \\ & 78-257, \\ & 79-255, \\ & 78-258 \end{aligned}$ |
| Iron \& steel mill products | $\begin{aligned} & 80-259,80-260,80-261, \\ & 80-262,80-263,80-264, \\ & 80-265,80-266,80-267, \\ & 80-268,80-269,80-270, \\ & 80-271,80-272 \end{aligned}$ |
| Smelted \& refined metals | $\begin{aligned} & 83-279,83-280,83-281, \\ & 83-282,83-283,83-284, \\ & 83-285,83-286,83-287, \\ & 83-288,83-289 \end{aligned}$ |


| Input-Output |  |  |
| :---: | :---: | :---: |
| 65 Commodity | Input-Output | Groupings of 644 |
| Classification No. | 65 Commodity Title | Input-Output Comnoditie |
| 33-033 | Other primary metals | $\begin{aligned} & 81-273,81-274,81-275, \\ & 81-276,82-277,82-278, \\ & 84-290,85-291,85-292, \\ & 86-293,86-294,86-295, \\ & 86-296,86-297 \end{aligned}$ |
| 34-034 | Fabricated structural metal products | 88-303, 88-304, 88-305 |
| 35-035 | Metal stampings | $\begin{aligned} & 90-307,90-308, \\ & 90-310,90-311, \\ & 90-312, \\ & 90-313 \end{aligned}$ |
| 36-036 | Other metal working products |  |
| 37-037 | Machinery (n.e.s.) | $96-350,96-351, ~ 97-352$, <br> $97-353,97-354,97-355$, <br> $97-356,97-357,97-358$, <br> $97-359,97-360,97-361$, <br> $97-362,98-363,99-364$, <br> $99-365,99-366$, $99-367-2$ |
| 38-038 | Aircraft \& parts | $\begin{aligned} & 100-368,100-369,100-370 \\ & 100-371 \end{aligned}$ |
| 39-039 | Automobile \& truck | $\begin{aligned} & 101-372,101-373,101-374, \\ & 101-375,102-376,102-377, \\ & 102-378 \end{aligned}$ |
| 40-040 | Motot vehicle parts | $\begin{aligned} & 103-379,103-380,103-381, \\ & 103-382 \end{aligned}$ |
| 41-041 | Other transportation equipment | $\begin{aligned} & 104-383,104-384,104-385, \\ & 105-386,105-387,105-388, \\ & 106-389,106-390 \end{aligned}$ |
| 42-042 | Electrical appliances | $\begin{aligned} & 107-391,108-392,108-393 \\ & 108-394,108-395 \end{aligned}$ |


| Input-Output |  |  |
| :---: | :---: | :---: |
| 65 Commodity | Input-Output | Groupings of 644 |
| Classification No. | 65 Commodity Title | Input-Output Commodities |
| 43-043 | Industrial equipment, electrical | $\begin{aligned} & 111-404,111-405,111-406, \\ & 111-407,111-408 \end{aligned}$ |
| 44-044 | Commuication equipment \& wire | $\begin{aligned} & 110-398,110-399,110-400, \\ & 110-401,110-402,110-403, \\ & 113-410,113-411 \end{aligned}$ |
| 45-045 | Other electrical products | $\begin{aligned} & 109-396,109-397,112-409 \\ & 114-412,114-413,114-414 \end{aligned}$ |
| 46-046 | Clay, 1ime \& cement | $\begin{array}{lll} 115-415, & 116-416, & 117-417, \\ 118-418, & 118-419, & 119-420, \\ 120-421, & 120-422, & 120-423, \\ 121-424, & 122-425, & 122-426 \end{array}$ |
| 47-047 | Non-metal mineral products (n.e.s.) | $\begin{array}{lll} 123-427, & 124-428, & 124-429, \\ 125-430, & 125-431, & 125-432, \\ 125-433, & 126-434, & 127-435 \end{array}$ |
| 48-048 | Petroleum \& coal products | $\begin{array}{ll} 128-436, & 128-437, \\ 128-439, & 128-440, \\ 128-441, \\ 128-442, & 128-443, \\ 129-445 \end{array}$ |
| 49-049 | Plastics \& synthetic resins | $\begin{aligned} & 132-451,132-452,132-453, \\ & 132-454 \end{aligned}$ |
| 50-050 | Paint \& varnish | 134-456 |
| 51-051 | Pharmaceuticals, soaps \& toiletries | $\begin{aligned} & 133-455,135-457,135-458, \\ & 135-459,135-460,135-461, \\ & 135-462,136-463 \end{aligned}$ |
| 52-052 | Other chemical products |  |

Input-Output 65 Commodity Classification No.

| 53-053 | Miscellaneous <br> manufactured commodities |
| :--- | :--- |

54-054

55-055

56-056

57-057
58-058

Input-Output
65 Commodity Title

Construction
Trade

Transport \& storage
$57-057$
$58-058$

Communications
Utilities

Groupings of 644
Input-Output Commodities


148-582
166-603, 166-604, 166-605, $167-606,167-607$
149-583, 150-584, 150-585, 151-586, 151-587, 152-588, 153-589, 154-590, 155-591, 156-592, 157-593, 158-594, 159-595

160-596, 161-597, 162-598
163-599, 164-600, 164-601, 165-602

Input-Output 65 Commodity
Classification No.
59-059

60-060
61-061
62-062

63-063
64-064

65-065

066

Input-Output
65 Commodity Title
Finance, insurance and real estate

Business services
Accommodation \& meals
Other services

Office supplies
Advertising, travel and entertainment

Repair, operating supplies and services

Groupings of 644
Input-Output Commodities
168-608, 168-609, 168-610, 168-611

175-617, 176-618
178-620, 178-621, 178-622
169-612, 170-613, 171-614, 173-615, 174-616, 177-619, 179-623, 180-624, 181-625, 181-626, 182-627, 182-628, 182-629, 182-630
184-632
188-636, 190-637

183-631, 185-633, 186-634, 187-635, 191-638

Specified Non-Competitive Commodities (Imported)

## CLASSIFICATION OF 197 INPUT-OUTPUT COMMODITY GROUPS

IOCC-I

## COMMODITY TITLES AND DEFINITIONS

Input-Output
197 Commodity
Classification No.
1-001

1-002
1-003
1-004
1-005
1-006
1-007

1-008

2-009

3-010
3-011

4-012
5-013

6-014

7-015

8-016
9-017

Input-Output Groupings of 644
197 Commodity Title
Live animals

Grain
Fruits, nuts and vegetables $1-013,1-014,1-015$
Mi1k, unprocessed
1-010
Eggs in the shell
1-011
Tobacco 1-021
Oil seeds, oil nuts and 1-019
oil kernels
Agricultural products,n.e.s. 1-012, 1-016, 1-017, 1-018, $1-020,1-022,1-023,1-024$

Forestry products 2-025, 2-026, 2-027, 2-028, 2-029

Fish 1andings 3-030
Fur skins, undressed, 3-031
excluding ranch
Iron ores and concentrates 7-034
Metallic ores and concen- 4-032
trates, n.e.s.
Radioactive ores and concen- 6-033 trates

Gold and platinum ores and 8-035, 8-036 concentrates

Coal
9-037
Crude mineral oils
10-038, 10-040

| Input-Output |  |  |
| :---: | :---: | :---: |
| 197 Commodity | Input-Output | Groupings of 644 |
| Classification No. | 197 Commodity Title | Input-Output Commodities |
| 9-018 | Natural gas | 10-039 |
| 9-019 | Products incidental to mining (including sulphur) | 17-051, 10-041 |
| 10-020 | Asbestos, crude and milled fibres | 12-042 |
| 11-021 | Clay and gypsum | 13-043, 15-046 |
| 11-022 | Salt | 14-044 |
| 11-023 | Non-metallic minerals, n .e.s. | $\begin{aligned} & 15-045,15-047,15-048, \\ & 16-049,16-050 \end{aligned}$ |
| 12-024 | Meat | $\begin{aligned} & 18-052,18-053,18-054, \\ & 18-055,18-056 \end{aligned}$ |
| 12-025 | Hides and skins, raw | 18-062 |
| 12-026 | Margarine, animal oils and fats and lard | 18-057, 18-058 |
| 12-027 | Meat by-products, n.e.s. | $\begin{aligned} & 18-059,18-060,18-061, \\ & 18-063,18-064 \end{aligned}$ |
| 13-028 | Poultry | 19-065, 19-066 |
| 14-029 | Milk and cream, fresh, processed | 20-067, 20-068 |
| 14-030 | Butter | 20-069 |
| 14-031 | Cheese, milk and cheddar | 20-070 |
| 14-032 | Dairy products, n.e.s. | 20-071, 20-072, 20-073 |
| 15-033 | Process cheese, mayonnaise | 21-074, 21-075 |
| 16-034 | Fish products | 22-076 |
| 17-035 | Fruit and vegetable products | $\begin{aligned} & 23-077,23-078,23-079, \\ & 23-080,23-081,23-082, \\ & 23-083,23-084,23-085, \\ & 23-086 \end{aligned}$ |
| 18-036 | Feeds and concentrates | $\begin{aligned} & 24-087,24-088,24-089 \\ & 24-090,24-091 \end{aligned}$ |
| 19-037 | Flour and meal, cereal and vegetable | 25-092, 25-093, 25-094 |
| 20-038 | Breakfast cereals | 26-095 |
| 21-039 | Biscuits and similar products | 27-096 |
| 22-040 | Bakery products | 28-097, 28-098 |
| 23-041 | Confectionery products | $\begin{aligned} & 29-099,29-100,29-101, \\ & 29-102 \end{aligned}$ |


| Input-Output <br> 197 Commodity <br> Glassification No. | ```Input-Output 1 9 7 \text { Commodity Title}``` | Groupings of 644 Input-Output Commodities |
| :---: | :---: | :---: |
| 24-042 | Sugar and molasses | $30-103,30-104,30-105$ |
| 25-043 | Oilseed meal, cake and oil | $\begin{aligned} & 31-106,31-107,31-108 \text {, } \\ & 31-109 \end{aligned}$ |
| 25-044 | Coffee and tea | 32-114, 32-115 |
| 26-045 | Food products and byproducts, n.e.s | $\begin{array}{lll} 32-110, & 32-111, & 32-112 \\ 32-113, & 32-116, & 32-117 \end{array}$ |
| 27-046 | Soft drinks and concentrates | 33-118, 33-119 |
| 28-047 | Distillery products | $\begin{aligned} & 34-120,34-121,34-122, \\ & 34-123 \end{aligned}$ |
| 29-048 | Brewery and winery products | 35-124, 36-125 |
| 30-049 | Tobacco, processed but unmanufactured | 37-126 |
| 31-050 | Tobacco products | 38-127, 38-128 |
| 32-051 | Footwear, rubber and plastic | 39-129 |
| 33-052 | Tires and tubes | $\begin{aligned} & 40-130,40-131,40-132 \\ & 40-133,40-134 \end{aligned}$ |
| 34-053 | Rubber products, n.e.s. | $\begin{array}{lll} 41-135, & 41-136, & 41-137 \\ 41-138, & 41-139, & 41-140 \\ 41-141, & 41-142, & 41-143 \end{array}$ |
| 35-054 | Leather | 42-144 |
| 36-055 | Footwear, leather | 43-145 |
| 37-056 | Leather products, n.e.s. | $\begin{aligned} & 44-146,45-147,45-148 \\ & 45-149 \end{aligned}$ |
| 38-057 | Yarn, cotton and cotton blends | 46-150, 46-151 |
| 38-058 | Fabrics and products, cotton | $\begin{aligned} & 46-152,46-153,46-154, \\ & 46-155 \end{aligned}$ |
| 39-059 | Yarn and fabric, wool and wool blends | $\begin{aligned} & 47-156,48-157,48-158 \\ & 48-159 \end{aligned}$ |
| 40-060 | Yarns and fibres, synthetic | $\begin{aligned} & 49-160,49-161,49-162, \\ & 49-163 \end{aligned}$ |
| 40-061 | Fabrics and products,syn. fibres and blends | $\begin{aligned} & 49-164,49-165,49-166, \\ & 49-167 \end{aligned}$ |
| 41-062 | Carpeting | 55-180 |

Input-0utput
197 Commodity
Classification No.

$$
\begin{aligned}
& 42-063 \\
& 43-064 \\
& 43-065 \\
& 44-066 \\
& 44-067 \\
& 44-068 \\
& 44-069
\end{aligned}
$$

45-070
46-071
46-072
47-073
47-074

48-075

48-076

49-077
50-078
51-079
51-080
52-081
53-082

54-083
54-084

54-085

Input-0utput
197 Commodity Title
Coated fabric and linoleum
Canvas products
Containers, textile
Felt
Cordage and twine
Fabrics; lace, narrow, quilting, belting and foam,

Textile products, n.e.s.

Hosiery
Fabrics, knitted
Clothing, knitted
Clothing, fur
Clothing, $n . e . s$.

Pulpwood chips and wood by-products

Sawnill products

Plywood and Veneer
Millwork (woodwork)
Containers, wooden
Wood products, n.e.s.
Furniture, household
Furniture, n.e.s.

Pulp
Paper stock

Paper products and byproducts,n.e.s.

Groupings of 644
Input-Output Commodities
$57-182,57-183$
$58-184,58-185,58-186$
59-187
$54-178,54-179$
$52-173,52-174$
53-175, 53-176, 53-177, 60-189
$50-168,50-169,50-170$, $51-171,52-172,56-181$, $60-188,60-190,60-191$, $60-192,60-193$
61-194
$62-195,62-196$
$62-197,62-198$
$63-205,63-206,63-207$
63-199, 63-200, 63-201,
63-202, 63-203, 63-204, 63-208

64-209, 64-213

64-210, 64-211, 64-212, 64-214

65-215
$66-216,66-217,66-218$
$67-219,69-222$
$68-220,69-221,69-223$
70-224
$71-225,72-226,72-227$
73-228
74-229
$74-230,74-231,74-232$, $74-233,74-234,74-235$,
74-237
$74-236,74-238,74-239$,

| Input-Output |  |  |
| :---: | :---: | :---: |
| 197 Commodity | Input-Output | Groupings of 644 |
| Classification No. | 197 Commodity Title | Input-Output Commodities |
| 55-086 | Building paper and construction materials | 75-241, 75-242 |
| 56-087 | Paper, cartons | 76-243 |
| 57-088 | Converted paper products | $\begin{aligned} & 77-244,77-245,77-246, \\ & 77-247,77-248,77-249, \\ & 77-250 \end{aligned}$ |
| 58-089 | Printed matter | $\begin{aligned} & 78-251, \quad 78-252, \quad 78-253, \\ & 78-254 \end{aligned}$ |
| 58-090 | Printing and publishing | $\begin{aligned} & 78-255,78-256,78-257 \\ & 79-258 \end{aligned}$ |
| 59-091 | Pig iron, steel in primary shapes, and ferro alloys | 80-259, 80-260, 80-261 |
| 59-092 | Steel bars and rods | 80-263 |
| 59-093 | Steel plates, sheet and strip | $\begin{aligned} & 80-264,80-265,80-266, \\ & 80-267,80-268 \end{aligned}$ |
| 59-094 | ```Structural shapes, including rails and track material of steel``` | 80-269, 80-270 |
| 59-095 | Steel castings | 80-262 |
| 59-096 | Graphite and carbon products and coal tar | 80-271, 80-272 |
| 60-097 | Steel pipes and tubes | $\begin{aligned} & 81-273,81-274,81-275, \\ & 81-276 \end{aligned}$ |
| 61-098 | Iron castings | 82-277, 82-278 |
| 62-099 | Non-ferrous base metals, alloys in primary forms | $\begin{aligned} & 83-279,83-280,83-281, \\ & 83-282,83-283,83-284, \\ & 83-285,83-286,83-287, \\ & 83-288,83-289 \end{aligned}$ |
| 63-100 | Aluminum, cast, rolled or extruded | 84-290 |
| 64-101 | Copper and copper alloys | 85-291, 85-292 |
| 65-102 | Non-ferrous metals, cast, rolled or extruded, n.e.s. | $\begin{aligned} & 86-293,86-294,86-295, \\ & 86-296,86-297 \end{aligned}$ |
| 66-103 | Plates, tanks and boilers | $\begin{aligned} & 87-298,87-299,87-300, \\ & 87-301,87-302 \end{aligned}$ |


| Input-Output |  |  |
| :---: | :---: | :---: |
| 197 Commodity | Input-Output | Groupings of 644 |
| Classification No. | 197 Commodity Title | Input-Output Commodities |
| 67-104 | Basic steel products, punched, drilled, or otherwise fabricated (including structural) | 88-303, 88-304, 88-305 |
| 68-105 | Fences, doors and architectural metal products, n.e.s | 89-306 |
| 69-106 | Containers, metal | 90-313 |
| 69-107 | ```Basic metal products, stamped, pressed or perforated``` | $\begin{aligned} & 90-307,90-308,90-309 \\ & 90-310 \end{aligned}$ |
| 69-108 | Metal household products, including ash cans, ironing boards and cooking utensils | 90-311, 90-312 |
| 70-109 | Wire and wire products | $\begin{aligned} & 91-314, \\ & 91-317, \\ & 91-315, \\ & 91-320, \\ & 91-321, \end{aligned} 91-316,319, ~ 91-322,$ |
| 71-110 | Hardware, n.e.s. | $92-323,92-324,92-325$ |
| 71-111 | Tools and cutting equipment | $\begin{aligned} & 92-326, \\ & 92-329,92-330, \\ & 92-332,92-328, \\ & 92-333 \end{aligned}$ |
| 71-112 | Heating and fuel burning equipment | $\begin{aligned} & 93-334,93-335,93-336, \\ & 93-337,93-338 \end{aligned}$ |
| 72-113 | ```Forgings and plumbing equipment of steel, metal, and plumber's brass``` | $\begin{aligned} & 95-340,95-341,95-342, \\ & 95-343,95-344 \end{aligned}$ |
| 72-114 | Equipment, metal fabricated, including firearms and firefighting and traffic control equipment | $\begin{array}{ll} 94-339, & 95-345, \\ 95-347, & 95-346, \\ 95-348, & 95-349 \end{array}$ |
| 73-115 | Agricultural implements | 96-350, 96-351 |
| 73-116 | Industrial Machinery | $\begin{array}{lll} 97-352, & 97-353, & 97-354, \\ 97-355, & 97-356, & 97-357, \\ 97-358, & 97-359, & 97-360, \\ 97-361, & 97-362 \end{array}$ |
| 74-117 | Refrigeration and air conditioning equipment | 98-363 |
| 74-118 | Office and store machinery | $\begin{aligned} & 99-364,99-365,99-366, \\ & 99-367 \end{aligned}$ |

Input-Output 197 Commodity Classification No.

75-119
75-120

76-121

76-122
76-123

76-124

77-125

78-128
78-127

78-128
78-129
79-130
79-131

79-132

79-133
80-134

80-135
81-136

82-137

82-138

Input-Output Groupings of 644
197 Commodity Title
Input-Output Commodities
Aircraft and aircraft equipt. $100-368,100-369,100-370$
Modification, conversion, 100-371 servicing, overhaul and repair to aircraft and engines

Passenger automobiles and 101-372 chassis

Commercial vehicles 101-373, 101-374
Commercial trailers and 102-377 semi-trailers

Motor vehicles and accesso- 101-375, 102-376, 102-378 ries, n.e.s.

Motor vehicle parts and
$103-379,103-380,103-381$, 103-382
$104-383,104-384,104-385$
Ships and boats, including 105-386, 105-387, 106-390
parts and accessories
Vehicles, n.e.s. 106-389
Ship repair 105-388
Small electrical appliances 107-391
Refrigerators, freezers and 108-393 combinations, domestic

Gas stoves and electric 108-394
ranges, domestic
Appliances, domestic, n.e.s. 108-392, 108-395
Communications equipment $110-398,110-399,110-400$ $110-401,110-402,110-403$

Wire and cable, electrical 113-410, 113-411
Industrial equipment, electrical

Radio, television and sound recording and reproducing equipment

Batteries

112-409

| Input-Output <br> 197 Commodity <br> Classification No. | Input-Output <br> 197 Commodity Title | Groupings of 644 <br> Input-Output Commodities |
| :---: | :---: | :---: |
| 82-139 | Light bulbs and fixtures | 114-413, 114-414 |
| 82-140 | Electrical equipment, n.e.s. | 114-412 |
| 83-141 | Cement | 115-415 |
| 83-142 | Lime | 116-416 |
| 84-143 | Plasters and other gypsum basic products | 117-417 |
| 84-144 | Concrete basic products | 118-418, 118-419, 119-420 |
| 85-145 | Clay products including porcelain and vitreous china | 120-421, 120-422, 120-423 |
| 85-146 | Refractories | 121-424 |
| 85-147 | Natural stone products | 122-425, 122-426 |
| 86-148 | Glass and glass products | $\begin{aligned} & 125-430,125-431,125-432, \\ & 125-433 \end{aligned}$ |
| 86-149 | Mineral wool and thermal insulation materials, n.e.s. | 123-427 |
| 87-150 | Asbestos basic products | 124-428, 124-429 |
| 87-151 | Non-metallic mineral basic products, n.e.s. | 126-434, 127-435 |
| 88-152 | Gasoline | 128-436, 128-437 |
| 88-153 | Fuel oil | 128-438 |
| 88-154 | Lubricating oil and grease | 128-439 |
| 88-155 | Petroleum and coal products, n.e.s. | $\begin{aligned} & 128-440,128-441, \\ & 128-443, \\ & 128-444, \\ & 129-442, \end{aligned}$ |
| 89-156 | Explosives including ammunition and pyrotechnics | $\begin{aligned} & 130-446,130-447,130-448 \\ & 130-449 \end{aligned}$ |
| 90-157 | Fertilizers | 131-450 |
| 91-158 | Plastic resins, cellulosic plastic film and sheet, and products incidental to resin manufacturing | $\begin{aligned} & 132-451,132-452,132-453, \\ & 132-454 \end{aligned}$ |
| 92-159 | Medicinal and pharmaceutical products | 133-455 |
| 93-160 | Paint and related products | 134-456 |
| 94-161 | Soaps, detergents, cleaning compounds and javel water | 135-460, 135-461, 135-462 |


| Input-Output <br> 197 Commodity <br> Classification No. | Input-Output <br> 197 Commodity Title | Groupings of 644 Input-Output Commodities |
| :---: | :---: | :---: |
| 94-162 | Vegetable oils and glycerine, refined (excluding corn oil) and dentifrices | 135-457, 135-458, 135-459 |
| 95-163 | Toilet preparations and cosmetics | 136-463 |
| 96-164 | Pigments, dyes, inks, and tanning materials | $\begin{aligned} & 137-519,137-520,137-521, \\ & 137-522,138-540,138-541 \\ & 138-548 \end{aligned}$ |
| 96-165 | Inorganic chemicals | $\begin{aligned} & 137-464,137-465,137-466, \\ & 137-467,137-468, \\ & 137-469, \\ & 137-470, \\ & 137-473, \\ & 137-471, \\ & 137-476, \\ & 137-474, \\ & 137-479, \\ & 137-475, \\ & 137-482, \\ & 137-480, \\ & 137-483 \end{aligned}$ |
| 96-166 | Organic and organo-inorganic chemicals |  |
| 96-167 | Industrial chemical products including synthetic rubber, adhesives and insecticides | $\begin{array}{lll} 137-523, & 137-524, & 137-525, \\ 137-526, & 137-527, & 137-528, \\ 138-529, & 138-530, & 138-531, \\ 138-532, & 138-533, & 138-534, \\ 138-535, & 138-536, & 138-537, \\ 138-538, & 138-539, & 138-542, \\ 138-543, & 138-546, & 138-547, \\ 138-549, & 138-550, & 138-551 \end{array}$ |
| 96-168 | Household chemical products | 138-544, 138-545, 138-552 |
| 97-169 | Scientific and laboratory equipment | $\begin{aligned} & 139-553,139-554,139-555, \\ & 139-556,139-557 \end{aligned}$ |
| 97-170 | Jewelry, including watches and tableware | $\begin{aligned} & 139-558,139-559,140-560 \text {, } \\ & 140-561 \end{aligned}$ |
| 97-171 | Plastic fabricated products | $\begin{aligned} & 143-564,143-565,143-566, \\ & 143-567 \end{aligned}$ |


| Input-Output <br> 197 Commodity <br> Classification No. | Input-Output <br> 197 Commodity Title | Groupings of 644 <br> Input-Output Commodities |
| :---: | :---: | :---: |
| 97-172 | Sporting goods and toys | 144-568, 144-569, 144-570 |
| 97-173 | Fur dressing and dyeing | 145-571 |
| 97-174 | Signs and displays | 146-572, 146-573 |
| 97-175 | Notions | 147-579 |
| 97-176 | Office, desk and writing equipment | 147-577, 147-578 |
| 97-177 | End products, n.e.s. | $\begin{aligned} & 141-562,142-563,147-574, \\ & 147-575,147-576,147-580, \\ & 147-581 \end{aligned}$ |
| 98-178 | Construction | 148-582 |
| 99-179 | Wholesale and retail trade | $\begin{aligned} & 166-603,166-604,166-605, \\ & 167-606,167-607 \end{aligned}$ |
| 100-180 | Transportation and storage | $\begin{aligned} & 149-583,150-584,150-585, \\ & 151-586,151-587,152-588, \\ & 153-589,154-590,155-591, \\ & 156-592,157-593,158-594, \\ & 159-595 \end{aligned}$ |
| 101-181 | Radio and television broadcasting | 160-596 |
| 101-182 | Telephone and telegraph communications | 161-597 |
| 101-183 | Postal services | 162-598 |
| 102-184 | Electric power | 163-599 |
| 102-185 | Gas distribution and other utilities | 164-600, 164-601, 165-602 |
| 103-186 | Real estate rent | 168-610 |
| 103-187 | Insurance and other financial services | 168-608, 168-609, 168-611 |
| 104-188 | Health and education | 170-613,-171-614 |
| 105-189 | Business services | 175-617, 176-618 |
| 106-190 | Accommodation and meals | 178-620, 178-621, 178-622 |
| 107-191 | Personal services, n.e.s. | $\begin{aligned} & 169-612,173-615,174-616, \\ & 177-619,179-623,180-624, \\ & 181-625,181-626,182-627, \\ & 182-629 \end{aligned}$ |
| 107-192 | Rentals, excluding real estate | 182-628, 182-630 |


| Input-Output |  |  |
| :---: | :---: | :---: |
| 197 Commodity | Input-0utput | Groupings of 644 |
| Classification No. | 197 Commodity Title | Input-Output Commodities |
| 108-193 0ffice supplies 184-632 |  |  |
| 109-194 | Advertising | 190-637 |
| 109-195 | Travel and entertainment | 188-636 |
| 110-196 | Cafeteria supplies | 185-633 |
| 110-197 | Repair \& operating supplies | $\begin{aligned} & 183-631,186-634,187-635, \\ & 191-638 \end{aligned}$ |
| Specified Non-Competitive Commodities (Imported) |  |  |
| 198 | Non-competitive imports | $\begin{array}{lll} 000-639, & 000-640, & 000-641 \\ 000-642, & 000-643, & 000-644 \end{array}$ |

TABLE 1 VALUES OF INOUSTRY INPUTS ANO FINAL EXPENOITURES. 1961 - AGGREGATION S (SEE CHAPTER 4)


TABLE I VALUES OF INDUSTRY INPUTS AND FINAL EXPENDITURES, 1961 - AGGREGATION S ISEE CHAPTER 41

| INDUSTRY(COLUMNS) |  | $\begin{array}{r} \text { AGR. FORESTRY } \\ \text { FISHING } \end{array}$ | $\begin{aligned} & \text { MINING } \\ & \text { EX:COAL } \end{aligned}$ | $\begin{aligned} & \text { FUEL } \\ & \text { AND } \end{aligned}$ | MINES <br> WELLS | $\begin{aligned} & \text { FOOD, } \\ & \text { TOBACCO IND. } \end{aligned}$ | textile INDUSTRIES | $\begin{aligned} & \text { WOOD AND } \\ & \text { FURN. I ND. } \end{aligned}$ | PAPER <br> INDUSTRIES | METAL <br> IINDUSTRIES |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| COMMODIT Y ROWSI |  | 1 | 2 |  | 3 | 4 | 5 | 6 | 7 | 8 |
| RURBER PRODUCTS | 26 | 6.7 | . 0 |  | .0 | . 0 | 15.3 | 7.1 | - 3 | 4.9 |
| PETROLEUM PROD. | 27 | 182.7 | 16.0 |  | 7.7 | 25.8 | 5.3 | 10.0 | 25.2 | 24.9 |
| OTMER CHEMICALS | 28 | 88.6 | 35.7 |  | 5.3 | 63.0 | 62.2 | 20.3 | 73.2 | 36.6 |
| PRINTED MATTER | 29 | .0 | .0 |  | . 0 | 7.2 | . 1 | . 1 | 6.1 | 1.6 |
| DTH.MINERAL PROD. |  | . 4 | 2.3 |  | . 1 | 35.2 | 1.2 | 7.2 | 6.2 | 31.0 |
| MISC. MFGR. PROD. |  | 1.2 | - 0 |  | - 0 | 6.1 | 39.3 | 11.2 | 10.6 | 5.2 |
| CONSTRUCTION | 32 | 83.0 | 14.8 |  | 11.2 | 15.4 | 5.5 | 6.8 | 9.2 | 26.5 |
| TRADE \& TRANSPORT |  | 229.3 | 35.0 |  | 19.0 | 280.7 | 104.9 | 107.8 | 108.4 | 192.4 |
| UTILITIES | 34 | 28.6 | 29.5 |  | 16.1 | 33.9 | 12.9 | 13.2 | 71.2 | 80.0 |
| FIMANCIAL SERVICE |  | 164.3 | 18.5 |  | 154.3 | 46.1 | 37.5 | 20.8 | 21.4 | 48.9 |
| COMMUNICATIONS | 36 | 13.0 | 2.3 |  | 3.6 | 16.3 | 9.2 | 6.3 | 8.0 | 20.9 |
| BUSINESS SERVICES | 37 | 40.3 | 19.6 |  | 25.5 | 39.7 | 13.4 | 6.1 | 10.6 | 24.0 |
| PERSONAL SERVICE |  | 4.9 | 3.8 |  | 5.5 | 16.3 | 4.3 | 4.4 | 8.6 | 18.7 |
| ADVTG. ¢ TRAVEL | 39 | 5.3 | 4.1 |  | 9.9 | 208.0 | 50.9 | 16.3 | 22.0 | 59.8 |
| REPAIR \& MAINT. | 40 | 200.4 | 86.2 |  | 46.0 | 132.1 | 60.1 | 53.5 | 89.5 | 164.6 |
| NON-COMP.IMPORTS |  | .0 | - 0 |  | .0 | 122.1 | 50.1 | . 0 | . 0 | . 0 |
| BAL OF PAYMNT ADJ | 142 | .0 | . 0 |  | .0 | . 0 | . 0 | . 0 | . 0 | . 0 |
| COMMODITY TAXES | 43 | 26.8 | 4.2 |  | 2.4 | 12.9 | . 8 | 1.7 | 1.3 | 4.7 |
| SUBSIDIES | 44 | $-21.0$ | -12.4 |  | $-15.5$ | $-7.7$ | . 0 | . 0 | . 0 | $=.3$ |
| INDIR.TAXEGOY.SER | R45 | 154.2 | 16.0 |  | 9.6 | 34.4 | 12.4 | 9.4 | 28.9 | 38.3 |
| WAGES \& SALARIES |  | 544.0 | 380.1 |  | 167.4 | 873.3 | 660.9 | 423.3 | 505.7 | 1172.7 |
| NET-INC.UNINCORP. | . 47 | 999.9 | 4.1 |  | 2.2 | 28.4 | 12.4 | 18.9 | . 6 | 8.8 |
| SURPLUS | 48 | 692.4 | 643.5 |  | 360.7 | 426.3 | 128.9 | 97.3 | 430.9 | 503.9 |
| SUB TOTAL 441 -48) | 49 | 2396.2 | 1035.6 |  | 526.7 | 1489.9 | 865.5 | 550.7 | 967.4 | 1728.1 |
| TOTAL INPUTS | 50 | 4070.3 | 1379.0 |  | 876.6 | 5474.3 | 2217.4 | 1426.0 | 2228.6 | 4930.7 |

TABLE 1 VALUES DF INDUSTRY INPUTS AND FINAL EXPENDITURES. 1961 - AGGREGATIDN $S$ (SEE CHAPTER 4 )


TABLE 1 VALUES DF INDUSTRY INPUTS AND FINAL EXPENDITURES, 1961 - AGGREGATION S ISEE CHAPTER 4 I

| INDUSTRY(COLUMNS) |  | TRANSPORT E ELEC.EQUIP. | CHEM.RUBBER PETROL IND. | OTHER MANUF I INO. | CONS TRUCTION | TRADE AND TRANSPOR T | UTILITIES | COM.AND <br> SERVICE IND. | DUMMY <br> INOUSTRIES |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| COMmODITYIROMS) |  | 9 | 10 | 11. | 12 | 13 | 14 | 15 | 16 |
| RUBBER PRODUCIS | 26 | 62.0 | 10.9 | 1.7 | 26.1 | 32.2 | . 0 | 1.7 | 81.2 |
| PETROLEUM PROD. | 27 | 7.5 | 64.1 | 13.9 | 104.0 | 278.1 | 6.9 | 38.2 | 3.9 |
| OTHER CHEMICALS | 28 | 47.6 | 381.9 | 93.3 | 69.3 | 9.0 | - 3 | 67.3 | 147.7 |
| PRINTEO MATTER | 29 | . 0 | - 3 | 66.1 | . 0 | 11.8 | .4 | 19.9 | 562.7 |
| OTH.MINERAL PROO. |  | 34.4 | 15.6 | 89.2 | 470.2 | 3.4 | .0 | 3.9 | 13.8 |
| MISC. MFGR. PROO. | 31 | 27.1 | 21.6 | 35.4 | 58.3 | 15.7 | .0 | 26.5 | 103.1 |
| CONSTRUCTION | 32 | 14.4 | 37.4 | 8.8 | 4.0 | 205.8 | 56.5 | 553.1 | . 0 |
| TRADE E TRANSPORT | 33 | 149.9 | 204.6 | 100.9 | 723.9 | 660.8 | 10.7 | 198.9 | 774.1 |
| UTILITIES | 34 | 20.0 | 50.9 | 30.5 | 6.7 | 110.5 | 244.3 | 45.8 | . 0 |
| FINANCIAL SERVIGE | 35 | 43.2 | 39.3 | 43.5 | 61.7 | 501.5 | 32.1 | 589.8 | .0 |
| COMMUNICATIONS | 36 | 17.8 | 12.8 | 27.1 | 7.7 | 227.2 | 4.7 | 134.9 | 92.9 |
| BUSTNESS SERVICES | 37 | 20.1 | 19.5 | 16.7 | 226.6 | 148.1 | 8.2 | 126.6 | 545.1 |
| PERSONAL SERVICE |  | 18.0 | 13.7 | 19.3 | 32.2 | 25.6 | 1.1 | 225.5 | 127.9 |
| AOVTG. \& TRAVEL | 39 | 76.4 | 120.7 | 76.1 | 29.8 | 394.5 | 6.7 | 196.6 | . 0 |
| REPAIR E MAINT. | 40 | 95.2 | 75.3 | 118.4 | 22.9 | 453.8 | 20.9 | 396.5 | . 0 |
| NON-COMP.IMPORTS |  | . 1 | 19.5 | 1.4 | . 0 | 4.8 | . 0 | 10.3 | - 8 |
| BAL. OF PAYMNT AOJ | 42 | . 0 | . 0 | . 0 | . 0 | . 0 | . 0 | . 0 | . 0 |
| COMMODITY TAXES | 43 | 3.7 | 1.8 | 5.4 | 206.1 | 159.5 | 1.8 | 26.3 | 102.6 |
| SUBSIOIES | 44 | . 0 | -. 1 | . 0 | . 0 | -172.4 | $-1.6$ | -80.4 | . 0 |
| INDIR.TAXEGOV.SER | 45 | 33.0 | 25.0 | 21.5 | 63.8 | 240.2 | 23.5 | 1217.8 | . 0 |
| WAGES E SALARIES | 46 | 996.2 | 507.7 | 767.7 | 2177.2 | 4237.7 | 225.1 | 2793.2 | - 0 |
| NET-INC. UNINCORP. | 47 | 1.8 | 4.0 | 22.1 | 237.4 | 743.8 | .7 | 1598.0 | - 0 |
| SURPLUS | 48 | 282.0 | 488.9 | 278.8 | 273.1 | 1810.8 | 608.4 | 3024.7 | . 0 |
| SUB TOTAL (41-48) | 49 | 1316.8 | 1046.8 | 1097.0 | 2958.1 | 7024.4 | 857.8 | 8589.9 | 103.5 |
| TOTAL INPUTS | 50 | 3372.4 | 3079.5 | 2220.2 | 7017.1 | 10627.8 | 1262.4 | 11742.2 | 3292.4 |

TABLE 1 VALUES DF INOUSTRY INPUTS AND FINAL EXPENOITURES, 1961 - AGGREGATION S (SEE CHAPTER 41

| (NOUSTRY(COLUMNS) | [MTERMEDIATE <br> INPUTS(1-16) | MET | EXPORTS | RE-EXPORTS | IMPORTS | INVENTORY CHANGE | OTMER FINAL DEMAND | TOTAL OUTPUT |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| COMMOOITY(ROWS | 17 |  | 18 | 19 | 20 | 21 | 22 | 23 |
| LIVE ANIMALS 1 | 942.8 |  | 66.2 | . 1 | -8.6 | 34.5 | 73.2 | 1108.3 |
| GRAIN 2 | 324.2 |  | 624.5 | - 0 | -40.6 | $-439.8$ | .2 | 468.6 |
| FISH E FUR 3 | 110.0 |  | 23.9 | - 9 | $-18.0$ | . 5 | 5.8 | 123.1 |
| FORESTRY PRODUCTS 4 | 782.6 |  | 42.9 | 1.0 | -14.7 | $-12.0$ | 38.3 | 838.1 |
| OTHER AGR. PROD. 5 | 908.6 |  | 112.4 | . 9 | -202.9 | 4.7 | 412.7 | 1236.5 |
| METAL ORES \& CONC. 6 | 780.6 |  | 519.0 | . 0 | -126.5 | 19.4 | . 0 | 1192.6 |
| NON-METAL MINERALST | 161.5 |  | 153.0 | 4.3 | $-56.4$ | 1.3 | 12.1 | 275.7 |
| COA 8 | 130.3 |  | 8.1 | - 0 | -119.4 | 2.4 | 47.0 | 68.5 |
| OIL E NAT. GAS 9 | 801.2 |  | 208. 5 | . 0 | $-368.4$ | 5.5 | 154.7 | 801.5 |
| MEATEDAIRY PROD. 10 | 640.1 |  | 93.9 | 1.9 | -88.1 | 28.1 | 1844.2 | 2520.2 |
| ALL OTHER FOOOS 11 | 925.6 |  | 247.1 | 2.8 | -303.7 | 37.3 | 1334.5 | 2243. 5 |
| 8EVERAGES 12 | 103.0 |  | 88.7 | . 2 | $-65.7$ | 23.1 | 456.4 | 605.6 |
| TO8ACCO 13 | 75.8 |  | 28.1 | . 0 | $-9.2$ | 4.7 | 231.8 | 331.3 |
| LEATHERETEXTILES 14 | 1059.0 |  | 58.2 | 4.0 | -451.8 | 17.8 | 496.1 | 1183.3 |
| CLOTHING 15 | 123.9 |  | 9.7 | .9 | $-101.4$ | 18.4 | 1018.7 | 1070.2 |
| LUMBER 16 | 367.5 |  | 354.9 | . 1 | $-39.2$ | 13.7 | 6.7 | 703.7 |
| FURNITURE IT | 35.9 |  | 2.3 | . 2 | -35.2 | 7.0 | 358.3 | 368.5 |
| OTHER WOOD PROO. 18 | 329.3 |  | 39.7 | . 6 | -32.5 | 9.7 | 11.3 | 358.1 |
| PAPER \& PRODUCTS 19 | 1085.3 |  | 1118.2 | .8 | -108.2 | 9.2 | 103.0 | 2208.3 |
| IRON \& STEEL PROD20 | 2393.5 |  | 144:9 | 5.0 | $-430.2$ | 7.7 | 69.7 | 2190.6 |
| NON-FERROUS PROD. 21 | 871.4 |  | 875.5 | 11.1 | -117.0 | 3.1 | $-67.5$ | 1576.5 |
| MACHINERYEEQUIP. 22 | 939.4 |  | 87.11 | 26.6 | -827.2 | 4.7 | 863.7 | 1094.3 |
| VEHICLES \& PARTS 23 | 606.7 |  | 42.6 | 6.6 | -598.7 | 20.6 | 1173.1 | 1250.8 |
| OTHER TRANS. EOUIP24 | 193.5 |  | 197.2 | 41.1 | $-469.3$ | 13.4 | 717.5 | 693.5 |
| FLEC.ECOM.EQUIP. 25 | 665.1 |  | 68.0 | 7.3 | $-410.6$ | 22.7 | 797.3 | 1149.8 |

TABLE 1 VALUES OF INOUSTRY INPUTS ANO FINAL EXPENDITURES, 1961 - AGGREGATION S ISEE CHAPTER 4 I

| INDUSTRY(COLUMNSI |  | INTERMEOIATE <br> INPUTS(1-16) | NET | EXPORTS | RE-EXPORTS | IMPORTS | INVENTORY CHANGE | OTHER FINAL DEMANO | total OUT PUT 23 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| COMMODITY(ROMS) |  | 1T |  | 18 | 19 | 20 | 21 | 22 | 23 |
| RUBBER PROOUCTS | 26 | 250.1 |  | 7.2 | . 6 | -59.8 | 1.4 | 107.5 | 307.0 |
| PETROLEUM PROO. | 27 | 814.2 |  | 10.2 | . 3 | $-137.8$ | 9.7 | 539.9 | 1236.5 |
| OTHER CHEMICALS | 28 | 1201.2 |  | 215.1 | 3.6 | -395.4 | 17.3 | 414.3 | 1456.1 |
| PRINTED MATTER | 29 | 676.3 |  | 16.1 | 2.4 | $-144.7$ | 6.4 | 298.7 | 855.1 |
| OTH.MINERAL PROO. | 30 | 114.1 |  | 40.4 | .9 | $-154.3$ | 12.3 | 62.6 | 675.9 |
| MISC. MFGR. PROD. | 31 | 361.7 |  | 40.4 | 10.5 | -361.0 | 13.3 | 533.0 | 597.9 |
| CONSTRUCTION | 32 | 1052.4 |  | . 0 | . 0 | . 0 | . 0 | 5911.9 | 6964.3 |
| TRADE \& TRANSPORT | 33 | 3901.5 |  | 669.9 | . 0 | -80.9 | 20.0 | 6016.3 | 10526.9 |
| UTILITIES | 34 | 794.1 |  | 18.1 | . 0 | -15.9 | -. 3 | 476.4 | 1212.4 |
| FINANCIAL SERVICE | 35 | 1822.8 |  | 19.7 | . 0 | $-83.4$ | . 0 | 5097.2 | 6856.3 |
| COMmUNICATI ONS | 36 | 604.9 |  | 24.9 | . 0 | -17.6 | . 0 | 443.2 | 1055.4 |
| BUSINESS SERVICES | 37 | 1290.0 |  | 8.7 | .0 | -85.1 | . 0 | 1469.8 | 2683.3 |
| PERSONAL SERVICE | 38 | 530.0 |  | 5.8 | . 0 | $-107.3$ | . 0 | 1348.0 | 1776.5 |
| AOVTG. \& TRAVEL | 39 | 1277.1 |  | . 0 | .0 | . 0 | . 0 | . 0 | 1277.1 |
| REPAIR \& MAINT. | 40 | 2015.4 |  | . 0 | . 0 | . 0 | . 0 | . 0 | 2015.4 |
| NON-C OMP.IMPORTS |  | 209.0 |  | -. 0 | . 0 | -301.5 | 2.9 | 89.0 | . 0 |
| 8AL. OF PAYMNT AD | 42 | . 0 |  | 798.9 | . 0 | $-934.4$ | .0 | 135.5 | .0 |
| COMmOOITY TAXES | 43 | 562.3 |  | 1.0 | .0 | 515.0 | 14.9 | 1951.1 | 3044.3 |
| SUBSIDIES | 44 | -311.4 |  | . 0 | . 0 | . 0 | . 0 | . 0 | -311.4 |
| INDIR.TAXEGOV.SER | 45 | 1928.1 |  | . 0 | . 0 | . 0 | . 0 | -77.9 | 1850.2 |
| HAGES \& SALARIES |  | 16432.1 |  | . 0 | - 0 | . 0 | . 0 | 4293.1 | 20725.2 |
| NET-INC.UNI NCDRP. | 47 | 3683.1 |  | . 0 | . 0 | . 0 | . 0 | . 0 | 3683.1 |
| SURPLUS | 48 | 10051.3 |  | .0 | . 0 | . 0 | . 0 | 566.0 | 10617.2 |
| SUB TOTAL (41-48) | 49 | 32554.5 |  | 799.9 | . 6 | -120.9 | 17.9 | 6956.8 | 39608.7 |
| TOTAL INPUTS | 50 | 65217.0 |  | 7091.2 | 135.4 | $-7408.0$ | $-44.3$ | 39834.5 | 104825.7 |

TABLF 2 INDUSTRY INPUT AND FINAL EXPENOITURE COEFFICIENTS - AGGREGATION S (SEE CHAPTER 4)


TABLE 2 (NDUSTRY INPUT ANO FINAL EXPENDITURE COEFFICIENTS - GGREGATION S (SEE CHAPTER 4)


TABLE 2 INOUSTRY INPUT ANO FINAL EXPENDITURE COEFFICIENTS - AGGREGATION S ISEE CHAPYER 4


TABLE 2 INOUSTRY INPUT AND FINAL EXPENDITURE COEFFICIENTS - AGGREGATION S (SEE CHAPTER 4 I

| INDUSTRYICOLUMNSI COMMOOITY(ROWS) |  | TRANSPORT ELEC.EQUIP. 9 | CHEM.RUBBER PETROL. IND. 10 | OTHER MANUF I IND. 11 | CONSTRUCTION | TRADE AND TRANSPDRT 13 | UTILITIES 14 | $\begin{array}{r} \text { COM. AND } \\ \text { SERYICE IND. } \\ \\ \\ 15 \end{array}$ | $\begin{array}{r} \text { DUMMY } \\ \text { INDUSTRIES } \\ 16 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| RUBBER PRODUCTS | 26 | .018386 | .003524 | . 000784 | .003716 | . 003027 | .000000 | . 000149 | . 024669 |
| PETROLEUM PROD. | 27 | . 002225 | . 020818 | .006280 | .014817 | . 026164 | .005496 | . 003251 | . 001189 |
| OTHER CHEMICALS | 28 | . 014115 | . 124008 | .042035 | .009873 | .000847 | . 000271 | . 005727 | . 044847 |
| PRINTED MATTER | 29 | .000000 | .000089 | . 029794 | . 000000 | .001111 | . 000304 | .001692 | .170902 |
| OTH.MINERAL PROD. |  | . 010188 | .005053 | . 040199 | .067013 | .000320 | . 000000 | . 000331 | . 004180 |
| MISC. MFGR. PROD. |  | .008206 | .007012 | . 015924 | .008304 | .001475 | .000000 | .002253 | .031321 |
| CONSTRUCTION | 32 | . 004270 | . 012145 | . 003964 | .000570 | . 019361 | . 044753 | . 047103 | . 000000 |
| TRADE \& TRANSPORT | 33 | . 044438 | . 066447 | . 045446 | . 103161 | . 062180 | . 008492 | . 016936 | .235109 |
| UTILITIES | 34 | . 005925 | .016523 | .013747 | .000948 | .010401 | .193518 | . 003901 | .000000 |
| FINAMCIAL SERVICE | 35 | .012797 | . 012764 | .019571 | .008787 | . 047192 | . 025418 | . 050226 | .000000 |
| COMMUNICATIONS | 36 | . 005285 | . 004169 | . 012200 | .001095 | . 021374 | . 003736 | .011491 | . 028219 |
| BUSINESS SERVICES | 37 | .005953 | . 006322 | .007532 | .032295 | . 013932 | .006460 | .010783 | . 165551 |
| PERSONAL SERVICE |  | . 005334 | . 004443 | .008683 | . 004594 | .002410 | . 000909 | .019207 | .038853 |
| ADVTG. \& TRAVEL | 39 | . 0222645 | . 039200 | .034255 | .004252 | .037118 | . 005346 | . 016743 | .000000 |
| REPAIR \& MAINT. | 40 | . 028235 | . 024455 | . 053320 | . 003261 | . 042697 | . 016522 | . 033764 | .000000 |
| NON-COMP.IMPORTS |  | .000027 | .006342 | .000618 | .000000 | . 000448 | . 000000 | .000875 | .000256 |
| BAL. OF PAYMNT ADJ | 42 | . 000000 | .000000 | . 000000 | .000000 | .000000 | .000000 | .000000 | . 000000 |
| COMMODITY YAXES | 43 | .001111 | .000597 | .002440 | .029369 | .015009 | . 001404 | . 002237 | .031173 |
| SUBSIDIES | 44 | .000000 | -. 000041 | .000000 | .000000 | -. 016218 | -. 001263 | -. 006847 | . 000000 |
| [NDIR.TAXEGOV.SER | 45 | . 009776 | .008123 | . 009699 | .009093 | . 022603 | . 018596 | .103715 | . 000000 |
| WAGES \& SALARIES | 46 | .295385 | .164870 | . 345802 | . 310266 | .398734 | .178303 | .237877 | .000000 |
| NET-INC.UNI NCORP. | 47 | . 000544 | .001290 | .009955 | .033826 | . 069989 | . 000564 | .136090 | . 000000 |
| SURPLUS | 48 | . 083629 | . 158757 | .125583 | .039007 | .170381 | . 481889 | . 257595 | . 000000 |
| SUB TOTAL (4)-48) |  | . 390473 | .339939 | .494098 | .421561 | . 660947 | . 679494 | . 731543 | . 031429 |
| TOTAL INPUTS | 50 | 1.000000 | 1.000000 | 1.000000 | 1.000000 | 1.000000 | 1.000000 | 1.000000 | 1.000000 |

TABLE 2 INDUSTRY INPUT AND FINAL EXPENDITURE COEFFICIENTS - AGGREGATION S (SEE CHAPTER 4 )

| INDUSTRY(COLUMNS) COMMODITY(ROWSI | INTERMED:ATE <br> \{NPUTS(1-16) 17 | NET EXPORTS | RE-EXPORTS | IMPORTS 20 | INVENTORY CHANGE 21 | OTHER FINAL DEMANO 22 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LIVE ANIMALS | .014456 | .009338 | . 000000 | .000000 | . 000000 | .001839 |
| GRAIN | .004972 | . 098061 | .000000 | .000000 | . 000000 | .000006 |
| FISH \& FUR | . 001687 | .003375 | . 000000 | .000000 | .000000 | .000146 |
| FORESTRY PRGDUCTS | .012000 | .006050 | .000000 | .000000 | . 000000 | . 000960 |
| OTHER AGR. PROD. | .013931 | . 015856 | .000000 | . 000000 | .000000 | . 010360 |
| METAL ORES \& CONC. 6 | .011969 | .073196 | . 000000 | . 000000 | .000000 | .000000 |
| NON-METAL MINERALST | . 002476 | .021573 | .000000 | .000000 | . 000000 | .000305 |
| COAL | . 001998 | .001147 | .000000 | . 000000 | . 000000 | . 001180 |
| OIL NAT. GAS | . 012285 | .029397 | .000000 | .000000 | .000000 | .003883 |
| MEATEDAIRY PROD. 10 | .009815 | . 013244 | .000000 | .000000 | .000000 | .046297 |
| ALL OTHER FOOOS 11 | . 014192 | . 034849 | . 000000 | .000000 | . 000000 | .033500 |
| BEVERAGES 12 | .001579 | .012506 | . 000000 | .000000 | . 000000 | . 011456 |
| TOBACCO 13 | . 001162 | .003964 | .000000 | .000000 | .000000 | .005820 |
| LEATHERETEXTILES I4 | . 016237 | .008206 | .000000 | .000000 | .000000 | .012454 |
| CLOTHING 15 | . 001900 | .001366 | .000000 | .000000 | . 000000 | .025573 |
| LUMBER 16 | .005635 | . 050051 | . 000000 | .000000 | .000000 | .000168 |
| FURNITURE 17 | . 000551 | .000325 | . 000000 | .000000 | .000000 | . 008994 |
| OTHER WOOD PROD. 16 | .005049 | . 005599 | . 000000 | .000000 | .000000 | . 000284 |
| PAPER $¢$ PROOUCTS 19 | .016641 | . 1.57693 | .000000 | .000000 | .000000 | . 002586 |
| IRON E STEEL PROOZO | .036701 | . 020431 | .000000 | .000000 | .000000 | .001749 |
| NON-FERROUS PROO. 21 | . 013361 | .123464 | .000000 | .000000 | .000000 | -. 001695 |
| MACHINERYEEQUIP. 22 | . 014405 | . 012284 | .000000 | .000000 | .000000 | . 021683 |
| VEHICLES \& PARTS 23 | .009303 | .006002 | .000000 | . 000000 | .000000 | . 029449 |
| OTHER TRANS EQUIP24 | .002968 | . 027816 | .000000 | . 000000 | .000000 | . 018012 |
| ELEC.ECDM.EQUIP. 25 | .010199 | . 009591 | . 000000 | .000000 | .000000 | .020016 |

TABLE 2 INDUSTRY INPUT AND FINAL EXPENDITURE COEFFICIENTS - AGGREGATION S (SEE CHAPTER 4 I

| INOUSTRYICOLUMNS: |  | INTERMEDIATE <br> [NPUTS(1-16) | NET | EXPORTS | RE-EXPORTS | IMPORTS | INVENTORY CHANGE | OTMER FINAL DFMAND |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| COMMODITY(ROWS: |  | 17 |  | 18 | 19 | 20 | 21 | 22 |
| RUBBER PROOUCTS | 26 | . 003834 |  | . 001014 | .000000 | . 000000 | . 000000 | . 002700 |
| PETRTLEUM PROO. | 27 | .012485 |  | .001441 | . 000000 | . 000000 | . 000000 | . 013554 |
| OTHER CHEMICALS | 28 | .018418 |  | .030339 | .000000 | . 000000 | . 000000 | .010400 |
| PRINTEO MATTER | 29 | .010370 |  | .002269 | .000000 | . 000000 | . 000000 | . 007498 |
| OTH.MINERAL PROO. |  | .010950 |  | . 005690 | .000000 | . 000000 | . 000000 | . 001572 |
| MISC. MFGR. PROD. |  | .005547 |  | .005701 | .000000 | .000000 | . 000000 | .013380 |
| CONSTRUCTION | 32 | .016136 |  | . 000000 | .000000 | . 000000 | . 000000 | .148413 |
| TRADE \& TRANSPORT |  | . 059823 |  | . 094475 | .000000 | . 000000 | . 000000 | .151033 |
| uticities | 34 | . 012176 |  | . 002547 | .000000 | . 000000 | .000000 | . 011960 |
| Financial service |  | . 027950 |  | . 002778 | .000000 | . 000000 | .000000 | .127959 |
| COMMUNICATIONS | 36 | .009275 |  | . 003518 | .000000 | . 000000 | . 000000 | . 011126 |
| BUSINFSS SERYICES |  | .019780 |  | . 001227 | .000000 | . 000000 | . 000000 | .036897 |
| PERSONAL SERVICE | 38 | .008127 |  | .000818 | .000000 | . 000000 | .000000 | .033841 |
| ADVIG. \& TRAVEL | 39 | . 019582 |  | .000000 | . 000000 | . 000000 | .000000 | . 000000 |
| REPAIR 6 MAINT. | 40 | .030902 |  | .000000 | .000000 | . 000000 | . 000000 | . 000000 |
| NON-COMP.IMPORTS | 41 | .003205 |  | -. 000007 | .000000 | . 000000 | .000000 | . 002234 |
| BAL. OF PAYMNT ADJ |  | .000000 |  | .112664 | .000000 | . 000000 | .000000 | .003402 |
| COMMODITY TAXES | 43 | .008621 |  | . 000141 | .000000 | . 000000 | .000000 | . 048980 |
| SUBSICIES | 44 | -.004774 |  | .000000 | .000000 | . 000000 | . 000000 | .000000 |
| INDIR.TAXEGOV.SER | 45 | . 029565 |  | . 000000 | . 000000 | .000000 | . 000000 | -. 001956 |
| HAGES G SALARIES | 46 | .251960 |  | . 000000 | .000000 | . 000000 | . 000000 | .107774 |
| NET-INC.UNI NCORP. |  | . 056475 |  | . 000000 | . 000000 | . 000000 | .000000 | .000000 |
| SURPLUS | 48 | . 154120 |  | .000000 | . 000000 | . 000000 | . 000000 | . 014209 |
| SUB TOTAL (4)-48) | 49 | .499172 |  | .112798 | . 000000 | . 000000 | . 000000 | .174643 |
| TOTAL INPUTS | 50 | 1.000000 |  | 1.000000 | . 000000 | . 000000 | . 000000 | 1.000000 |

table 3 values of inoustry dutputs, 1961 - agGregation s (SEE CHAPTER 4)

| COMmOditrecolumns) | live | ANIMALS | GRAIN | $\begin{aligned} & \text { FISH } \\ & \text { AND FUR } \end{aligned}$ | forestry <br> PRODUCTS | OTHER AGR. PRODUCTS | METAL ORES \& CONC. | NON-METAL MINERALS | coal |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (NDUSTRY(ROWS) |  | 1 | 2 | 3 | 4 | 5 | , | 7 | 8 |
|  | (millions of dollars) |  |  |  |  |  |  |  |  |
| AGR.FORESTRY FISH.I |  | 1108.0 | 468.2 | 123.1 | 834.2 | 1233.1 | . 0 | . 0 | . 0 |
| mining ex.coal 2 |  | . 0 | . 0 | . 0 | . 0 | . 0 | 1064.3 | 266.7 | . 0 |
| fuel minesemells 3 |  | . 0 | . 0 | . 0 | . 0 | . 0 | . 0 | . 0 | 68.5 |
| FOOO, TOBACCO INO. 4 |  | . 0 | . 4 | . 0 | . 0 | . 9 | . 0 | . 9 | . 0 |
| textile ino. 5 |  | . 0 | . 0 | . 0 | . 0 | . 0 | . 0 | . 0 | . 0 |
| WOOOEFURN.INO 6 |  | . 0 | . 0 | . 0 | 3.3 | . 0 | . 0 | . 0 | . 0 |
| Paper inoustries 7 |  | . 0 | . 0 | . 0 | . 0 | . 0 | . 0 | . 0 | . 0 |
| metal inoustries 8 |  | . 0 | . 0 | . 0 | . 0 | . 0 | 124.1 | -1 | - 0 |
| trans.eelec.equip.9 |  | . 0 | . 0 | . 0 | . 0 | - 0 | . 0 | . 0 | . 0 |
| CHEM.RUBEER PETR. 10 |  | . 0 | - 0 | . 0 | . 0 | . 0 | . 8 | . 8 | . 0 |
| dther manuf.ino 11 |  | . 0 | . 0 | . 0 | . 0 | . 0 | 3.4 | 7.2 | . 0 |
| CONSTRUCTIEN INO. 12 |  | . 0 | . 0 | . 0 | . 0 | - 0 | . 0 | . 0 | . 0 |
| TRADE \& TRANSPORTI3 |  | . 2 | . 0 | . 0 | . 0 | 2.4 | . 0 | . 0 | . 0 |
| UTILITIES 14 |  | . 0 | . 0 | . 0 | . 5 | . 0 | . 0 | . 0 | . 0 |
| COM.ESERVICE INO. 15 |  | . 0 | - 0 | . 0 | . 0 | . 0 | . 0 | . 0 | - 0 |
| Oummy indoustries 16 |  | . 0 | . 0 | . 0 | . 0 | . 0 | - 0 | . 0 | . 0 |
| TOT.COMMOD. OUTPUTIT |  | 1108.3 | 468.6 | 123.1 | 838.1 | 1236.5 | 11.92 .6 | 275.7 | 68.5 |

TABLE 3 VALUES OF INOUSTRY OUTPUTS. 1961 - AGGREGATION S (SEE CHAPTER 41



TABLE 3 VALUES OF INDUSTRY DUTPUTS, 1961 - AGGREGATION 5 (SEE CHAPTER 4)


TABLE 3 VAIUES OF INDUSTRY OUTPUTS, 1961 - AGGREGATIDN S (SEE CHAPTER 4)


TAOLE 4 MARKET SHARE COEFFICIENTS - AGGREGATION 5 (SEE CHAPTER 4)

| COMMODITY(COLUMNSI | ANIMALS | GRAIN | FISH | FORESTRY | OTHER AGR : | METAL ORES | NON-METAL | COAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | AND FUR | PRODUCTS | PRODUCIS | \& CONC. | MINERALS |  |
| [NDUSTRY(ROWS) | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| AGR. FORESTRY FISH. I | .999776 | . 999108 | 1.000000 | .995439 | . 997257 | . 000000 | .000000 | .000000 |
| MINING EX.COAL 2 | .000000 | .000000 | .000000 | .000000 | .000000 | .892405 | .967380 | . 000000 |
| FUEL MINESEWELLS 3 | . 000000 | . 020000 | . 000000 | . 000000 | . 000000 | . 000000 | . 000094 | 1.000000 |
| FOOD. TO8ACCO INO. 4 | .000016 | .000892 | .000000 | .000000 | . 000746 | .000000 | .003290 | .000000 |
| TEXTILE IND. 5 | . 000000 | .000000 | . 000000 | .000000 | . 000000 | .000000 | . 000000 | . 000000 |
| WOODEFURN. INO 6 | . 000000 | . 000000 | .000000 | .003950 | .000027 | . 000000 | . 000000 | .000000 |
| PAPER INDUSTRIES 7 | . 000000 | .000000 | .000000 | . 000000 | . 000000 | . 000000 | .000000 | .000000 |
| METAL INDUSTRIES 8 | .000000 | . 000000 | .000000 | . 000014 | .000000 | .104018 | . 000501 | . 000000 |
| TRANS.EELEC.EQUIP.9 | .000000 | . 000000 | . 000000 | .000000 | . 000000 | . 000000 | . 000000 | . 000000 |
| CHEM.RUBBER PETR. 10 | .000000 | . 000000 | .000000 | .000000 | . 000000 | .000696 | . 002753 | . 000000 |
| DTHER MANUF.IND 11 | . 000000 | . 000000 | . 000000 | . 000000 | . 000000 | . 002880 | . 025982 | . 000000 |
| CONSTRUCTION IND. 12 | .000000 | .000000 | .000000 | .000000 | . 000000 | .000000 | . 000000 | .000000 |
| TRADE \& TRANSPORTI3 | . 000208 | .000000 | .000000 | . 000000 | . 001969 | .000000 | . 000000 | . 000000 |
| UTILIIES 14 | .000000 | .000000 | . 000000 | . 000597 | .000000 | . 000000 | . 000000 | . 000000 |
| COM. ESERVICE IND. 15 | .000000 | . 000000 | . 000000 | .000000 | .000000 | .000000 | . 000000 | . 000000 |
| DUMmy Industries 16 | .000000 | .000000 | . 000000 | .000000 | .000000 | . 000000 | . 000000 | . 000000 |
| TOT. COMMOD. OUTPUT 17 | 1.000000 | 1.000000 | 1.000000 | 1.000000 | 1.000000 | 1.000000 | 1.000000 | 1.000000 |

TABLE 4 MARKET SHARE COEFFICIENTS - AGGREGATION S (SEE CHAPTER 4)


TABLE 4 MARKET SHARE COEFFICIENTS - AGGREGATION S (SEE CHAPTER 4 )

| COMMODITY(COLUMNS) INOUSTRY(ROWS) | FURNITURE | $\begin{array}{r} \text { OTHER } \\ \text { WOOD PROD. } \\ 18 \end{array}$ | PAPER \& PRODUCTS 19 | STEEL PROD. | NON-FERROUS PROD. 21 | MACHINERY $\varepsilon$ EQUIP. 22 | VEHICLES \& PARTS 23 | $\begin{array}{r} \text { OTHER TRANS. } \\ \text { EQUIP. } \\ 24 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AGR.FORESTRY FISH.I | .000000 | . 000000 | . 000000 | . 000000 | . 000000 | .000000 | . 000000 | .000000 |
| MINING EX.COAL 2 | .000000 | .000000 | .000000 | . 000000 | . 001062 | . 008348 | . 000000 | .000000 |
| FUEL MINESEWELLS 3 | .000000 | . 000014 | . 000000 | .000000 | .000497 | . 006561 | . 000000 | . 000000 |
| FOOO. TOBACCO INO. 4 | .000000 | .000000 | .000791 | . 000220 | .000000 | . 002428 | .000000 | .000000 |
| TEXTILE INO. 5 | . 006692 | .000332 | .003878 | .000220 | .000069 | .002835 | .000000 | . 000048 |
| WOODEFURN.IND 6 | . 892734 | .970431 | .002363 | .001691 | . 000059 | .003392 | . 000040 | . 001342 |
| PAPFR INOUSTRIES 7 | . 000163 | .001829 | . 976939 | .000341 | .000034 | . 006018 | . 002952 | . 000000 |
| METAL INDUSTRIES 8 | . 0.053554 | . 002424 | .001184 | .966583 | .988024 | . 805883 | .015770 | .033749 |
| TRANS.EFLEC.EQUIP. 9 | . 031486 | .000519 | .000000 | .025071 | .006108 | .100020 | .980329 | .924383 |
| CHEM=RUBBER PEYR 10 | .001436 | .002801 | .002228 | . 001850 | .000391 | .003768 | .000000 | . 002903 |
| OTHER MANUF.IND 11 | .009007 | .003131 | .010865 | .002785 | . 003543 | . 024224 | . 001563 | .023003 |
| CONSTRUCTION IND.12 | . 000000 | . 000000 | .000000 | .000000 | .000000 | .000000 | .000000 | . 000000 |
| TRADE \& TRANSPORTI3 | . 004928 | . 018518 | . 001751 | .001239 | .000213 | . 001934 | .000357 | .014573 |
| WTILIIES 14 | .000000 | .000000 | .000000 | .000000 | .000000 | .000000 | . 000000 | . 000000 |
| COM. ESERVICE INO. 15 | . 000000 | .000000 | .000000 | .000000 | .000000 | .034590 | . 000000 | .000000 |
| DUMMY INDUSTRIES 16 | .000000 | .000000 | .000000 | .000000 | .000000 | .000000 | .000000 | . 000000 |
| TOT. COMMOD. OUT PUT 17 | 1.000000 | 1.000000 | 1.000000 | 1.000000 | 1.000000 | 1.000000 | 1.000000 | 1.000000 |

TABLE 4 MARKET SHARE COEFFICIENTS - AGGREGATION S (SEE CHAPTER 4$)$

| COMMODITY(COLUMNS INOUSTRY(ROWS) | $\begin{array}{r} \text { COM. EQUIP. } \\ 25 \end{array}$ | $\begin{array}{r} \text { RUBBER } \\ \text { PRODUCTS } \\ 26 \end{array}$ | PETROLEUM PRODUCTS 27 | $\begin{array}{r} \text { OTHER } \\ \text { CHEMICALS } \\ 28 \end{array}$ | $\begin{gathered} \text { PRINTED } \\ \text { MATTER } \\ 29 \end{gathered}$ | OTH.MINERAL PROD. 30 |  | CONSTRUCTION |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AGR.FARESTRY FISH. 1 | .000000 | . 000000 | . 000000 | .000000 | .000000 | . 000000 | .001840 | .000000 |
| MINTNG EX.COAL 2 | . 000000 | .000000 | .000000 | . 000062 | . 000000 | .003127 | .000000 | .000000 |
| FUEL MINESEWELLS 3 | . 000000 | .000000 | .005309 | .000000 | . 000000 | . 000000 | .000000 | . 000000 |
| FOOD. TOBACCO IND. 4 | . 200000 | . 000000 | .000000 | .017130 | . 000068 | . 000000 | . 004854 | . 000000 |
| TEXTILE IND. 5 | . 000000 | . 007890 | .000000 | . 003367 | . 000000 | .003570 | .014920 | . 000000 |
| WONDEFURN.INO 6 | . 000429 | . 000036 | . 000097 | . 001020 | . 000000 | . 000447 | .009956 | .000000 |
| PAPER INDUSTRIES 7 | .000161 | . 002430 | .001633 | .003139 | . 015504 | .000672 | .019414 | .000000 |
| METAL INDUSTRIFS 8 | .018096 | . 002121 | .003801 | .012751 | . 000854 | .004712 | .021195 | . 000000 |
| TRANS.EELFC.EQUIP.9 | . 963532 | . 003502 | .000044 | .005129 | .000463 | . 001987 | .033132 | . 000000 |
| CHEM. RUABER PETR. 10 | .000635 | .965058 | .989116 | .948849 | .002392 | .005867 | .028752 | . 000000 |
| OTHFR MANUF. INO 11 | . 015473 | .011890 | .000000 | .006681 | .980106 | .971622 | .848155 | . 000000 |
| CONSTRUCTION IND. 12 | .000000 | .000000 | .000000 | . 000000 | . 000000 | .000000 | . 000000 | 1.000000 |
| TRADE \& TRANSPGRTI3 | . 001673 | .007072 | . 000000 | . 002071 | . 000614 | .007996 | .017782 | .000000 |
| UTILITTFS 14 | . 000000 | .000000 | . 000000 | . 000000 | . 000000 | .000000 | .000000 | . 000000 |
| COM. ©SERVICE IND. 15 | .000000 | .000000 | . 000000 | . 000000 | .000000 | .000000 | .000000 | .000000 |
| DUMMY INDUSTRIES 16 | .000000 | . 000000 | .000000 | .000000 | .000000 | .000000 | .000000 | . 000000 |
| TOT. COMMOO. OUTPUT17 | 1.000000 | 1.000000 | 1.000000 | 1.000000 | 1.000000 | 1.000000 | 1.000000 | 1.000000 |

TABLE 4 MARKET SHARE COEFFICIENTS - AGGREGATION 5 (SEE CHAPTER 4 )


TABLE 5 IMPACT TABLE WITHOUT IMPORT LEAKAGES - AGGREGATION 5 (SEE CHAPTER 4 )


TABLE 5 IMPACT TABLE WITHOUT IMPORT LEAKAGES - AGGREGATION S ISEE CHAPTER 4 I


TABLE 5 IMPACT TABLE WITHOUT IMPORT LEAKAGES - AGGREGATION S (SEE CHAPTER 4$)$


TABLE 5 IMPACT TABLF WITHOUT IMPORT LEAKAGES - AGGREGATION S (SEE CHAPTER \&)


TABLE 5 IMPACT TABLE WITHOUT IMPORT LEAKAGES - AGGREGATION S (SEE CHAPTER 4)



table 5 Impact table without import leakages - aggregation s (see chapter u)

| COMMODITY(COLUMNS) PRIMARY(ROWS) | $\begin{gathered} \text { ELEC. } \\ \text { COM. } \begin{array}{c} \text { EOUIP. } \\ 25 \end{array} . \end{gathered}$ | $\begin{gathered} \text { RUBBER } \\ \text { PRODUCTS } \\ 26 \end{gathered}$ | petrol eum Products 27 | $\begin{aligned} & \text { OTHER } \\ & \text { CHEMICALS } \\ & 28 \end{aligned}$ | printed MATTER 29 | OTh. MINERAL <br> PROD. <br> 30 | MISC. MFGR. PROD. 31 | construction |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NON-COMP.IMPORTS 17 | . 001756 | . 009534 | . 009429 | . 009700 | . 002528 | . 002662 | . 003287 | . 001586 |
| 8AL. OF PAYMNT ADJIB | . 000000 | . 000000 | . 000000 | . 000000 | . 000000 | . 000000 | . 000000 | . 000000 |
| COMmODIt ${ }^{\text {d }}$ TAXES 19 | . 009143 | . 010201 | . 010118 | . 010202 | . 010808 | . 010890 | . 010867 | . 036441 |
| Subsidies 20 | -. 004097 | -.009286 | -. 009396 | -. 009209 | -. 004167 | -. 004319 | -. 004645 | -. 004831 |
| INDIR.TX.EGOV.SER2I | . 034504 | . 038019 | . 038124 | .038103 | . 033973 | . 033909 | . 034353 | . 033883 |
| WAGESESALARIES 22 | . 643246 | . 462101 | . 457156 | . 461593 | . 596552 | . 597106 | . 591950 | . 628011 |
| NET-INC.UNINCORP. 23 | . 032719 | . 045336 | . 044841 | . 046690 | . 048398 | . 048243 | . 050274 | . 074993 |
| SURPLUS 24 | . 282728 | . 444095 | .449728 | . 442921 | . 311907 | . 311508 | . 313914 | . 229917 |
| SUB TOTAL(17-24) 25 | 1.000000 | 1.000000 | 1.000000 | 1.000000 | 1.000000 | 1.000000 | 1.000000 | 1.000000 |



TABLE 5 IMPACT TABLE WITHOUT IMPORT LEAKAGES - AGGREGATION S ISEE CHAPTER 41


TABLE 6 IMPACT TABLE WITH IMPORT LEAKAGES - AGGREGATION S (SEE CHAPTER 4)

| COMm | LIVE | ANIMALS | GRAIN | FISM | FORESTRY | OTHER AGR. | METAL ORES | NON-METAL | COAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| INOUSTRY(ROWS) |  | 1 | 2 | AND FUR | PRODUC TS | PRODUCTS 5 | $\varepsilon$ CONC. 6 | MINERALS 7 |  |
| NET-EXPORTS |  | 66.2 | 624.5 | 23.9 | 42.9 | 112.4 | 519.0 | 153.0 | 8.1 |
| RE-EXPORTS |  | -1 | . 0 | -9 | 1.0 | . 9 | . 0 | 4.3 | . 0 |
| IMPORTS |  | -8.6 | -40.6 | $-18.0$ | $-14.7$ | -202.9 | $-126.5$ | $-56.4$ | $-119.4$ |
| INVENTORY CHANGE |  | 34.5 | $-439.8$ | . 5 | $-12.0$ | 4.7 | 19.4 | 1.3 | 2.4 |
| OTHFR FINAL DEMAND |  | 73.2 | . 2 | 5.8 | 38.3 | 412.7 | . 0 | 12.1 | 47.0 |
| IMPORT COEF. |  | .008102 | .124907 | .147219 | . 016900 | .152289 | . 158091 | .298327 | . 664191 |
| RE-EXPORT COEF. |  | . 001222 | . 000040 | .035891 | .023846 | .008168 | . 000089 | . 027155 | .000246 |



TABLE 6 IMPACT TABLE WITH IMPORT LEAKAGES - AGGREGATION S ISEE CHAPTER 4

| COMMDOITY(COLUMNS) | LIVE ANIMALS | GRAIN | FiS H | FORESTRY | OTHER AGR. | METAL ORES | NON-METAL | COAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | AND FUR | PRODUCTS | PROOUCTS | \& CONC. | MINERALS |  |
| PRIMARY(RIWSI | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| NON-COMP.IMPORTS 17 | .002779 | . 002801 | . 002779 | . 002774 | .002795 | .000672 | . 000804 | .000869 |
| BAL OF PAYMNT ADJIS | .000000 | .000000 | .000000 | .000000 | .000000 | .000000 | .000000 | .000000 |
| COMMODITY TAXES 19 | .013181 | . 013179 | .013179 | .013162 | .013196 | . 007566 | .007667 | .008439 |
| SUBSIOIES 20 | -.008548 | -. 008545 | -. 0008546 | -. 0008528 | -. 008566 | -. 010177 | -. 010693 | -. 021139 |
| INOIR.TX. \&GOV. SER2I | .057476 | . 057463 | . 057479 | .057371 | . 057435 | . 022793 | . 022717 | . 041926 |
| WAGESESALARIES 22 | . 284354 | .284405 | .284301 | . 285269 | .284883 | .376747 | . 369160 | . 330618 |
| NET-INC. UNI NCORP. 23 | .293158 | .293054 | .293199 | . 292299 | .292704 | .019983 | . 020411 | .047795 |
| SURPLUS 24 | .278527 | .278519 | .278530 | .278525 | .278492 | . 513120 | .530780 | .533651 |
| SUB TOTALI17-24) 25 | .920927 | .920877 | .920922 | .920873 | .920940 | .930704 | .940846 | .942159 |

TABLE 6 IMPACT TABLE WITH IMPORT LEAKAGES - AGGREGATION S (SEE CHAPTER 4)

| COMMOD(TY(COLUMNS) | $\begin{aligned} & \text { OIL AND } \\ & \text { NAT. GAS } \end{aligned}$ | MEAT \& DAIRY PROD. | AL 1 OTHER FOODS | BEVERAGES | TO8ACCO | LEATHER E TEXIILES | CLOTHING | LUMBER |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (MDUSTRY(ROWS) | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| NET-EXPORTS | 208. 5 | 93.9 | 247.1 | 88.7 | 28.1 | 58.2 | 9.7 | 354.9 |
| RF-EXPORIS | . 0 | 1.9 | 2.8 | - 2 | .0 | 4.0 | .9 | . 1 |
| IMPORTS | $-368.4$ | -88.1 | -303.7 | $-65.7$ | $-9.2$ | -451.8 | $-101.4$ | -39.2 |
| I MVENTORY CHANGE | 5.5 | 28.1 | 37.3 | 23.1 | 4.7 | 17.8 | 18.4 | 13.7 |
| OIHER FINAL DEMAND | 154.7 | 1844.2 | 1334.5 | 456.4 | 231.8 | 496.1 | 1018.7 | 6.7 |
| IMPNRT COEF. | .383179 | .034308 | .130990 | . 112464 | . 029431 | .284683 | . 086564 | . 100925 |
| RE-EXPORT COEF. | .000139 | . 020086 | .011152 | . 002564 | . 000427 | . 064767 | . 088703 | . 000234 |
| AGR.FORESTRY FISH. 1 | . 016371 | . 374306 | . 402941 | . 402745 | .402758 | . 038172 | . 036636 | .277649 |
| MINING EX.COAL ? | .022903 | . 008091 | . 008478 | .008486 | . 008487 | .005232 | .004838 | . 008968 |
| FUEL MINESEWELLS 3 | . 997227 | .012032 | . 011842 | .011329 | .011329 | . 013459 | . 011957 | . 010652 |
| FOOD. TO8ACCO IND. 4 | .013934 | 1.053860 | 1.188673 | 1.203519 | 1.203563 | . 029609 | .030033 | . 029303 |
| TEXTILE IND. 5 | .003420 | . 010169 | .009821 | .009792 | .009792 | 1.277767 | 1.332809 | .031227 |
| WOODEFURN.IND 6 | .003739 | .006305 | . 006543 | . 006565 | .006566 | . 008585 | . 005646 | 1.117001 |
| PAPER INDUSTRIES 7 | .007029 | . 050044 | . 054398 | . 054869 | . 054870 | .039570 | .032194 | . 026698 |
| METAL INDUSTRIES B | . 034438 | .048759 | . 051456 | . 051682 | . 051683 | .027256 | . 024995 | . 061992 |
| TRANS.EELEC.EQUIP.9 | . 010332 | . 015241 | . 015212 | .015213 | .015213 | . 010545 | . 010381 | . 015290 |
| CHFM.RU88ER PETR. 10 | . 032227 | .070144 | .069232 | . 064658 | . 064659 | . 081946 | . 071944 | . 063605 |
| OTHER MANUF.IND 1L | . 021569 | .035920 | . 037205 | . 037321 | . 037322 | . 042878 | . 041344 | . 034005 |
| CONSTRUCTION IND. 12 | . 029935 | . 023618 | . 022641 | . 022537 | . 022537 | .014026 | . 013471 | . 021640 |
| TRADE \& TRANSPORTI3 | . 074397 | .244099 | . 149911 | . 145473 | . 145438 | .148915 | . 129941 | . 149849 |
| UTILIIES 14 | .027114 | . 020221 | . 020484 | . 020480 | . 020480 | .016783 | .016289 | .022395 |
| COM. ESERVICE IND. 15 | .253480 | .105177 | .102178 | . 101984 | .101983 | . 086894 | .085656 | .094184 |
| DUMmy Industries 16 | . 093058 | .125035 | .127525 | .127857 | .127858 | . 098829 | .098424 | .102664 |

TABLE 6 IMPACT TABLE WITH IMPORT LEAKAGES - AGGREGATION S ISEE CHAPTER 4)

| COMMODITY(COLUMNS) | $\begin{aligned} & \text { OIL AND } \\ & \text { NAT. GAS } \end{aligned}$ | MEAT \& DAIRY PROD. | ALL OTHER FOODS | BEVERAGES | TOBACCO | $\begin{aligned} & \text { LEATMER E } \\ & \text { TEXTILES } \end{aligned}$ | CLOTHING | LUABER |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PRIMARYIROWS: | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| NON-COMP.IMPORTS 17 | .000885 | . 024430 | .027372 | . 027678 | . 027679 | .030234 | .031412 | .001959 |
| BAL. OF PAYMNT ADJ18 | .000000 | . 000000 | .000000 | .000000 | .000000 | .000000 | .000000 | .000000 |
| COMmODITY TAXES 19 | .008535 | . 013769 | . 012914 | .012885 | .012885 | .007015 | . 006683 | .009875 |
| SURSIDIES 20 | -. 020929 | -. 0008403 | -. 007192 | -. 007130 | -. 007129 | -. 003560 | -. 003205 | -. 004855 |
| INDIR.TX. EGOV.SER21 | .041590 | .040243 | . 039808 | .039747 | .039747 | .023780 | .023210 | .034061 |
| WAGE SESALARIES 22 | . 332939 | . 412301 | .400896 | . 400904 | .400899 | . 531500 | .533938 | .527627 |
| NET - INC. UNINCTRP. 23 | .047790 | . 130380 | .131100 | .130784 | .130785 | .040194 | .038534 | .107979 |
| SURPLUS 24 | .531129 | . 266420 | .266130 | .265795 | .265795 | .177717 | . 172422 | .224723 |
| SUB TOTALI $17-24 \boldsymbol{2 5}$ | .941937 | . 879140 | .871028 | .870663 | . 870660 | . 806880 | . 802994 | .901370 |

TABLE 6 IMPACT TABLE WITH IMPORT LEAKAGES - AGGREGATION S (SEE CHAPTER 4 )

table 6 Impact table with import leakages - aggaegation s (SEE Chapter 4 )


TABLE 6 IMPACT TABLE WITH IMPORT LEAKAGES - AGGREGATION $S$ ISEE CHAPTER \&I


TABLE 6 IMPACT TABLE WITH IMPORT LEAKAGES - AGGREGATION S (SEE CHAPTER 4 I

| COMMODITY(COLUNNS) PRIMARY(ROWS) | ELEC. \& COM. EQUIP. 25 | $\begin{array}{r} \text { RUBBER } \\ \text { PRODUCIS } \\ 26 \end{array}$ | $\begin{aligned} & \text { PE TROLEUM } \\ & \text { PRODUCTS } \\ & 27 \end{aligned}$ | $\begin{array}{r} \text { OTHER } \\ \text { CHEMICALS } \\ 28 \end{array}$ | PRINTED MATTER 29 | OTH. MINERAL PROD. 30 | MISC. MFGR. PROD. 31 | CONSTRUCTION <br> 32 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NON-COMP.IMPORTS 17 | . 0011.04 | . 008564 | . 008486 | .008748 | . 001951 | . 002072 | . 002635 | . 001068 |
| BAL - DF PAYMNT AOJ 18 | . 000000 | .000000 | .000000 | . 000000 | .000000 | . 000000 | .000000 | . 000000 |
| COMMODITY TAXES 19 | .007197 | .008266 | . 008168 | . 008268 | . 009697 | .009774 | . 009695 | . 035040 |
| SUBSIDIES 20 | -. 002837 | -. 006265 | -. 006324 | -. 006213 | -. 003241 | -. 003386 | -. 003645 | -. 003829 |
| INDIR.TX.EGOV.SER21 | .027062 | . 029580 | . 029604 | . 029683 | .029628 | . 029547 | .029762 | . 028602 |
| MAGESESALARIES 22 | . 521474 | . 374211 | .369116 | . 373909 | . 538447 | .538629 | .530098 | . 547745 |
| NET-INC.UNINCORP. 23 | .024429 | . 034497 | .033927 | .035718 | . 042231 | . 042079 | . 043791 | . 067975 |
| SURPLUS 24 | . 2111888 | .347901 | .352314 | .347196 | .267377 | .266775 | . 266940 | .176702 |
| SUB TOTAL(17-24) 25 | .790318 | .796754 | .795292 | .797309 | . 886089 | . 885491 | .879277 | .853303 |

TABLE 6 IMPACT TABLE WITH IMPORT LEAKAGES - AGGREGATION $S$ (SEE CHAPTER 4 )

## COMMOOITY(COLUMNS)

INOUSTRY(ROWS)

## NET-EXPORTS

RE-EXPORTS

## IMPORTS

## I NVENTORY CHANGE

 OTHER FINAL DEMAND IMPORT COEF. RE-EXPORT COEF.
## AGR.FORESTRY FISH. 1

MINING EX.COAL 2
FUEL MINESEWELLS 3
FOOO, TOBACCO IND. 4
TEXTILE IND. 5
WOODEFURN.IND 6
PAPER INDUSTRIES 7
METAL INOUSTRIES B
TRANS.EELEC.EQUIP. 9
CHEM.RUBEER PETR. 10
OTHER MANUF. IND 11
CONSTRUCTION IND. 12
TRADE E TRANSPORTI3
UTILITIES 14

COM.ESFRVICE IND. 15 DUMMY INDUSTRIES 16

| TRADE $\&$ | UTILITIE |
| ---: | ---: |
| TRANSPORT | 34 |
| 33 | 34 |


| 669.9 | 18.1 |
| ---: | ---: |
| -.0 | .0 |
| -80.9 | -15.9 |
| 20.0 | -.3 |
| 6016.3 | 476.4 |
| .008141 | .012536 |
| .000000 | .000332 |


| .039797 | .007553 | .056643 | .024963 |
| :--- | :--- | :--- | :--- |
| .006351 | .005774 | .006747 | .004106 |
| .009192 | .008399 | .006313 | .003859 |
| .022710 | .004700 | .042107 | .040516 |
| .011943 | .001961 | .006440 | .005825 |
| .006392 | .006333 | .006058 | .005531 |
| .018553 | .008431 | .009579 | .008894 |
| .039126 | .035828 | .026449 | .023646 |
| .031020 | .006598 | .010027 | .009291 |
| .054881 | .020415 | .028099 | .022289 |
| 1.060408 | .012580 | .022689 | .021597 |
| .019225 | 1.206627 | .059070 | .057836 | SERVICES

35
19.7
-.0
-83.4
.0
5097.2
.012048
.000000
COMMUNI-
CATIONS
$\begin{array}{cc}\text { BUSINESS } & \text { PERSONAL } \\ \text { SERVICES } & \text { SERVICES } \\ 37 & 38\end{array}$ 37
$-.0$
-85.1
.0
1469.8
.030849
.000000

| .038878 | .025019 |
| :--- | :--- |
| .007744 | .006165 |
| .005167 | .004064 |
| .040049 | .039903 |
| .006969 | .005916 |
| .006704 | .007063 |
| .011192 | .009158 |
| .032790 | .040718 |
| .022721 | .019241 |
| .028299 | .022912 |
| .028560 | .023571 |
| .064968 | .055382 |
| .125585 | .057128 |
| .013650 | .009006 |
| .075087 | .072611 |


| .042417 | .042417 |
| :--- | :--- |
| .021086 | .021086 |
| .017167 | .017167 |
| .052054 | .052054 |
| .016359 | .016359 |
| .007344 | .007344 |
| .048315 | .048315 |
| .129006 | .129006 |
| .068077 | .068077 |
| .202516 | .01516 |
| .028421 | .028421 |
| .315548 | .01815548 |
| .018320 | .0830 |

TABLE 6 IMPACT PABLE HITH IMPGRT LEAKAGES - AGGREGATION S (SEE CHAPTER \&)

| COMMODITY(COLUMNS) | TRADE E TRANSPORT | UTILITIES | FINANCIAL SERVICES | COMMUNI CATIONS | BUSINESS SERVICES | PER SONAL SERVICES | AOVTG. E TRAVEL | REPAIR <br> E MAINT. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PRIMARY(ROWSI | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| NON-COMP.IMPORTS 17 | . 001766 | .000370 | . 002264 | . 002216 | . 002204 | .002191 | . 002987 | . 002987 |
| BAL. OF PAYMNT ADJI 8 | .000000 | .000000 | .000000 | .000000 | .000000 | . 000000 | .000000 | . 000000 |
| COMMOOITY TAXES 19 | .021082 | .005574 | . 008026 | .007693 | . 008952 | . 007658 | . 041448 | . 041448 |
| SUBSIOTES 20 | -. 018602 | -. 002820 | -. 008963 | -. 008931 | -. 009361 | -. 008787 | -. 008019 | -. 008019 |
| INOIR.IX.GGOV.SER21 | . 042062 | .031822 | .116881 | . 120454 | .111081 | .118520 | .046853 | . 046853 |
| WAGESESALARIES 22 | . 528684 | .291241 | . 346240 | .345657 | . 362283 | . 348738 | . 388965 | . 388965 |
| NET-INC.UNINCORP. 23 | . 104097 | .016353 | .167113 | .165395 | . 158189 | . 162484 | . 077841 | . 077841 |
| SURPLUS 24 | .265125 | .625837 | . 326361 | .327990 | .321423 | . 326559 | . 241439 | . 241439 |
| SUB TOTAL(17-24) 25 | . 944214 | .968376 | .957921 | .960473 | .954771 | . 957363 | .791513 | .791513 |

TABLE 7

Valuation Conversion Coefficients， 1961 －Aggregation S
（See Chapter 4 for definitions and qualifications）

| Commodity |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 |
| 1 Live Animals | .010167 | ． 018154 | ． 114720 | ． 063048 | ． 035640 | － |
| 2 Grain | .117111 | ＿ | ． 022727 | ． 060275 | ． 079051 | － |
| 3 Fish \＆Fur | ． 020942 | ． 026621 | ． 058414 | .022130 | ． 388486 | － |
| 4 Forestry Products | ． 065710 | ． 010204 | ． 058092 | － | ． 192366 | － |
| 5 Other Agr．Prod． | ． 078387 | ． 002447 | ． 253005 | ． 051069 | ． 313656 | － |
| 6 Metal Ores \＆Conc． | ． 065924 | ． 018694 | ． 119372 | ． 000026 | － | － |
| 7 Non－Metal Minerals | ． 038820 | ． 047152 | ． 603772 | ． 019179 | ． 352919 | － |
| 8 Coal | ． 051969 | ． 537171 | ． 608138 | ． 041837 | ． 385092 | － |
| 9 Oil \＆Nt．Gas | － | ． 245291 | .230439 | ． 000601 | .432555 | － |
| 10 Meat \＆Dairy Prod． | ． 038649 | ． 005136 | ． 055668 | ． 061767 | ． 194526 | ． 002008 |
| 11 All other Foods | ． 036748 | ． 003288 | ． 083286 | ． 089530 | ． 257787 | ． 008942 |
| 12 Beverages | .000517 | ． 016390 | ． 042890 | ． 108994 | ． 339244 | .228415 |
| 13 Tobacco | － | ． 028589 | ． 011472 | .342403 | .142160 | ． 545053 |
| 14 Leather \＆textiles | ． 019740 | ． 022764 | ． 042310 | ． 186161 | ． 332344 | ． 062244 |
| 15 Clothing | ． 014827 | ． 018905 | ． 030888 | .260672 | ． 382249 | ． 057216 |
| 16 Lumber | ． 083248 | ． 051647 | ． 1.71469 | ． 012250 | .121483 | － |
| 17 Furniture | ． 004423 | ． 014475 | ． 024695 | .222116 | ． 283814 | ． 064988 |
| I8 Other Wood Prod． | ． 055847 | ． 010218 | ． 075186 | ． 135395 | ． 195268 | ． 0421.95 |
| 19 Paper \＆Products | ． 031476 | ． 041837 | ． 058058 | .157131 | ． 326592 | ． 057390 |
| 20 Iron \＆Steel Prod． | ． 033187 | ． 023198 | ． 061912 | ． 126060 | ． 229057 | ． 051980 |
| 21 Non－Ferrous Prod． | ． 028100 | ． 013536 | ． 093242 | ． 042574 | －． 000504 | － |
| 22 Machinery \＆Equip． | ． 141353 | ． 011963 | ． 012722 | .107573 | ． 179798 | ． 040506 |
| 23 Vehicles \＆Parts | ． 115128 | ． 004393 | ． 018790 | ． 083344 | ． 235624 | ． 087262 |
| 24 Other Trans．Equip． | ． 033017 | ． 011510 | ． 012045 | ． 008240 | ． 130169 | ． 033231 |
| 25 Elec．\＆Com．Equip． | ． 056898 | ． 020110 | ． 011843 | .157725 | ． 221488 | ． 081453 |
| 26 Rubber Products | ． 202621 | ． 000307 | ． 021034 | ． 184628 | ． 296059 | ． 0621.38 |
| 27 Petroleum Prod． | ． 099725 | ． 019687 | ． 286545 | ． 064770 | ． 319158 | ． 240440 |
| 28 Other Chemicals | ． 053366 | ． 010674 | ． 057169 | ． 076972 | ． 372791 | ． 060173 |
| 29 Printed Matter | ． 066017 | ． 010429 | ． 011425 | ． 049136 | ． 187419 | ． 020958 |
| 30 Oth．Mineral Prod． | ． 066686 | ． 017940 | ． 097659 | ． 111285 | ． 331959 | ． 057818 |
| 31 Misc．Mfgr．Prod． | ． 102160 | ． 004146 | ． 028482 | ． 120918 | ． 317965 | ． 055912 |
| 32 Construction | － | － | － | － | － | － |
| 33 Trade \＆Transport | － | － | － | － | － | － |
| 34 Utilities | ． 065687 | － | .270335 | － | － | － |
| 35 Financial Service | － | － | － | － | － | － |
| 36 Communications | － | － | － | － | － | － |
| 37 Business Services | － | － | － | － | － | － |
| 38 Personal Service | － | － | － | － | － | ． 019186 |
| 39 Advtg．\＆Travel | － | － | － | － | － | － |
| 40 Repair \＆Maint． | － | － | － | － | － | － |
| 41 Non－Comp．Imports | ． 080756 | － | ． 211814 | ． 039720 | ． 302889 | － |

TABLE 8 VALUES OF INDUSTRY INPUTS AND FINAL EXPENDITURES, $196 I$ - AGGREGATION M (SEE CHAPTER 4 I


TABLE 8 VALUES OF INOUSTRY INPUTS AND FINAL EXPENDITURES. IG6I - AGGREGATION M (SEE CHAPTER 4 )

| INDUSTRY(COLUMNS) |  | AGRICULTURE | FORESTRY |  | FISHING | METAL | NON-METAL | COAL | PETROLEUM E | MEAT, POULTRY |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\varepsilon$ | HUNT ING | MINES | MINES | MINES | Natural gas | PROCESSORS |
| COmm01TY(ROMS) |  | 1 | 2 |  | 3 | 4 | 5 | 6 | 7 | 8 |
| FURNITURE, FIXTRS | 26 | . 0 | . 0 |  | . 0 | .0 | .0 | .0 | .0 | .0 |
| OTHER WOOD PROD. | 27 | 5.5 | . 0 |  | .0 | .0 | .5 | .0 | .0 | 1.7 |
| PULP ANO PAPER | 28 | . 0 | . 0 |  | - 0 | . 0 | . 0 | - 0 | - 0 | 2.0 |
| OTHER PAPER PROD. |  | 2.7 | . 0 |  | - 0 | - 0 | 6.2 | - 0 | - 0 | 20.1 |
| PRINTEO MATTER | 30 | . 0 | . 0 |  | . 0 | .0 | . 0 | . 0 | - 0 | . 0 |
| Steel mill Prood |  | .0 | . 0 |  | . 0 | 1.2 | . 0 | . 3 | . 1 | . 0 |
| SMELT.EREF.PROD. |  | - 0 | . 0 |  | . 0 | .2 | . 0 | . 0 | . 0 | . 0 |
| OTH.PRIMARY METAL |  | - 0 | - 0 |  | . 0 | 8.8 | .2 | - 0 | 2.6 | . 0 |
| STRUCTURAL METAL | 34 | . 0 | - 0 |  | -0 | .0 | - 0 | .0 | - 0 | .0 |
| METAL STAMPINGS | 35 | -0 | . 0 |  | . 2 | . 8 | . 0 | .0 | .4 | 6.1 |
| OTHER METAL PROD. |  | 6.0 | 5.4 |  | . 1 | . 0 | - 0 | . 0 | - 0 | . 0 |
| MACHINERY (NES) | 37 | 37.5 | 4.1 |  | 2.9 | 17.4 | 3.0 | .9 | 13.0 | - 3 |
| AIRCRAFT E PARTS | 38 | 1.0 | . 0 |  | . 0 | .0 | . 0 | . 0 | - 0 | . 0 |
| MOTOR VEHICLES | 39 | - 0 | . 0 |  | . 0 | .0 | - 0 | - 0 | .0 | . 0 |
| VEHICLE PARTS | 40 | . 0 | . 0 |  | . 0 | . 0 | - 0 | . 0 | .0 | - 0 |
| OTH. TRANSP.EQUIP |  | - 0 | .0 |  | 1.9 | . 9 | . 0 | -1 | . 0 | . 0 |
| ELEC. APPLIANCES |  | . 0 | . 0 |  | .0 | -0 | . 0 | - 0 | . 0 | - 0 |
| ELEC. IND. EQUIP. |  | - 0 | - 0 |  | .0 | . 0 | .0 | .0 | . 0 | - 0 |
| COM.EQUIP., WIRE | 44 | - 0 | . 0 |  | .8 | . 0 | .0 | . 0 | . 0 | . 0 |
| OTHER ELEC.PROD. |  | . 0 | .0 |  | .0 | - 0 | .0 | . 0 | . 0 | - 0 |
| CLAY, LIME,CEMENT |  | . 2 | -1 |  | .0 | 2.2 | . 1 | - 0 | . 1 | - 0 |
| A.D.NON-METALL IC |  | . 0 | -0 |  | .2 | .0 | .0 | - 0 | . 0 | - 2 |
| PETR. PROO. | 48 | 154.1. | 22.5 |  | 6.1 | 8.0 | 8.0 | .7 | 7.0 | 2.0 |
| PLASTIC.SVN,RESIN | 149 | . 0 | . 0 |  | -1 | - 0 | .0 | .0 | . 8 | 3.6 |
| PAINT E VARNISH | 50 | . 0 | - 0 |  | . 0 | - 0 | . 0 | - 0 | - 0 | . 0 |

TABLE 8 VALUES DF INDUSTRY INPUTS AND FINAL EXPENDITURES, 1961 - AGGREGATIDN M (SEE CHAPTER \&J


TABLE 8 VALUES OF INDUSTRY INPUTS AND FINAL EXPENDITURES. 1961 - AGGREGATION M (SEE CHAPTER 4)

| INDUSTRY(COLUMNS) |  | $\begin{array}{r} \text { DAIRY } \\ \text { FACTORIES } \\ 9 \end{array}$ | FRUITEVEG. CANNERS 10 | FEED,FLOUR CEREAL MFG 11 | $\begin{gathered} \text { BISCUITE } \\ \text { BAKERIES IND. } \\ 12 \end{gathered}$ | SUGAR ANO CONECTIONERY 13 | $\begin{aligned} & \text { OTHER } \\ & \text { FOOD IND. } \\ & 14 \end{aligned}$ | $\begin{gathered} \text { SOFT DRINK } \\ \text { MFG. } \\ \text { is } \end{gathered}$ | AL GOHOLIC <br> beverage mfg <br> 16 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AGRICULTURAL PROD |  | 497.7 | 55.5 | 236.1 | 2.4 | 18.3 | 95.8 | . 0 | 17.8 |
| FORESTRY PRODUCTS |  | -1 | . 0 | - 0 | .0 | - 0 | . 0 | . 0 | . 0 |
| FISH AND FUR | 3 | . 0 | . 0 | . 6 | . 0 | . 0 | 92.2 | . 0 | . 0 |
| METAL ORES \& CONC |  | . 0 | - 0 | .0 | . 0 | - 0 | . 0 | . 0 | .0 |
| NON-METAL MINERAL |  | . 2 | . 3 | 1.1 | . 4 | . 3 | . 6 | . 0 | . 0 |
| COAL | 6 | 1.2 | 1.1 | -3 | - 2 | . 7 | . 7 | - I | .9 |
| OIL AND NAT.GAS | 7 | - 2 | . 0 | . 1 | . 3 | . 1 | . 2 | . 0 | . 1 |
| MEAT PRODUCTS | 8 | . 8 | 13.4 | 15.5 | 18.8 | - 2 | 11. 7 | - 2 | .7 |
| DAIRY PRODUCTS | 9 | 64.8 | 1.6 | 1.4 | 5.6 | 3.7 | 3.4 | . 0 | . 0 |
| FRUIT \& VEG.PROD. |  | 2.6 | 20.4 | - 4 | 11.4 | . 8 | 3.5 | . 0 | .5 |
| FEED,FLR.CEREALS | 11 | . 1 | - 3 | 38.2 | 60.3 | - 8 | 10.1 | - 0 | 2.7 |
| BAKERY PRODUCTS | 12 | . 3 | . 0 | . 0 | - 3 | . 2 | . 2 | .0 | . 0 |
| SUGAR, CONFECT. | 13 | 4.8 | 11.1 | 5.1 | 18.9 | 23.1 | 9.5 | 14.1 | 1.0 |
| OTHER FOOD PROD. | 14 | 5.5 | 4.1 | 41.7 | 21.7 | 5.1 | 58.5 | . 9 | 25.0 |
| SOFT DRINKS | 15 | - 2 | - 1 | .0 | .0 | . 0 | . 0 | 18.7 | . 0 |
| ALCOMOLIC BEV. | 16 | . 0 | . 0 | 2.1 | . 0 | . 0 | . 6 | . 1 | 18.1 |
| TOBACCO PRODUCTS |  | - 0 | .0 | . 0 | . 0 | . 0 | . 0 | . 0 | . 0 |
| RUBEER PRODUCTS | 18 | . 0 | .0 | . 0 | - 0 | . 0 | . 0 | .0 | . 0 |
| LEATHER PRODUCTS |  | - 0 | .0 | . 0 | .0 | - 0 | . 0 | . 0 | . 0 |
| SYNTHET.TEXTILES |  | . 0 | . 0 | . 0 | . 0 | . 0 | .0 | . 0 | - 0 |
| COTTON. YARN,CLOTH | 21 | . 1 | . 0 | - 2 | . 0 | . 0 | . 2 | .0 | . 0 |
| KNITTEO PRODUCTS |  | . 0 | . 0 | . 0 | . 0 | . 0 | . 0 | . 0 | . 0 |
| CLOTHING | 23 | - 0 | .0 | - 0 | . 0 | . 0 | . 0 | . 0 | . 0 |
| OTHER TEXTILES | 24 | - 1 | .0 | 10.4 | .0 | 1.0 | 1.4 | . 0 | . 0 |
| SAMMILL PROD. | 25 | - 0 | . 0 | . 1 | - 0 | . 0 | . 0 | . 0 | . 0 |

TABLE 8 VALUES OF INOUSTRY [NPUTS AND FINAL EXPENDITURES, $196 I$ - AGGREGATION M (SEE CHAPTER 4)


TABLE 8 VALUES OF INDUSTRY INPUTS AND FINAL EXPENOITURES, 1961 - AGGREGATION M (SEE CHAPTER \&)

| 1 NDUSTRY(COLUMNS) COMMODITY(ROWS) |  | $\begin{array}{r} \text { DAIRY } \\ \text { FACTORIES } \\ 9 \end{array}$ | FRUITEVEG. CANNERS 10 | FEED, FL OUR CEREAL MFG 11 | $\begin{array}{r} \text { BISCUITE } \\ \text { BAKERIES IND. } \\ 12 \end{array}$ | SUGAR AND CONECTIOVERY 13 | $\begin{aligned} & \text { OTHER } \\ & \text { FOOD IND. } \\ & 14 \end{aligned}$ | SOFT DRINK MFG. 15 | ALCOHOLIC BEVERAGE MFG 16 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PHARM. SOAP, TOILET |  | 2.6 | 1.3 | 6.3 | 2.6 | . 8 | 14.8 | . 1 | . 0 |
| OTHER CHEM PROO. | 52 | . 6 | 2.4 | 1.0 | . 5 | 1.9 | $4 \cdot 3$ | 3.2 | 2.0 |
| MISC. MFG. PROD. |  | . 6 | . 2 | . 2 | - 0 | - 4 | . 7 | - 0 | . 0 |
| CONSTRUCTION | 54 | 2.6 | 1.0 | 1.1 | 1.3 | - 9 | 2.1 | . 7 | 1.7 |
| TRADE, WH.ERETAIL |  | 9.3 | 10.0 | 11.9 | 13.5 | 6.7 | 12.8 | 2.7 | 7.7 |
| TRANSPORT, STORAGE |  | 13.3 | 9.6 | 58.6 | 13.1 | 7.9 | 28.2 | 2.4 | 10.4 |
| COMMUNICATIONS | 57 | $2 \cdot 3$ | 1. 2 | 1.8 | 1.5 | . 8 | 2.4 | - 7 | 1.2 |
| utilities | 58 | 6.1 | 2.0 | 4.1 | 3.5 | 1.7 | 4.2 | 1.1 | 4.3 |
| FIN.INSUR.RL.EST. |  | T. 0 | 3.8 | 3.3 | 8.6 | 3.1 | 6.4 | 3.2 | 3.6 |
| BUSINESS SERVICE |  | 2.0 | 1.1 | . 6 | 5.2 | 1.2 | 3.2 | . 8 | 12.0 |
| ACCOM. MEALS | 61 | .0 | - 0 | . 0 | .0 | . D | . 0 | .0 | . 0 |
| OTHER SERVICES | 62 | 7.6 | 3.1 | 1.7 | 2.9 | 1.0 | 2.7 | . 1 | 1.9 |
| OFFICE SUPPLIES | 63 | 1.5 | .7 | 1.2 | 1.0 | . 5 | 1.4 | . 6 | 1.1 |
| ADVTG. AND TRAVEL |  | 20.7 | 17.4 | 16.4 | 15.8 | 8.5 | 38.5 | 18.5 | 41.2 |
| OPERATING SUPPL. |  | 22.0 | 7.5 | 8.3 | 12.4 | 7.6 | 17.6 | 3.9 | 14.6 |
| NON-COMP.IMPORTS |  | .0 | . 2 | . 0 | - 0 | 67.5 | 53.5 | . 0 | . 7 |
| BAL. OF PAYMNT ADJ |  | .0 | . 0 | .0 | - 0 | . 0 | . 0 | .0 | . 0 |
| COmmodity Taxes | 68 | 4.3 | . 4 | .7 | 3.9 | . 1 | . 6 | 1.1 | 1.0 |
| SUBSIDIES | 69 | -. 9 | . 0 | $-6.5$ | - 0 | . 0 | -. 2 | . 0 | . 0 |
| INDIR.TAXEGOV.SER |  | 4.8 | 2.1 | 2.6 | 3.6 | 2.0 | 4.3 | 2.1 | 7.2 |
| WAGES \& SALARIES |  | 132.8 | 59.4 | 59.9 | 136.0 | 53.6 | 101.3 | 51.1 | 83.5 |
| NET-INC.UNICORP. |  | 5.8 | . 5 | 3.7 | 12.8 | - 5 | .7 | 1.8 | . 0 |
| SURPLUS | 73 | 44.3 | 29.3 | 15.1 | 34.3 | 33.0 | 51.1 | 35.5 | 118.2 |
| SUB TOTAL (66-73) |  | 191.3 | 91.9 | 75.4 | 190.7 | 156.7 | 211.4 | 91.6 | 210.7 |
| TOTAL INPUTS | 75 | 916.7 | 335.4 | 565.5 | 461.6 | 274.6 | 692.7 | 175.4 | 435.8 |

TABLE 8 VALUES OF INOUSTRY INPUTS AND FINAL EXPENDITURES. 1961 - AGGREGATION M ISEE CHAPTER 4 I

| [NDUSTRYICOLUMNSI COMMODITY(ROWS) | $\begin{array}{r} \text { TOBACCO } \\ \text { PROD. } 1 \text { ND. } \\ 17 \end{array}$ | RUBBER PROD. MFG 18 | $\begin{array}{r} \text { LEATHER } \\ \text { PROD.MFG. } \\ 19 \end{array}$ | SYNTHETIC textile mills 20 | COTTON YARN. CLOTH MILLS 21 | $\begin{gathered} \text { KNITTING } \\ \text { MILLS } \\ 22 \end{gathered}$ | CLOTMING INOUSTRIES 23 | OTHER <br> TEXTILE INO. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AGRICULTURAL PROD. 1 | 103.5 | .0 | . 0 | .0 | . 0 | .0 | 10.1 | 4.0 |
| FORESTRY PROOUCTS 2 | .0 | - 0 | .0 | . 0 | . 0 | . 0 | .0 | . 0 |
| FISH AND FUR 3 | .0 | .0 | . 0 | . 0 | - 0 | . 0 | 13.2 | . 2 |
| METAL ORES E CONC. 4 | . 0 | . 0 | .0 | . 0 | . 0 | - 0 | .0 | - 0 |
| NON-METAL MINERALSS | . 0 | . 5 | . 1 | . 0 | . 0 | . 0 | .0 | - 3 |
| COAL 6 | . 1 | 1.3 | . 5 | . 2 | 1.0 | .4 | . 1 | 1.0 |
| OIL AND NAT.GAS 7 | .0 | . 3 | . 0 | . 0 | . 0 | .0 | . 0 | - 0 |
| HEAT PROOUCTS 8 | 1.6 | . 0 | 24.0 | . 0 | . 0 | . 0 | . 0 | . 0 |
| DAIRY PROOUCTS 9 | . 0 | . 0 | . 0 | . 0 | . 0 | .0 | . 0 | . 0 |
| FRUIT \& VEG.PROD. 10 | .0 | . 0 | .0 | . 0 | . 0 | .0 | . 0 | . 0 |
| FEED,FLR.CEREALS 11 | .0 | . 0 | . 0 | .0 | . 3 | . 0 | . 0 | - 0 |
| BAKERY PRODUCTS 12 | .0 | . 0 | . 0 | . 0 | . 0 | .0 | .0 | - 0 |
| SUGAR,CONFECT. 13 | - 5 | . 0 | . 0 | - 0 | . 0 | . 0 | . 0 | .0 |
| OTHER FOOD PROD. 14 | .0 | . 3 | . 5 | 2.9 | . 9 | . 0 | . 9 | 1.7 |
| SOFT DRINKS 15 | .0 | .0 | . 0 | .0 | . 0 | .0 | . 0 | .0 |
| ALCOHOLIC BEV. 16 | .0 | .0 | - 0 | .0 | . 0 | . 0 | .0 | . 0 |
| TOBACCO PRODUCTS 17 | 75.8 | . 0 | . 0 | . 0 | . 0 | . 0 | . 0 | . 0 |
| RUBEER PRODUCTS 18 | . 0 | 8.7 | 10.3 | 1.5 | .7 | . 5 | . 5 | 1.7 |
| LEATHER PROOUCTS 19 | . 0 | 2.8 | 61.4 | . 0 | .0 | . 6 | . 5 | . 2 |
| SYNTHET.TEXTILES 20 | . 0 | 1.9 | - | 59.7 | 20.9 | 47.7 | 67.3 | 22.8 |
| COTTON, YARN, CLOTH21 | .0 | 27.7 | 5. | 4.0 | 43.3 | 23.5 | 114.2 | 44.8 |
| KNITTED PRODUCTS 22 | - 0 | - 0 | . 5 | . 0 | - 0 | 10.6 | 37.1 | 1.2 |
| CLOTHING 23 | . 0 | - 8 | . 6 | 2.7 | . 9 | 5.3 | 35.3 | 5.7 |
| OTHER TEXTILES 24 | . 0 | 5.6 | 4. | 4.2 | 8.0 | 21.9 | 96.0 | 75.4 |
| SAHMILL PROD. 25 | -1 | .0 | - | . 0 | . 0 | . 0 | . 0 | . 0 |

TABLE 8 VALUES OF INOUSTRY INPUTS AND FINAL EXPENDITURES, 1961 - AGGREGATION M ISEE CHAPTER 41


TABLE 8 VALUES OF INDUSTRY INPUTS AND FINAL EXPENDITURES, 1961 - AGGREGATION M (SEE CHAPTER 4 )

| INDUS TRY(COLUMNS) COMMODITY(ROWS) | $\begin{array}{r} \text { TOBACCO } \\ \text { PROD. IND. } \\ 17 \end{array}$ | $\begin{gathered} \text { RUBBER } \\ \text { PROD. MFG } \\ 18 \end{gathered}$ | $\begin{array}{r} \text { LEATHER } \\ \text { PRDD.MFG. } \\ 19 \end{array}$ | SYNTHETIC <br> rextile mills | COTTON YARN. CLOTH MILLS 21 | $\begin{gathered} \text { KNITTING } \\ \text { MILLS } \\ 22 \end{gathered}$ | Clothing <br> INDUSTRIES <br> 23 | OTHER <br> TEXTILE IND. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PhARM. SOAP, TOILETSI | .0 | . 0 | . 0 | .0 | . 0 | . 0 | . 0 | . 6 |
| OTHER CHEM PROD. 52 | . 0 | 49.6 | 7.8 | 23.2 | 5.4 | 1.8 | .9 | 14.2 |
| MISC. MFG. PROD. 53 | 3.5 | 2.1 | 8.9 | . 3 | . 0 | .6 | 25.6 | 3.9 |
| CONSTRUCTION 54 | 1.3 | .9 | . 6 | 1.2 | 1.1 | . 4 | .7 | 1.5 |
| TRADE, WH.ERETAILS5 | 5.2 | 7.0 | 13.5 | 3.4 | 4.1 | 3.7 | 35.7 | 14.3 |
| TRANSPORT, STORAGE 56 | 2.9 | 5.9 | 3.8 | 4.0 | 3.9 | 2.8 | 8.6 | 7.1 |
| COMMUNICATIONS 57 | . 6 | 2.1 | 1.4 | 1.0 | . 5 | 1.0 | 3.5 | 1.8 |
| UTILITIES 58 | .7 | 3.5 | 1.5 | 2.3 | 2.8 | $1 \cdot 1$ | 2.2 | 3.0 |
| FIN.INSUR.RL.EST. 59 | 4.3 | 6.0 | 3.6 | 4.5 | 1.2 | 5.5 | 17.9 | 4.7 |
| BUSINESS SERVICE 60 | 1.6 | 1.5 | 1.3 | . 5 | . 3 | 1.3 | 2.7 | 1.1 |
| ACCOM. MEALS 61 | . 0 | . 0 | .0 | . 0 | . 0 | . 0 | . 0 | - 0 |
| OTHER SERVICES 62 | .7 | . 8 | 3.9 | .7 | 1.1 | .6 | 1.9 | 2.2 |
| OFFICE SUPPLIES 63 | - 3 | 1.7 | .9 | 9.7 | . 4 | . 5 | 2.3 | 1.3 |
| AOVTG. ANO TRAVELG4 | 19.2 | 12.7 | 12.1 | 3.0 | 1.6 | 4.9 | 18.1 | 11.1 |
| OPERATING SUPPL * 65 | 5.3 | 9.4 | 9.1 | 9.3 | 6.1 | 4.8 | 10.4 | 14.4 |
| NON-C OMP.IMPORTS 66 | - 0 | 18.8 | . 1 | 1.1 | 45.9 | -1 | . 0 | 2.9 |
| 8AL. OF PAYMNT ADJG7 | . 0 | . 0 | .0 | . .0 | . 0 | .0 | . 0 | . 0 |
| COMMODITY TAXES 68 | - 0 | -1 | . 2 | 2.1 | .0 | . 2 | - 2 | . 2 |
| SUBSIDIES 69 | . 0 | . 0 | . 0 | - 0 | . 0 | . 0 | . 0 | . 0 |
| INDIR.TAXEGOV.SER 70 | 1.9 | 3.0 | 1.6 | 61.8 | 1.7 | 1.4 | 2.6 | 3.3 |
| WAGES \& SALARIES 71 | 45.4 | 97.2 | 101.5 | 564.7 | 59.3 | 64.3 | 264.3 | 106.8 |
| NET-INC.UNICORP. 72 | . 0 | -1 | 1.0 | 0.0 | .0 | 1.0 | 8.2 | 2.3 |
| SURPLUS 73 | 30.8 | 48.7 | 4.5 | 539.7 | 21.5 | 10.4 | 28.1 | 24.6 |
| SUB TOTAL (66-73) 74 | 78.1 | 167.9 | 108.8 | 8107.5 | 128.4 | 77.3 | 303.4 | 140.0 |
| TOTAL INPUTS 75 | 335.0 | 339.5 | 295.3 | 3251.0 | 236.3 | 221.1 | 816.9 | 396.8 |

TABLE 8 VALUES OF INOUSTRY INPUTS ANO FINAL EXPENDITURES. 1961 - AGGREGATION M (SEE CHAPTER 4)


TABLE 8 VALUES OF INOUSTRY INPUTS AND FINAL EXPENDITURES, 1961 - AGGREGATIDN M (SEE CHAPTER 4 I


TABLE 8 VALUES OF INDUSTRY INPUTS AND FINAL EXPENOITURES, 1961 - AGGREGATION M (SEE CHAPTER 4 )

| INDUSTRY(COLUMNS) |  | AMMILLS FURNITUREE |  | OTHER | PULP AND |  |  |  | SMELTING, REFINING |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | FIXTURE IND. | WOOO IND. | PAPER MILLS | PAPER IVD. | PUBLISHING | STEEL MILLS |  |
| COMMODITY(ROWS) |  | 25 | 26 | 27 | 28 | 29 | 30 | 31 | ) 32 |
| PHARM. SOAP, TOILETSI |  | . 0 | . 0 | . 0 | . 1 | . 0 | . 0 | .0 | . 0 |
| OTHER CHEM PROD. |  | 2.1 | 1.7 | 2.0 | 46.9 | 15.3 | 12.7 | 4.4 | 9.0 |
| MISC. MFG. PROD. |  | .0 | 10.1 | 1.1 | . 2 | 10.4 | 1.4 | . 0 | . 0 |
| CONSTRUCTION | 54 | 4.0 | 1.0 | 1.8 | 6.9 | 2.3 | 2.5 | 3.8 | 10.5 |
| TRADE, WH.ERETAIL | 55 | 15.8 | 18.6 | 20.5 | 19.7 | 12.5 | 7.8 | 18.4 | 7.5 |
| TRANSPORT, STORAGE | 56 | 25.3 | 8.1 | 19.6 | 56.3 | 19.8 | 14.9 | 28.4 | 24.0 |
| COMMUNICATIONS | 57 | 1.8 | 2.1 | 2.4 | 3.1 | 4.9 | 18.1 | 2.1 | 1.5 |
| UTILITIES | 58 | 6.4 | 2.3 | 4.6 | 88.0 | 3.1 | 4.6 | 20.8 | 36.0 |
| FIN. INSUR.RL.EST. 59 |  | 6.8 | 6.7 | 7.2 | 11.2 | 10.3 | 17.0 | 3.0 | 4.7 |
| BUSINESS SERVICE | 60 | 1.8 | 1.9 | . 9 | 5.6 | 1.8 | 2.9 | 1.7 | 6.2 |
| ACCOM. MEALS | 61 | . 0 | - 0 | . 0 | .0 | - 0 | . 0 | . 0 | . 0 |
| OTHER SERVICES | 62 | 3.2 | 1.4 | 1.4 | 8.3 | 3.5 | 15.6 | 3.8 | 1.6 |
| OFFICE SUPPLIES | 63 | . 9 | 1.1 | 1.0 | 2.1 | 1.7 | 5.1 | 1.1 | 1.0 |
| AOVTG. ANO TRAVEL 64 |  | 2.2 | 8.9 | 5.3 | 9.6 | 12.3 | 32.8 | 3.8 | 3.7 |
| OPERATING SUPPL - 65 |  | 29.8 | 7.1 | 13.6 | 70.5 | 15.2 | 20.9 | 56.4 | 10.6 |
| NON-COMP.IMPORTS 66 |  | . 0 | . 0 | . 0 | .0 | . 0 | . 0 | .0 | . 0 |
| 8AL. OF PAYMNT ADJ67 |  | . 0 | .0 | . 0 | . 0 | . 0 | . 0 | . 0 | - 0 |
| commoolly raxes | 68 | . 9 | . 4 | . 5 | .7 | . 6 | 2.0 | - 5 | - 4 |
| SUBSIOIES | 69 | .0 | . 0 | - 0 | .0 | - 0 | . 0 | -. 3 | . 0 |
| INOIR.TAXEGOV.SERTO |  | 3.9 | 3.0 | 2.5 | 22.0 | 6.8 | 7.6 | 6.6 | 11.4 |
| WAGES \& SALARIES |  | 179.0 | 121.3 | 123.0 | 371.2 | 134.4 | 358.1 | 204.5 | 170.7 |
| NET-INC.UNI CORP. |  | 7.5 | 6.9 | 4.5 | . 0 | . 6 | 11.3 | - 0 | . 0 |
| SURPLUS | 73 | 40.0 | 28.3 | 29.1 | 385.2 | 45.7 | 99.5 | 142.6 | 84.3 |
| SUB TOTAL (66-731 |  | 231.3 | 159.8 | 159.6 | 779.3 | 188.1 | 478.5 | 353.9 | 266.8 |
| TOTAL INPUTS | 75 | 646.7 | 366.3 | 413.0 | 1647.5 | 581.0 | 874.8 | 787.0 | 1413.1 |

TABLE 8 VALUES OF INOUSTRY INPUTS ANO FINAL EXPENOITURES, 1961 - AGGREGATION M (SEE CHAPTER 4I


TABLE 8 VALUES OF INDUSTRY INPUTS AND FINAL EXPENDITURES, 1961 - AGGREGATION M ISEE CHAPTER \& I


TABLE 8 VALUES OF INOUSTRY INPUTS ANO FINAL EXPENOITURES. 1961 - AGGREGATION M (SEE CHAPTER 4 I

| $\begin{aligned} & \text { I NOUSTRYICOLUMNS) } \\ & \text { COMMOOITY(ROHS) } \end{aligned}$ | OTHER PRIMARY METAL 【NO. 33 | STRUCTURAL. <br> FABRIC.METAL 34 | METAL $\begin{aligned} & \text { STAMP ING INO. } \\ & 35 \end{aligned}$ | OTHER METAL WORK ING INO. 36 | MACHINERY (NESIMFG. 37 | AIRCRAFT EPARTS MFG. 38 | MOTOR <br> VEHICLE MFG. 39 | VEHICLE <br> PARTS MFG. 40 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PHARM. SOAP. TOILETSI | . 0 | . 0 | . 0 | . 1 | . 0 | . 0 | . 0 | . 0 |
| OTHER CHEM PROD. 52 | 2.7 | .4 | 2.5 | 3.4 | 2.0 | . 1 | 2.6 | . 4 |
| MISC. MFG. PROD. 53 | - 3 | . 1 | . 8 | 2.6 | 1.4 | 8.5 | 5.7 | 2.0 |
| CONSTRUCTION 54 | 4.8 | .7 | 1.0 | 3.5 | 2.9 | 3.0 | 3.7 | 2.7 |
| TRAOE, WH.ERETAILSS | 14.1 | 2.8 | 6.1 | 23.4 | 19.5 | 5.5 | 30.0 | 9.4 |
| TRANSPORT, STORAGES6 | 17.8 | 2.2 | 8.1 | 15.3 | 12.5 | 5.3 | 26.1 | 7.3 |
| COMMUNICATIONS 57 | 1.8 | 1.1 | 1.7 | 7.3 | 6.0 | 2.1 | 3.6 | 1.1 |
| UTILITES 58 | 7.6 | 1.1 | 2.8 | 8.4 | 4.5 | 1.9 | 2.9 | 3.4 |
| FIN.INSUR.RL.EST. 59 | 5.9 | 1.3 | 3.9 | 11.5 | 20.3 | 4.5 | 2.3 | 1.9 |
| BUSINESS SERVICE 60 | 1.6 | .5 | . 5 | $4=2$ | 2.8 | 2.7 | 6.1 | . 4 |
| ACCOM. MEALS 61 | . 0 | . 0 | - 0 | . 0 | . 0 | .0 | . 0 | . 0 |
| OTHER SERVICES 62 | 2.3 | 1.2 | 6.8 | 6.7 | 5.0 | 2.5 | 8.4 | 1.8 |
| OFFICE SUPPLIES 63 | .9 | .7 | 1.2 | 3.6 | 2.9 | 1.6 | 2.4 | . 6 |
| AOVTG. ANO TRAVEL 64 | 3.9 | 1. 6 | 2.5 | 28.7 | 18.0 | 6.0 | 27.5 | 2.5 |
| OPERATING SUPPL. 65 | 16.4 | 8.8 | 10.1 | 38.0 | 16.8 | 13.9 | 15.0 | 15.2 |
| NON-COMP.IMPORTS 66 | . 0 | - 0 | . 0 | . 0 | .0 | . 0 | .0 | .0 |
| BAL. OF PAYMNT ADJ67 | - 0 | - 0 | . 0 | . 0 | . 0 | . 0 | .0 | . 0 |
| COMMODITY TAXES 68 | . 3 | 1.6 | . 4 | 1.1 | - 6 | 1.5 | . 4 | . 2 |
| SUBSIOLES 69 | . 0 | . 0 | . 0 | . 0 | . 0 | - 0 | . 0 | . 0 |
| INOTR.TAXEGOV.SER 70 | 4.1 | 1.3 | 2.7 | 7.8 | 7.7 | 3.3 | 12.2 | 1.9 |
| WAGES E SALARIES 71 | 110.7 | 74.4 | 104.9 | 304.2 | 252.6 | 152.0 | 163.0 | 108.7 |
| NET-INC.UNICORP. 12 | - 8 | -. 0 | 1.4 | 5.9 | . 8 | . 0 | . 4 | . 3 |
| SURPLUS 73 | 45,3 | 13.9 | 50.7 | 81.7 | 87.4 | 14.4 | 108.5 | 26.9 |
| SUB TOTAL (66-73) 74 | 161.2 | 91.2 | 160.2 | 400.7 | 349.1 | 171.2 | 284.5 | 137.9 |
| TOTAL INPUTS 75 | 548.3 | 218.7 | 404.9 | 930.7 | 765.4 | 364.8 | 995.0 | 355.2 |

TABLE B VALUES OF (NDUSTRY INPUTS AND FINAL EXPENDITURES, 1961 - AGGREGATION M (SEE CHAPTER 4 )


TABLE 8 VALUES OF INDUSTRY INPUTS AND FINAL EXPENDITURES, 1961 - AGGREGATION M (SEE CHAPTER 4)


TABLE 8 VALUES OF INDUSTRY INPUTS AND FINAL EXPENDITURES, 1961 - AGGREGATIGN M (SEE CHAPTER 4 )


TABIE 8 VALUES OF INDUSTRY INPUTS ANO FINAL EXPENOITURES, 1961 - AGGREGATION M (SEE CHAPTER 4 I


TABLE 8 VALUES DF INDUSTRY INPUTS AND FINAL EXPENDITURES, 1961 - AGGREGATION M (SEE CHAPTER 4 )


TABLE 8 VALUES OF INDUSTRY INPUTS AND FINAL EXPENDITURES, 1961 - AGGREGATION M ISEE CHAPTER $4 I$

| INOUSTRY(CDLUMNS) COMMODITY(ROWS) | $\begin{array}{cl}\text { PLASTIC } & \text { AND } \\ \text { SYN.RESIN } & \text { IND. } \\ & 49\end{array}$ | $\begin{gathered} \text { PAINT AND } \\ \text { VARNISH MFG. } \\ 50 \end{gathered}$ | PHARM. SOAP TOILET MFG. 51 | OTH.CHEMICAL <br> INDUSTRIES $52$ | MISC.MFG. INDUSTRIES 53 | CONSTRUCTION INOUSTRIES 54 | WHOLESALE RETAIL TRADE 55 | TRANSPORT \& STORAGE 56 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PHARM. SOAP, TOILETS1 | 1.2 | 1.9 | 13.4 | 2.7 | . 2 | . 3 | . 0 | . 0 |
| OTHER CHEM PRDO. 52 | 27.7 | 30.3 | 34.4 | 141.5 | 10.2 | 25.3 | 1.4 | 3.5 |
| MISC. MFG. PROD. 53 | . 6 | . 2 | 12.5 | 2.1 | 30.4 | 58.3 | 11.4 | 4.3 |
| CONSTRUCTION 54 | 1.4 | . 4 | 1.3 | 7.3 | 2.1 | 4.0 | 38.8 | 167.0 |
| TRADE. WH.ERETAILSS | 2.5 | 3.6 | 9.8 | 15.8 | 14.0 | 471.5 | 99.0 | 94.3 |
| TRANSPORT, STORAGES6 | 3.6 | 4.3 | 9.3 | 28.3 | 9.B | 252.4 | 212.4 | 255.1 |
| COMMUNICATIONS 57 | . 9 | 1.2 | 3.5 | 3.7 | 5.2 | 7.7 | 185.9 | 41.3 |
| UTILITIES 58 | 2.4 | - 6 | 1.7 | 32.5 | 3.8 | 6.7 | 94.6 | 16.0 |
| FIN.INSUR.RL.EST. 59 | 1.5 | 3.0 | 6.5 | 10.8 | 16.6 | 61.7 | 421.9 | 79.7 |
| BUSINESS SERVICE 60 | -4 | 1.2 | 6.4 | 2.1 | 2.1 | 117.4 | 59.5 | 11.9 |
| ACCOM. MEALS 61 | . 0 | .0 | .0 | . 0 | . 0 | . 0 | . 0 | 8.0 |
| DTHER SERVICES 62 | . 6 | 1.8 | 7.0 | 8.2 | 3.7 | 141.4 | 57.1 | 37.1 |
| OFFICE SUPPLIES 63 | - 3 | .7 | 1.6 | 2.3 | 9.4 | 4.7 | 104.2 | 24.0 |
| AOVTG. ANO TRAVEL64 | 3.3 | 12.4 | 79,8 | 10.4 | 31.1 | 29.8 | 352.1 | 42.4 |
| OPERATING SUPPL. 65 | 5.2 | 2.4 | 7.2 | 26.7 | 26.3 | 18.2 | 201.9 | 123.7 |
| NON-COMP.IMPORTS 66 | - 0 | - 0 | . 0 | . 7 | 1.0 | .0 | 4.8 | .0 |
| BAL OF PAYMNT ADJ67 | . 0 | . 0 | . 0 | . 0 | . 0 | .0 | . 0 | . 0 |
| COMMODITY TAXES 68 | . 0 | .0 | - 8 | . 4 | 1.0 | 206.1 | B0. 1 | 79.4 |
| SUBSIDIES 69 | . 0 | . 0 | . 0 | -. 1 | . 0 | . 0 | -76.4 | -96.0 |
| INDIR.TAXEGOV.SER 70 | 1.1 | 1.3 | 3.5 | 9.7 | 4.6 | 63.8 | 145.3 | 94.9 |
| WAGES E SALARIES 71 | 23.9 | 38.7 | 94.7 | 173.2 | 211.0 | 2177.2 | 2826.9 | 1410.7 |
| NET-INC.UNICARP. 72 | . 0 | .1 | . 4 | - 3 | 8.1 | 237.4 | 654.0 | 89.8 |
| SURPLUS 73 | 21.3 | 13.8 | 54.7 | 185.3 | 75.4 | 273.7 | 1037.3 | 773.4 |
| SU8 TOTAL (66-73) 74 | 46.4 | 53.9 | 154.0 | 369.5 | 301.0 | 2958.1 | 4672.0 | 2352.4 |
| TOTAL INPUTS 75 | 118.4 | 155.3 | 424.9 | 799.0 | 648.6 | 7017.1 | 7098.2 | 3529.6 |

TABLE 8 VALUES OF (NDUSTRY INPUTS AND FINAL EXPENDITURES, $196 I$ - AGGREGATION M (SEE CHAPTER 4)

| INDUSTRYICOLUMNSI COMMODITYIROWSI |  | COMMUNICATIONS | UTILITIES | FINANCE,INS. REAL ESTATE | BUSINESS SERVICES | HOTEL AND RESTAURANT | OTHER SERVICES | DFFICE <br> SUPPLIES(DI | ADVTG. AND TRAVEL (D) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 57 | 58 | 59 | 60 | 61 | 62 | Suprles 63 | \% 64 |
| AGRICULTURAL PROD. 1 |  | .0 | . 0 | .0 | . 0 | 52.4 | 1.1 | . 0 | . 0 |
| FORESTRY PROOUCTS |  | . 0 | - 0 | .0 | . 0 | .0 | .0 | . 0 | . 0 |
| FISH AND FUR | 3 | . 0 | . 0 | .0 | .0 | 1.5 | . 0 | . 0 | . 0 |
| METAL ORES E CONC. 4 |  | .0 | .0 | .0 | .0 | .0 | .4 | . 0 | . 0 |
| NON-METAL MINERALS5 |  | . 0 | .0 | . 0 | . 0 | .6 | . 0 | . 0 | . 0 |
| COAL | 6 | . 0 | 6.9 | . 0 | . 0 | .0 | - 2 | .0 | - 0 |
| OIL AND NAT.GAS | 7 | . 0 | . 8 | 1.1 | . 0 | . 1 | . 1 | . 0 | . 0 |
| MEAT PRODUCTS | 8 | - 0 | .0 | . 0 | - 0 | 121.6 | . 0 | . 0 | .0 |
| DAIRY PRODUCTS | 9 | . 0 | .0 | . 0 | .0 | 87.2 | - 0 | . 0 | . 0 |
| FRUIT E VEG.PROD. 10 |  | .0 | . 0 | .0 | . 0 | 39.3 | . 0 | . 0 | . 0 |
| FEED, FLR.CEREALS |  | .0 | . 0 | .0 | . 0 | 8.9 | - 1 | . 0 | .0 |
| BAKERY PRODUCTS | 12 | .0 | .0 | .0 | .0 | 53.1 | . 0 | .0 | . 0 |
| SUGAR, CONFECT. | 13 | .0 | . 0 | .0 | .0 | 10.2 | .0 | . 0 | - 0 |
| OTHER FOOD PROO |  | . 0 | .0 | .0 | .0 | 31.2 | 1.5 | .0 | - 0 |
| SOFT DRINKS | 15 | .0 | .0 | . 0 | . 0 | 19.2 | . 0 | . 0 | 3.3 |
| ALCOHOLIC BEV. | 16 | . 0 | .0 | .0 | . 0 | .0 | . 0 | .0 | 34.5 |
| TOBACCO PRODUCTS |  | . 0 | . 0 | .0 | . 0 | . 0 | . 0 | . 0 | . 0 |
| RUBBER PRODUCTS | 18 | - 0 | .0 | .0 | - D | . 0 | 1.7 | 10.3 | . 0 |
| L.EATHER PRODUCTS | 19 | . 0 | . 0 | .0 | . 0 | . 0 | 1.6 | . 8 | 2.7 |
| SYNTHET.TEXTILES |  | . 0 | .0 | .0 | - 0 | .0 | 1.2 | - 0 | .0 |
| COTTON, YARN, CLOTHZ1 |  | . 0 | .0 | .0 | .0 | 11.8 | 7.2 | - 0 | . 0 |
| KNITTED PROOUCTS |  | . 0 | . 0 | .0 | - 0 | - 0 | .0 | .0 | - 0 |
| CLOTHING | 23 | - 2 | .0 | .0 | .0 | . 9 | - 0 | - 0 | - 0 |
| OTher textiles | 24 | 1.1 | .0 | .0 | - 1 | 4.7 | 8.9 | .0 | - 0 |
| SAWMILL PROD. | 25 | . 0 | 2.0 | . 5 | - 0 | - 0 | . 1 | .0 | .0 |

TABLE 8 VALUES OF INDUSTRY INPUTS ANO FINAL EXPENDITURES, 1961 - AGGREGATION M (SEE CHAPTER 4 )

| INDUSIRY(COLUMNS) | COMMUNICATIUNS | UTILITIES | FINANCE,INS. REAL ESTATE | BUSINESS <br> SERVICES | HOTEL AND RESTAURANT | OTHER SERVICES | OFFICE <br> SUPPLIES(D) | ADVTG. AND TRAVEL (0) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| COMMODITYIROWS) | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 |
| FURNITURE, FIXTRS 26 | . 0 | . 0 | . 0 | . 0 | . 6 | . 0 | . 0 | . 0 |
| OTHER WOOD PROD. 27 | . 0 | . 0 | . 0 | . 0 | .0 | 11.6 | . 1 | . 0 |
| PULP AND PAPER 28 | . 0 | . 0 | . 0 | . 5 | 7.8 | 1.1 | . 7 | - 0 |
| OTMER PAPER PROD. 29 | . 2 | . 0 | . 3 | - 2 | 7.9 | 1.9 | 39.0 | . 0 |
| PRINTED MATTER 30 | 9.1 | . 4 | 8.0 | .7 | .0 | 2.1 | 193.9 | 368.8 |
| STEEL MPLL PROO. 31 | .0 | .0 | . 0 | . 0 | . 0 | .1 | . 0 | . 0 |
| SMELT.EREF.PROD. 32 | . 0 | . 0 | . 0 | . 0 | . 0 | 1.3 | . 0 | . 0 |
| OTH.PRIMARY METAL33 | .0 | . 0 | - 0 | - 0 | .0 | . 5 | .0 | . 0 |
| STRUC TURAL METAL 34 | . 0 | . 0 | - 0 | . 0 | . 0 | . 0 | . 0 | . 0 |
| METAL STAMPINGS 35 | .0 | - 0 | - 0 | . 0 | . 0 | . 0 | .0 | . 0 |
| OTHER METAL PROD. 36 | . 1 | . 0 | . 0 | . 0 | . 2 | 3.1 | 2.9 | . 0 |
| MACHINERY (NES) 37 | 1.2 | 2.0 | 9.1 | . 5 | . 1 | - 3 | . 0 | . 0 |
| AIRCRAFT 6 PARTS 38 | . 0 | . 0 | . 0 | . 0 | . 0 | . 0 | . 0 | . 0 |
| MOTOR VEHICLES 39 | .0 | - 0 | .0 | . 0 | - 0 | . 0 | . 0 | . 0 |
| VEMICLE PARTS 40 | . 0 | . 0 | . 0 | . 0 | . 0 | . 0 | . 0 | . 0 |
| OTM. IRANSP.EQUIP41 | . 0 | . 0 | . 0 | . 0 | . 0 | .0 | . 0 | . 0 |
| ELEC. APPLIANCES 42 | - 0 | .0 | . 0 | . 0 | . 0 | . 0 | . 0 | . 0 |
| ELEC. IND. EQU1P.43 | . 0 | . 0 | - 0 | . 0 | . 0 | . 0 | . 0 | . 0 |
| COM.EQUIP..WIRE 44 | 9.5 | . 0 | . 0 | . 0 | . 0 | . 0 | . 0 | - 0 |
| OTHER ELEC. PROO. 45 | . 9 | . 0 | . 0 | . 0 | . 0 | -0 | . 0 | . 0 |
| CLAY,LIME,CEMENT 46 | . 0 | . 0 | . 0 | . 0 | 1.7 | . 0 | - 0 | . 0 |
| A.O.NON-METALLIC 47 | . 0 | . 0 | . 0 | . 0 | 2.0 | . 2 | . 0 | . 9 |
| PETR. PROO. 48 | 2.1 | 6.9 | 9.1 | 1.0 | 9.2 | 16.8 | . 0 | . 0 |
| PLASTIC, SYN.RESIN49 | . 0 | . 0 | . 0 | . 0 | . 0 | . 5 | . 0 | . 0 |
| PAINT \& VARNISH 50 | . 0 | . 0 | 12.1 | .0 | . 0 | . 0 | . 0 | . 0 |

TABLE 8 VALUES DF INOUSTRY INPUTS AND FINAL EXPENDITURES, 1961 - AGGREGATION M (SEE CHAPTER 4 )


TABLE \& VALUES OF INOUSTRY INPUTS AND FINAL EXPENOITURES, 1961 - AGGREGATION M (SEE CHAPTER 4 I


TABLE G VALUES OF INDUSTKY INPUIS AND FINAL EXPEND\&TURES, 1961 - AGGREGATION M (SEE CHAPTER 4)


TABLE 8 VALUES OF INDUSTRY INPUTS AND FINAL EXPENDITURES, 1961 - AGGREGATION M (SEE CHAPTER 4 I

| (N0.65 E FINAL DEMAND COMMODITY(ROWS) | OPERATING SUPPLIES(O) 65 | INTERMEDIATE <br> INPUTS (1-65) <br> 66 | NET EXPORTS | RE-EXPORTS | IMPORTS | INVENTORY CHANGE TO | OTHER FINAL DEMAND 71 | $\begin{gathered} \text { Total } \\ \text { OUTPuT } \\ 72 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PHARM. SOAP, TOILET51 | 44.2 | 135.9 | 12.1 | .6 | $-58.1$ | 7. 9 | 319.1 | 417.5 |
| OTHER CHEM PROO. 52 | 49.3 | 757.7 | 171.1 | 2.7 | $-264.3$ | 6.1 | 79.1 | 752.3 |
| MISC. MFG. PROD. 53 | 56.2 | 361.7 | 40.4 | 10.5 | -361.0 | 13.3 | 533.0 | 597.9 |
| CONSTRUCTION 54 | .0 | 1052.4 | . 0 | .0 | .0 | . 0 | 5911.9 | 6964.3 |
| TRADE, WH.\&RETAILS5 | 549.5 | 2039.2 | 111.8 | . 0 | . 0 | 24.8 | 4857.1 | 7032.9 |
| TRANSPORT, STORAGE56 | 34.1 | 1862.3 | 558.2 | .0 | $-80.9$ | $-4.7$ | 1159.2 | 3494.0 |
| COMMUNICATIONS 57 | . 0 | 604.9 | 24.9 | . 0 | -17.6 | . 0 | 443.2 | 1055.4 |
| UTIHITIES 58 | .0 | 794.1 | 18.1 | .0 | $-15.9$ | $-.3$ | 476.4 | 1272.4 |
| FIN.INSUR.RL.EST. 59 | . 0 | 1822.8 | 19.7 | . 0 | $-83.4$ | . 0 | 5097.2 | 6856.3 |
| BUSINESS SERVICE 60 | .0 | 546.5 | 8.0 | . 0 | $-72.1$ | .0 | 197.2 | 679.6 |
| ACCOM. MEALS 61 | . 0 | 437.3 | . 0 | . 0 | . 0 | . 0 | 1242.2 | 1679.5 |
| OTHER SERVICES 62 | 106.1 | 836.2 | 6.5 | . 0 | $-120.3$ | . 0 | 1378.4 | 2100.8 |
| OFFICE SUPPLIES 63 | . 0 | 335.7 | .0 | .0 | . 0 | . 0 | . 0 | 335.7 |
| ADVTG. AND TRAVELG4 | . 0 | 1277.1 | . 0 | .0 | . 0 | .0 | .0 | 1277.1 |
| OPERATING SUPPL. 65 | . 0 | 1679.6 | . 0 | . 0 | . 0 | . 0 | . 0 | 1679.6 |
| NON-COMP.IMPORTS 66 | . 8 | 209.0 | -. 0 | - 6 | $-301.5$ | 2.9 | 89.0 | . 0 |
| 8 AL L OF PAYMNT AOJ67 | .0 | . 0 | 798.9 | .0 | $-934.4$ | . 0 | 135.5 | . 0 |
| COMMODITY TAXES 68 | 48.5 | 562.3 | 1.0 | . 0 | 515.0 | 14.9 | 1951.1 | 3044.3 |
| SUBSIDIES 69 | . 0 | -311.4 | . 0 | .0 | . 0 | - 0 | . 0 | $-311.4$ |
| INDIR.TAXEGOV.SERTO | . 0 | 1928.1 | . 0 | .0 | . 0 | - 0 | -77.9 | 1850.2 |
| WAGES \& SALARIES 71 | . 0 | 16432.1 | . 0 | . 0 | . 0 | . 0 | 4293.1 | 20725.2 |
| NET-INC.UNI CORP. 12 | .0 | 3683.1 | .0 | .0 | .0 | .0 | - 0 | 3683.1 |
| SURPLUS T3 | . 0 | 10051.3 | .0 | . 0 | . 0 | . 0 | 566.0 | 10617.2 |
| SU8 rotal (66-73) 74 | 49.3 | 32554.5 | 799.9 | . 6 | -720.9 | 17.9 | 6956.8 | 39608.7 |
| TOTAL INPUTS 75 | 1679.6 | 85217.0 | 7091.2 | 135.4 | -7408.0 | $-44.3$ | 39834.5 | 104825.7 |

TABLE 9 INOUSTRY INPUT ANO FINAL EXPENOITURE COEFFICIENTS - AGGREGATION M (SEE CHAPTER 4)


TABLE 9 INDUSTRY INPUT AND FINAL EXPENDITURE COEFFICIENTS - AGGREGATION M (SEE CHAPTER 4 )

| (NDUSTRYICOLUMNS) COMMODITY(ROWS) | AGRICULTURE | FORESTRY 2 | FISHING <br> E HUNTING <br> 3 | METAL MINES 4 | NON-METAL <br> MINES <br> 5 | $\begin{gathered} \text { COAL } \\ \text { MINES } \\ 6 \end{gathered}$ | PETROLEUM \& NATURAL GAS 7 | MEAT, POULTRY PROCESSORS 8 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FURNITURE, FIXTRS 26 | .000000 | . 000000 | . 000000 | .000000 | . 000000 | . 000000 | . 000000 | . 000000 |
| OTHER WOOO PROD. 27 | . 001756 | . 000000 | .000000 | . 000000 | . 001829 | .000000 | . 000000 | .001333 |
| PULP ANO PAPER 28 | . 000000 | . 000000 | .000000 | . 000000 | .000000 | . 000000 | .000000 | .001547 |
| OTHER PAPER PROD. 29 | .000870 | . 000000 | .000000 | . 000000 | .022699 | . 000000 | . 000000 | .015706 |
| PRINTED MATTER 30 | . 000000 | .000000 | .000000 | .000000 | . 000091 | . 000000 | .000000 | .000000 |
| STEEL MILL PROO. 31 | .000000 | . 000000 | .000000 | . 001055 | . 000000 | . 003636 | .000082 | . 000000 |
| SMELT-EREF.PROD. 32 | .000000 | .000000 | .000000 | . 000184 | .000000 | . 000000 | .000026 | . 000000 |
| OTH.PRIMARY METAL33 | . 000000 | . 000000 | .000000 | . 007955 | . 000757 | .000000 | . 003264 | .000000 |
| STRUCTURAL METAL 34 | .000000 | .000000 | .000000 | .000000 | .000000 | . 000000 | . 000000 | .000000 |
| METAL STAMPINGS 35 | .000000 | .000000 | . 001924 | . 000733 | .000000 | . 000000 | .000546 | .004763 |
| OTHER METAL PROD. 36 | . 001914 | .006535 | .001117 | . 000000 | .000000 | . 000000 | . 000000 | . 000022 |
| MACHINERY (NES) 37 | .012023 | . 004989 | . 022542 | .015693 | .010857 | . 013114 | .016200 | .000215 |
| AIRCRAFT \& PARTS 38 | .000321 | .000000 | .000000 | . 000000 | . 000000 | . 000000 | .000000 | . 000000 |
| MOTOR VEHICLES 39 | . 000000 | .000000 | .000000 | .000000 | .000000 | . 000000 | . 000000 | .000000 |
| VEHICLE PARTS 40 | . 000000 | .000000 | .000000 | . 000000 | .000000 | .000000 | .000000 | .000000 |
| OTH. TRANSP. EQUIP41 | . 000000 | .000000 | .014697 | .000830 | .000000 | . 001665 | .000021 | .000000 |
| ELEC. APPLIANCES 42 | .000000 | . 000000 | .000000 | . 000000 | .000000 | . 000000 | . 000000 | . 000000 |
| ELEC. IND. EQUIP. 43 | .000000 | .000000 | .000000 | .000000 | . 000000 | .000000 | .000000 | .000000 |
| COM.EQUIP., HIRE 44 | .000000 | . 000000 | . 006557 | . 000000 | .000000 | .000000 | .000000 | . 000000 |
| OTHER ELEC.PROD. 45 | .000000 | . 000000 | .000000 | . 000000 | .000000 | . 000000 | .000000 | .000000 |
| CLAY,LIME, CEMENT 46 | .000058 | .000114 | .000000 | .001980 | .000289 | . 000167 | .000073 | . 000000 |
| A.O.NON-METALLIC 47 | . 000000 | .000000 | .001218 | .000000 | .000000 | . 000000 | . 000000 | . 000166 |
| PETR. PROD. 48 | .049391 | .027446 | . 046962 | . 007255 | . 029364 | . 009450 | .008738 | .001529 |
| PLASTIC, SYN.RESIN49 | .000000 | . 000000 | .000636 | . 000000 | . 000000 | . 000000 | .001049 | . 002835 |
| PAINT E VARNISH 50 | .000000 | .000000 | .000000 | .000000 | .000000 | .000000 | . 000000 | .000000 |



TABLE INDUSTRY INPUT AND FINAL EXPENDITURE COEFFICIENTS - AGGREGATION M (SEE CHAPTER \&)

| INDUSTRY(COLUANS) COMMODITY(ROWS) |  | $\begin{array}{r} \text { DAIRY } \\ \text { FACTORIES } \\ 9 \end{array}$ | FRUITEVEG. CANNERS 10 | FEED, FLOUR CEREAL MFG 11 | BISCUITE <br> BAKERIES IND. <br> 12 | SUGAR AND CONECTIONERY 13 | $\begin{aligned} & \text { OTHER } \\ & \text { FOOD IND. } \\ & 14 \end{aligned}$ | SOF T DRINK MFG. 15 | ALCOHOLIC BEVERAGE MFG 16 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AGRICULTURAL PROD |  | . 542990 | . 165578 | .417487 | . 005113 | . 066499 | .138262 | .000000 | . 040928 |
| FORESTRY PRDDUCTS | 2 | .000101 | .000003 | .000005 | . 000024 | .000000 | .000056 | .000000 | . 000000 |
| FISH AND FUR | 3 | .000000 | . 000000 | .000980 | .000000 | . 000000 | . 133161 | .000000 | .000000 |
| METAL DRES \& CONC |  | . 000000 | . 000000 | . 000000 | . 000000 | .000000 | .000000 | . 000000 | .000000 |
| NON-MEYAL MINERAL |  | . 000184 | . 000865 | .001931 | .000767 | .001249 | .000844 | .000000 | .000053 |
| COAL | 6 | .001285 | .003312 | .000493 | .000338 | .002371 | .001047 | . 000621 | .002123 |
| OIL ANO NAT.GAS | 7 | .000170 | .000125 | . 000140 | .000607 | . 000532 | . 000292 | .000097 | .000168 |
| MEAT PRODUCTS | 8 | .000860 | . 039864 | . 027319 | .040893 | . 000688 | . 018826 | . 001192 | .001671 |
| DAIRY PRODUCTS | 9 | . 070642 | . 004809 | . 002458 | .012199 | .013536 | . 004972 | .000000 | . 000000 |
| FRUIT \& VEG.PROD. |  | .002799 | . 060879 | .000762 | .024641 | .003015 | .005012 | .000148 | .001049 |
| FEED, FLR.CEREALS |  | . 000120 | .000891 | .067590 | . 130579 | . 002862 | .014512 | .000000 | . 006239 |
| BAKERY PRODUCIS | 12 | .000322 | .000051 | .000009 | .000633 | .000594 | . 000274 | . 000000 | . 000000 |
| SUGAR, CDNFECT. | 13 | .005228 | .033051 | .008967 | .040883 | .084034 | . 013678 | . 080280 | . 002304 |
| OTHER FOOD PROD. | 14 | . 005965 | . 012191 | .073809 | .046969 | .018442 | .084384 | .005348 | .057300 |
| SOFT DRINKS | 15 | .000238 | . 000194 | .000000 | .000000 | .000000 | .000000 | .106473 | .000092 |
| ALCOHOLIC BEV. | 16 | . 000000 | .000104 | .003740 | .000000 | .000000 | .000883 | .000793 | .041469 |
| TOBACCO PRODUCTS |  | .000000 | .000000 | .000000 | .000000 | . 000000 | .000000 | . 000000 | . 000000 |
| RUBEER PRODUCTS | 18 | .000000 | .000000 | .000000 | .000000 | . 000000 | . 000000 | .000000 | .000000 |
| LEATHER PRODUCYS |  | .000000 | .000000 | . 000000 | .000000 | .000000 | . 000000 | .000000 | . 000000 |
| SYNTHET.JEXTILES |  | .000000 | . 000000 | . 000000 | .000000 | . 000000 | .000000 | .000000 | . 000000 |
| COTTON, YARN, CLOTH |  | .000125 | .000000 | .000322 | . 000000 | .000000 | .000241 | . 000000 | .000000 |
| KNITTEO PRDDUCTS |  | .000000 | . 000000 | . 000000 | . 000000 | . 000000 | . 000000 | . 000000 | .000000 |
| CLOTHING | 23 | . 000000 | . 000000 | .000000 | .000000 | .000000 | . 000000 | .000000 | .000000 |
| OTMER TEXTILES | 24 | .000099 | .000086 | .018476 | . 000095 | . 003704 | .001965 | .000000 | .000000 |
| SAWMILL PROD. | 25 | . 000037 | . 000107 | .000099 | .000043 | .000000 | . 000027 | .000023 | .000083 |

TABLE 9 INDUSTRY INPUT AND FINAL EXPENDITURE COEFFICIENTS - AGGREGATION M (SEE CHAPTER 4)


TABLE 9 INDUSTRY INPUT AND FINAL EXPENOITURE COEFFICIENTS - AGGREGATIDN M (SEE GHAPTER 4 I

| [NOUSTRY(COLUMNS) COMMOOITY(ROWS) | $\begin{array}{r} \text { OAIRY } \\ \text { FACTORIES } \\ 9 \end{array}$ | FRUITEVEG. <br> CANNERS 10 | FEED, FLOUR CEREAL MFG 11 | $\begin{array}{r} \text { BISCUITE } \\ \text { BAKERIES IND. } \\ \frac{12}{} \end{array}$ | SUGAR ANO CONECTIONERY 13 | $\begin{aligned} & \text { OTHER } \\ & \text { FOOO IND. } \\ & 14 \end{aligned}$ | SOFT ORINK MFG. 15 | AL COHOLIC BEVERAGE MFG 16 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PHARM. SOAP, TOILETSI | . 002843 | . 003915 | .011121 | .005546 | .002830 | .021310 | . 000564 | . 000034 |
| OTHER CHEM PROD. 52 | . 000667 | .007012 | .001756 | .001261 | .006890 | .006194 | .018000 | . 004537 |
| MISC. MFG. PROO. 53 | . 000669 | .000513 | . 000430 | . 000000 | .001377 | .000972 | . 000000 | .000030 |
| CONSTRUCTION 54 | .002832 | . 002960 | .001973 | .002860 | .003361 | .003008 | . 003769 | . 003974 |
| TRAOE, H.ERETAILSS | .010095 | .029757 | .021037 | .029171 | .024458 | . 018528 | . 015343 | . 017559 |
| TRANSPORT, STORAGE 56 | . 014553 | . 028502 | .103611 | .028470 | .028624 | . 040777 | . 013473 | . 023890 |
| COMMUNICATIONS 57 | .002525 | .003536 | .003232 | . 003204 | .002946 | .003401 | . 004117 | . 002692 |
| UTILITES 58 | . 006614 | .005951 | . 007271 | .007732 | . 006111 | . 006134 | . 006352 | . 009929 |
| FIN.INSUR.RL.EST. 59 | .007617 | . 011264 | .005885 | .018653 | . 011144 | .009245 | . 018325 | . 008359 |
| BUSINESS SERVICE 60 | . 002212 | .003336 | .001125 | .011350 | .004268 | . 004618 | . 004493 | .027630 |
| ACCOM. MEALS 61 | .000000 | .000000 | . 000000 | . 000000 | . 000000 | . 000000 | . 000000 | . 000000 |
| OTHER SERVICES 62 | . 008256 | .009221 | .003071 | . 006252 | .003820 | . 003953 | .003923 | .004252 |
| OFFICE SUPPLIES 63 | .001609 | .001965 | . 002104 | .002093 | .001832 | .001969 | .003290 | . 002572 |
| ADVTG. ANO TRAVEL 64 | . 022595 | . 051768 | .029028 | . 034131 | .030915 | . 055641 | .105641 | . 094589 |
| DPERATING SUPPL. 65 | .023976 | .022461 | . 014634 | . 026888 | .027685 | . 025418 | .022390 | . 033596 |
| NON-COMP.IMPORTS 66 | .000000 | .000456 | . 000000 | .000000 | .245648 | . 017234 | . 000000 | . 001641 |
| BAL. OF PAYMNT A0.J67 | .000000 | .000000 | .000000 | . 000000 | .000000 | . 000000 | . 000000 | . 000000 |
| COMMOOITY TAXES 68 | .004717 | .001285 | .001156 | . 008454 | . 000386 | . 000938 | .006203 | .002357 |
| SUBSIDIES 69 | -. 000948 | . 000000 | -. 011559 | .000000 | .000000 | -. 000357 | .000000 | .000000 |
| INOIR.TAKEGOV. SERTO | .005272 | .006136 | . 004553 | .007888 | . 007462 | . 006269 | .011808 | .016501 |
| WAGES E SALARIES 71 | .144902 | .177086 | .105916 | . 294735 | .195057 | . 146221 | . 291430 | .191630 |
| NET-1 NC. UNICORP. 72 | .006381 | . 001625 | . 006541 | . 027824 | . 001682 | .001057 | .010531 | .000096 |
| SURPLUS 73 | . 048328 | . 087413 | . 026644 | .074262 | . 120298 | .073782 | . 202427 | . 271161 |
| SUB TOTAL (66-73) 74 | .208652 | .274001 | .133252 | .413163 | .570534 | .305145 | .522399 | .483387 |
| TOTAL INPUTS 75 | 1.000000 | 1.000000 | 1.000000 | 1.000000 | 1.000000 | 1.000000 | 1.000000 | 1.000000 |

TABLE 9 INDUSTRY INPUT AND FINAL EXPENOITURE COEFFICIENTS - AGGREGATION M (SEE CHAPTER 4 )


TABLE 9 INDUSTRY INPUT AND FINAL EXPENDITURE COEFFICIENTS - AGGREGATION M (SEE CHAPTER 4 )

| ( NDUSTRY(COLUMNS) COMMODITY(ROWS) |  | $\begin{array}{r} \text { TOBACCO } \\ \text { PROD. IND. } \\ 17 \end{array}$ | RUBEER PROD. MFG $18$ | LFATHER PROO.MF G. 19 | Syntmetic $\begin{array}{r} \text { TEXtile mills } \\ 20 \end{array}$ | COTTON YARN, CLOTH MILLS 21 | $\begin{array}{r} \text { KNITTING } \\ \text { MILLS } \\ 22 \end{array}$ | CLOTHING <br> I NDUSTRIES <br> 23 | OTHER <br> TEXTILE INO. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FURNITURE, FIXTRS |  | . 000000 | .000000 | .000000 | .000000 | . 000000 | . 000000 | .000000 | . 000091 |
| OTHER WOOD PROD. |  | . 002740 | .000327 | . 002804 | . 000012 | . 000055 | .000018 | .000002 | .005021 |
| PULP AND PAPER | 28 | . 008627 | .001376 | . 005185 | . 022094 | .001083 | . 001488 | . 000764 | .006170 |
| OTHER PAPER PROD. |  | . 069658 | . 010666 | . 012128 | . 007677 | .008191 | .014589 | .007142 | . 010961 |
| PRINTED MATTER | 30 | .002797 | . 000094 | . 000000 | .000000 | .000000 | .000213 | . 000000 | . 000081 |
| STEEL MILL PROD. |  | .000000 | . 000866 | . 000616 | .000000 | .000000 | . 000000 | .000000 | .000040 |
| SMELT.EREF. PROD. 32 |  | . 000000 | . 004507 | . 200000 | .000000 | . 000000 | . 000000 | .000000 | . 001379 |
| OTH. PRIMARY METAL |  | .000000 | . 0.00150 | . 000000 | .000000 | . 000000 | .000000 | . 000000 | .000207 |
| STRUCTURAL METAL 34 |  | .000000 | .000253 | . 000000 | . 000235 | .000000 | . 000041 | .000191 | . 000630 |
| METAL STAMPINGS 3 | 35 | . 003325 | . 002247 | . 000650 | . 000319 | . 000000 | .000000 | .000001 | .000623 |
| OTHER METAL PROD. 36 |  | .000000 | .011022 | . 007360 | .000000 | .000000 | . 000000 | . 000000 | .002130 |
| MACHINERY \{NES) 3 | 37 | . 000764 | . 002035 | . 000566 | .001442 | . 000791 | . 000656 | .000372 | . 000567 |
| AIRCRAFT \& PARIS 3 |  | .000000 | . 000872 | . 000000 | .000000 | .000000 | .000000 | . 000000 | .000000 |
| MOTOR VEHICLES | 39 | .000000 | .000000 | . 000000 | .000000 | .000000 | . 000000 | .000000 | . 000000 |
| $\checkmark$ VHICLE PARTS | 40 | .000000 | .000000 | .000000 | .000000 | .000000 | .000000 | .000000 | . 000000 |
| OTH. TRANSP. EQUIPA |  | .000000 | .000000 | . 000000 | .000000 | .000000 | .000000 | .000000 | . 000000 |
| ELEC. APPLIANCES |  | .000000 | .000000 | . 000000 | .000000 | . 001451 | .000000 | .000000 | . 000000 |
| ELEC. INO. EQUIP. 4 |  | .000000 | .000000 | . 000000 | . 000000 | .000000 | .000000 | . 000000 | .000000 |
| COM.EQUIP.OWIRE 4 |  | .000000 | .000000 | . 000000 | .000000 | . 000000 | . 000000 | .000000 | . 000000 |
| OTher elec. Proo. |  | .000000 | .000000 | .000000 | .000000 | . 000000 | .000000 | .000000 | . 000000 |
| CRAY,LIME, CEMENT |  | .000000 | .000000 | . 000329 | .000000 | . 000000 | .000000 | .000000 | .000000 |
| A.O.NON-METALLIC |  | .000000 | .000533 | .000085 | .001617 | .000000 | .000000 | .000000 | .001757 |
| PETR. PROO. 4 | 48 | .000827 | .003452 | . 001514 | .007708 | . 002056 | .002026 | . 000685 | . 003529 |
| PLASTIC.SYN.RESIN4 |  | . 000006 | .012192 | .000230 | .014588 | .000317 | . 000068 | .000464 | .007922 |
| PAINT \& VARNISH So | 50 | .000000 | .004106 | . 001074 | .001319 | .000093 | . 000000 | . 000000 | .000486 |

TABLE 9 INOUSTRY INPUT AND FINAL EXPENDITURE COEFFICIENTS - AGGREGATION M (SEE CHAPTER \&)


TABLE 9 INDUSTRY INPUT ANO FINAL EXPENDITURE COEFFICIENTS - AGGREGATION M (SEE CHAPTER 4 )


TABLF 9 INDUSTRY INPUT AND FINAL EXPENDITURE CDEFFICIENTS - AGGREGATION M (SEE (HAPTER 4)

| INDUS TRYICDLUMNS: |  | SAWMILLS 25 | FURNITUREE FIXTURE IND. | DTHER | PULP AND PAPER MILLS $2 B$ | $\begin{aligned} & \text { DTHER } \\ & \text { PAPER IND. } \\ & 29 \end{aligned}$ | PRINTING。 PUBLISHING | IRON AND STEEL MILLS | SMELTING, REFINING |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FURNITURE FIXTRS |  | . 000000 | . 025896 | .000000 | . 000000 | . 000000 | . 000000 | . 000000 | . 000000 |
| OTHER WDOD PROD. |  | .000778 | .032392 | .053005 | .000568 | . 000594 | .000171 | . 002062 | . 000013 |
| PULP AND PAPER | 28 | .000048 | .006850 | .001511 | . 046954 | . 350152 | . 179251 | . 001341 | . 000000 |
| OTHER PAPER PRDD. |  | . 000237 | . 012745 | . 003860 | .003691 | .052037 | .005037 | .000217 | .000589 |
| PRINTED MATTER | 30 | . 000000 | .000407 | . 000000 | .000000 | .010472 | .075235 | . 000000 | . 000000 |
| STEEL MILL PROD. |  | . 000594 | .014438 | .000671 | . 000045 | .003958 | . 000000 | . 054221 | . 014049 |
| SMELT.EREF.PRDD. |  | . 000000 | .001540 | . 000048 | . 000240 | . 000248 | . 000041 | . 064549 | .216702 |
| OTH.PRIMARY METAL |  | .000000 | .013949 | .000390 | . 000000 | .009995 | .004595 | .010727 | .000832 |
| STRUCTURAL METAL |  | .000608 | .000273 | .002625 | . 000011 | .000540 | .000008 | . 000929 | .000000 |
| METAL STAMPINGS | 35 | .000000 | . 004505 | . 008324 | . 000036 | .001103 | .000045 | . 000065 | .000000 |
| DTHER METAL PROD. | 36 | .000127 | . 059298 | . 008591 | . 008059 | . 000714 | . 000082 | . 003512 | . 000000 |
| MACHINERY (NES) | 37 | .000045 | .000194 | . 000194 | .000525 | .000334 | . 000613 | .008847 | . 001762 |
| AIRCRAFT \& PARTS | 38 | . 000000 | . 000000 | .000000 | . 000000 | .000000 | . 000000 | . 000000 | .000000 |
| MDTOR VEHICLES | 39 | .000000 | . 000000 | . 000000 | . 000000 | .000000 | .000000 | .000000 | .000000 |
| VEHICLE PARTS | 40 | .000000 | .000000 | . 000000 | . 000000 | .000000 | . 000000 | .000000 | .000000 |
| OTH. TRANSP. EQUIP |  | .000000 | .000000 | .000000 | . 000000 | .000000 | .000000 | . 000000 | . 000061 |
| ELEC. APPLIANCES |  | . 000000 | . 000016 | . 000000 | .000000 | . 000000 | .000000 | .000000 | . 000000 |
| ELEC. IND. EQUIP. |  | . 000000 | .000000 | .000000 | . 000000 | .000000 | .000000 | .000000 | .000000 |
| CDM.EQUIP.,WIRE | 44 | . 000000 | . 000066 | .000000 | . 000000 | .000000 | . 000000 | . 000000 | . 000000 |
| DTHER ELEC. PROD. |  | .000000 | .004833 | .000000 | .000000 | .000000 | . 000000 | . 000000 | . 000000 |
| CLAY,LIME, CEMENT | 46 | .000000 | .000000 | .000092 | . 001320 | .005199 | . 000000 | .019773 | .004703 |
| A.O.NON-METALLIC |  | .000012 | .008671 | . 009702 | .000345 | . 000742 | .000002 | . 000565 | . 000000 |
| PETR. PRDO. | 48 | .008377 | .001829 | . 009504 | .010472 | . 013600 | . 002323 | .013398 | . 004504 |
| PLASTIC, SYN.RESIN49 |  | . 000000 | .000093 | . 017479 | .000812 | . 015388 | . 000924 | .000000 | .000019 |
| PAINT \& VARNISH | 50 | . 001231 | . 012737 | .004194 | .000128 | .000859 | . 000197 | .000000 | . 000000 |

TABLE 9 INDUSTRY INPUT AND FINAL EXPENDITURE COEFFICIENTS - AGGREGATION M (SEE CHAPTER \&)

| [NDUSTRYICOLUMNS) COMMODITY(ROWS) |  | $\begin{aligned} & \text { SAWMILLS } \\ & 25 \end{aligned}$ | FURNITURE FIXTURE IND. | $\begin{aligned} & \text { OT HER } \\ & \text { WOOD IND. } \\ & 27 \end{aligned}$ | PULP AND PAPER MILLS 28 | $\begin{aligned} & \text { OTHER } \\ & \text { APER IND. } \\ & 29 \end{aligned}$ | $\begin{array}{r} \text { PRINTING } \\ \text { PUBLISHING } \\ 30 \end{array}$ | $\begin{array}{r} \text { IRON ANO } \\ \text { STEEL MILLS } \\ 31 \end{array}$ | SMELTING, REFINING 32 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PHARM.SOAP, TOILETS |  | .000000 | . 000000 | .000000 | .000033 | .000000 | . 000000 | .000000 | . 000000 |
| OTHER CHEM PROD. 5 |  | .003257 | . 004726 | . 004954 | . 028454 | . 026289 | . 014568 | . 005651 | . 006366 |
| MISC. MFG. PROD. 5 |  | .000003 | .027630 | . 002574 | .000101 | . 017974 | .001620 | . 000000 | . 000000 |
| CONSTRUCTIUN 5 | 54 | . 006193 | .002730 | .004346 | . 004216 | . 003879 | .002858 | .004773 | . 007448 |
| TRADE, WH.ERETAILS |  | . 024445 | . 050714 | . 049542 | .011957 | .021597 | . 008909 | .023396 | . 005315 |
| TRANSPORT, STORAGE5 |  | . 039112 | . 022025 | .047550 | . 034164 | .034133 | . 017015 | . 036108 | .016960 |
| COMMUNICATIONS 5 | 57 | .002855 | .005755 | .005693 | . 001901 | .008454 | . 020698 | . 002717 | .001092 |
| UTILITIES S | 58 | . 009876 | . 006181 | .011065 | .041296 | .005373 | .005218 | .026368 | .025475 |
| FIN.INSUR.RL.EST. 5 |  | . 010546 | . 018347 | .017552 | . 006791 | .017642 | . 019451 | .003796 | .003341 |
| BUSINESS SERVICE |  | .002718 | .005127 | .002087 | .003375 | .003156 | .003293 | .002120 | .004368 |
| ACCOM. MEALS | 61 | .000000 | .000000 | .000000 | .000000 | .000000 | . 000000 | .000000 | .000000 |
| OTHER SERVICES | 62 | . 004993 | . 003852 | . 003489 | .005031 | .006075 | . 017828 | .004778 | . 001135 |
| OFFICE SUPPLIES | 63 | .001441 | .002902 | .002421 | .001299 | .002862 | .005854 | .001346 | .000720 |
| ADVTG. AND TRAVEL 6 |  | .003357 | . 024184 | . 012719 | . 005851 | . 021236 | . 037484 | . 004824 | .002632 |
| OPERATING SUPPL. 6 |  | .046093 | .019415 | .032872 | .042790 | .026215 | . 023849 | .071721 | .007474 |
| NON-COMP. IMPORTS |  | .000000 | . 000000 | .000000 | . 000000 | .000000 | . 000000 | .000000 | .000000 |
| BAL. OF PAYMNT ADJG |  | .000000 | . 000000 | .000000 | .000000 | .000000 | .000000 | .000000 | . 000000 |
| COMmODITY TAXES 6 | 68 | . 001384 | . 000958 | . 001208 | . 000447 | .001045 | .002337 | .000619 | . 000248 |
| SUBSIDIES | 69 | .000000 | .000000 | .000000 | .000000 | . 000000 | .000000 | -. 000396 | .000000 |
| INOIR.TAXEGOV.SER |  | . 005975 | . 008204 | .006157 | .013382 | .011712 | . 008633 | .008450 | .008100 |
| WAGES \& SALARIES |  | . 276835 | .331143 | .297858 | .225336 | .231387 | . 409405 | .259820 | . 120777 |
| NET-INC. UNI CORP. |  | .011543 | . 018929 | . 010872 | .000003 | . 000950 | . 012872 | .000000 | .000000 |
| SURPLUS | 73 | . 061889 | . 077178 | . 070356 | .233834 | .078599 | . 113723 | .181202 | . 059648 |
| SUB TOTAL (66-73) | 74 | . 357626 | .436413 | .386451 | . 473002 | . 323693 | .546970 | -449695 | .188772 |
| TOTAL INPUTS | 75 | 1.000000 | 1.000000 | 1.000000 | 1.000000 | 1.000000 | 1.000000 | 1.000000 | 1.000000 |

TABLE 9 INOUSTRY INPUT AND FINAL EXPENOITURE COEFFICIENTS - AGGREGATION M ISEE CHAPTER 4)


TABLE 9 INOUSTRY INPUT AND FINAL EXPENDITURE COEFFICIENTS - AGGREGATION M (SEE CHAPTER 4 )

| [NDUSTRY(COLUMNS) COMMDOITYIROWSI | OTHER PRIMARY METAL IND. 33 | STRUC TURAL, FABRIC.METAL 34 | METAL <br> STAMP ING IND. | DTHER METAL WORKING $\begin{gathered}\text { INO. } \\ 36\end{gathered}$ | MACHINERY (NES)MFG. 37 | AIRCRAFT EPARTS MFG. 38 | $\begin{aligned} & \text { MOTQR } \\ & \text { VEHICLE MFG. } \\ & 39 \end{aligned}$ | VEHICLE <br> PARTS MFG. 40 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FURNITURE, FIXTRS 26 | . 000748 | . 000000 | .000632 | .000080 | .000000 | .000000 | . 001154 | . 000000 |
| OTHER WOOD PROO. 27 | . 001634 | . 000160 | . 004033 | .001699 | .000728 | . 001250 | .000383 | .000785 |
| PULP ANO PAPER 28 | . 002734 | . 001088 | . 000825 | . 000934 | .000393 | . 000406 | . 000587 | .001253 |
| OTHER PAPER PROO. 29 | . 001775 | . 006654 | . 008167 | .004485 | . 001493 | . 000483 | .001012 | . 006568 |
| PRINTED MATTER 30 | .000000 | .000000 | . 000077 | . 000045 | . 001949 | . 000000 | . 000000 | . 000000 |
| StEEL MILL PROD. 31 | .170028 | . 370568 | .281250 | . 157873 | . 060647 | .007578 | . 007157 | . 099604 |
| SMELT.EREF.PROD. 32 | . 321157 | . 001221 | .008187 | .024062 | .004115 | .005179 | .000292 | .003235 |
| OTH.PRIMARY METAL3 3 | .033480 | .007157 | .037305 | .059883 | .034451 | .028797 | . 009737 | .067560 |
| STRUCTURAL METAL 34 | . 003217 | . 023875 | .004618 | . 015251 | .016817 | . 006887 | . 000934 | .001013 |
| METAL STAMPINGS 35 | . 000784 | . 003969 | . 070869 | .007986 | . 010806 | .009595 | . 005226 | .015303 |
| OTHER METAL PROD. 36 | . 008768 | . 037644 | .036833 | . 098228 | . 082314 | . 042337 | . 024018 | . 063149 |
| MACHINERY (NES) 37 | .003139 | . 016751 | .002712 | . 005453 | .113642 | . 015243 | . 004639 | .013693 |
| AIRCRAFT \& PARTS 38 | .000000 | .000000 | .000000 | . 000000 | .000000 | . 204679 | .000000 | . 000000 |
| MOTOR VEHICLES 39 | . 000000 | .000000 | . 000198 | .000279 | . 000145 | . 000000 | .002181 | .000000 |
| VEHICLE PARTS 40 | .000000 | . 000000 | .001393 | . 000675 | .003492 | . 004732 | . 408825 | .170812 |
| OTH. TRANSP.EQUIP4I | .000000 | .000000 | .000032 | . 000062 | .000000 | .000000 | .000000 | .000000 |
| ELEC. APPLIANCES 42 | .000000 | . 000430 | . 002578 | . 002111 | .003405 | . 000000 | .002013 | . 000000 |
| ELEC. INO. EQUIP.43 | .000000 | .003270 | .000205 | .003709 | . 022819 | . 000488 | .001665 | . 000825 |
| COM. EQUTP.,VIIRE 44 | .000000 | .001674 | . 000496 | .000398 | .016878 | . 023667 | . 004473 | .003992 |
| OTHER ELEC.PROD. 45 | . 000000 | . 000421 | . 000000 | . 000134 | . 000184 | .001184 | .008779 | . 001909 |
| CLAY,LIME,CEMENT 46 | . 000759 | . 000133 | . 000000 | .000569 | .000244 | .000110 | .000007 | . 002945 |
| A.O.NON-METALLIC 47 | .000418 | . 000059 | .004127 | .005022 | .000907 | .002851 | . 017985 | .002230 |
| PETR. PROD. 48 | . 004419 | .002497 | . 002151 | .003011 | . 002160 | . 004578 | .001099 | .002843 |
| PLASTIC, SYN.RESIN49 | . 000735 | .000000 | .005527 | .001365 | .000549 | . 001872 | .000281 | .004099 |
| PAINT \& VARNISH 50 | .000523 | . 002168 | . 010859 | . 002037 | .002383 | .000463 | . 010264 | .000678 |

TABLE 9 INDUSTRY INPUT AND FINAL EXPENDITURE COEFFICIENTS - AGGREGATION M (SEE CHAPTER 4 )


TAHLE 9 INOUSTRY IAPUT ANI FINAL EXPENDITUHE CIUFFICIENTS - AGGRFGATION M ISEE CHAPTEK \& I


TABLE 9 INDUSTKY INPUT AND FINAL EXPENDITURE CDEFFICIFNTS - AGGRFGATION M (SEE CHAPTER 4)

InNustraricolumns) C(JMMIJIITY(ROWS)
UTHER WOOU PROM. 27
PIILP ANO PAPER 28 OTHER PAPER PRUO. 29 PRINTED MATTER 30 STEEL MILL PROD. 31 SMELT.EREF.PRDO. 3? OTH.PRIMARY METAL 33 STRUCTURAL METAL 34 METAL STAMPINGS 35 DTHER METAL PRON. 36 MACHINERY (NES) 37 AIRCRAFT \& PARTS 38 MDTOR VEHICLES 39 VEHICLE PARTS 40 JTH. PRANSP EQUIP4I ELEC. APPLIANCES 42 ELEC. IND. EQUIP. 43 COM.EQUIP..WIRE 44 DTHER ELEC.PRDD. 45 CLAY,LIME,CEMFNT 46 A.D. NON-METALLIC 47 PETR. PRDD. 48 PLASTIC, SYN.RESIN49 PAINT \& VARNISH 50

IITHFR IKANSPIRTEQUIP. ELECTRICAL ELEC.INU. COM. EDIJP. OTHERFLEC PIRT EQUIP. APPLIANCE IND. EJUIP,MFG. INCL. WIKF PKOD. MFF:

| . 001509 | .007689 | . 003464 | . 0000038 | . 025411 |
| :---: | :---: | :---: | :---: | :---: |
| . 001668 | .001776 | .001269 | . 001065 | .000330 |
| .001381 | . 000394 | . 003367 | . 004037 | .001724 |
| .000382 | .017255 | . 002731 | . 002686 | . 009615 |
| . 000000 | .000000 | . 000000 | .000000 | .000000 |
| .090721 | .074527 | .045816 | . 007378 | .028312 |
| .013269 | .003462 | .012771 | .024276 | .017804 |
| .024966 | . 034039 | . 033216 | .124674 | . 020623 |
| .004921 | .006210 | .000119 | . 000717 | . 001010 |
| .001116 | .030686 | .038269 | .011452 | . 003590 |
| . 048229 | .110386 | .035310 | . 011061 | .013160 |
| .028736 | .067433 | . 008218 | . 002963 | . 000900 |
| .000000 | .000000 | .000000 | .000000 | . 000000 |
| .000000 | .000305 | .000026 | .000000 | . 000000 |
| .004209 | . 000000 | .002327 | .000000 | . 000000 |
| . 089857 | . 000000 | .000000 | .000000 | . 000000 |
| .000821 | .052277 | .023597 | . 000000 | . 004666 |
| .003953 | . 050682 | . 067261 | .024455 | .033207 |
| . 017821 | . 007065 | .056260 | .095733 | .192873 |
| .006945 | .001932 | .004414 | .003710 | . 033151 |
| .000951 | .000185 | .009136 | .000702 | . 000500 |
| .008561 | . 001921 | .002590 | .007265 | . 012975 |
| .004343 | . 00.2215 | .002761 | .001390 | . 001586 |
| .001720 | .001247 | . 001431 | . 027999 | .017697 |
| .004517 | . 007323 | .002454 | .003066 | .003819 |

CLAY, IIME NON-METAL MIN PETROL.CUAL
CFMENT MFG. PRUD. (NES) PROD. MFG. 46

TABLE G INDUSTKY INPUT ANO FINAL EXPENDITURE GOEFFICIENTS - AGGKEGATIDN M (SEF CHAPTFH 4 )



TABLE G INDUSTRY INPUT AND FINAL EXPENOITURF COEFFICIENTS - AGGREGATIUN M (SEE CHAPTER 4)

| INDUSIRY(COLUMNS) COMMODITY(ROWS) |  | PLASTIC ANIT SYN.RESIN INI. 49 | $\begin{gathered} \text { PAINT AND } \\ \text { VARNISH MFG. } \\ 50 \end{gathered}$ | $\begin{array}{r} \text { PHARM SOAP } \\ \text { TOILET MF } \\ 52 \\ 52 \end{array}$ | OTH.CHEMICAL <br> INDUSTRIES <br> 52 | MISC.MFG. INOUSTRIES 53 | CONSTRUCTION <br> INDUSTRIES <br> b4 | WHOLESALE retail trade 55 | TRANSPQRI <br> \& STORAGE <br> 56 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FURNITURE, FIXIRS 2 | 26 | . 000000 | . 000000 | .000000 | . 000900 | . 000019 | . 001731 | .000000 | .000103 |
| OTHFR WOOU PROD. 2 |  | .001562 | . 000006 | . 000165 | .001280 | . 009980 | . 034871 | . 000334 | . 000000 |
| PULP AND PAPER 2 | 28 | .038440 | . 001403 | -002721 | . 002536 | .014090 | .003405 | . 002801 | . 000159 |
| OTMER PAPER PROD.? |  | . 009825 | . 011446 | .047763 | .017003 | .01104d | .007351 | .009905 | .000393 |
| PRINTED MATTER 30 | 30 | .000000 | .000000 | .000287 | . 000151 | .000393 | .000000 | .001317 | . 000696 |
| STFFL MILL PROD. 3 | 31 | .000000 | . 000451 | .000000 | . 006359 | .012963 | . 01.7768 | .000238 | . 001245 |
| SMELT.EREF.PRDD. 3 |  | . 000709 | .004294 | .000579 | .008236 | .018121 | .000000 | . 000055 | .000022 |
| OTH.PRIMARY MEPAL 3 |  | .200000 | - 000005 | . 000000 | .001343 | .028816 | .037503 | .000052 | . 000566 |
| STRUCTURAL MEIAL 3 |  | .000000 | - 000000 | .009000 | .000015 | .002155 | . 027363 | .000000 | .000073 |
| METAL STAMPINGS 3 | 35 | . 004174 | . 046936 | .011493 | .011190 | .022137 | .011881 | .001241 | .000010 |
| DTHER METAL PROD. 3 |  | . 002153 | .002742 | .007153 | .000378 | . 008448 | .070996 | .002223 | .000894 |
| MACHINERY (NES) 3 | 37 | .001148 | .201056 | . 004117 | . 000842 | .001579 | .018080 | . 0008807 | . 001945 |
| AIRCRAFT \& PARTS 3 | 38 | .000000 | . 00000 C | .000000 | . 000000 | .000000 | .000000 | .000000 | .003330 |
| MUTOR VEHICLES 3 | 39 | .000000 | . 000000 | .000000 | . 000000 | .000000 | .000000 | . 000000 | . 000000 |
| VEHICLE PARTS 40 | 40 | .000000 | .000000 | . 000000 | .000000 | . 000131 | . 001253 | .000000 | . 008080 |
| OTH. TRANSP. EDUPP |  | .000000 | .000000 | .000000 | .000000 | .000000 | .000000 | . 000000 | .008247 |
| ELEC. APPLIANCES 4 |  | .000000 | . 000000 | . 000158 | . 000011 | .000574 | .001503 | . 000000 | .000000 |
| ELEC. IND. EUUIP.4 |  | .000000 | . 000000 | .000000 | .000000 | . 003233 | . 006596 | .000000 | .000034 |
| COMM.EQUIP..WIRE 4 | 44 | . 000000 | . 000000 | .000007 | .000043 | .002077 | .017481 | .000071 | .000123 |
| OTHER ELEC.PROD. 4 |  | .000000 | . 000000 | .000000 | .000000 | .00175? | . 014137 | .000000 | .001008 |
| CLAY,LIME,CEMENT 46 |  | .000000 | . 000148 | .000038 | . 001210 | .000691 | . 054438 | .000064 | . 000037 |
| A.O.NDN-METALLIC 4 |  | .000000 | . 000985 | .029863 | . 001384 | .012208 | .012575 | .000179 | . 000438 |
| PETR. PRDO. 4 | 48 | . 029649 | . 027282 | .002876 | .050298 | . 002561 | .014817 | .019473 | .039620 |
| PLASTIC.SYN.RESINA |  | . 052821 | .076645 | .901676 | .010520 | .080037 | . 000148 | . 000541 | . 000000 |
| PAINT \& VARNISH S | 50 | .000236 | .014909 | .000000 | . 001288 | .003013 | . 006077 | .000000 | . 000006 |

TABLE 9 IMDUSTRY INPUT AND FINAL EXPENDITURE COEFFICIENTS - AGGREGATION M (SFE CHAPTER \&)


TARLF Y INDUSTRY INPUY ANO FINAL EXPENDITURE COEFFICIENTS - AGGREGATIDN M (SEE (HAPTFR 4)

| INDUSTRYICOLUMNS) COMMODITY(ROWS) |  | COMMUNICATIUNS 57 | UTILITIES 58 | FINANCE, INS. RFAL ESTATE 59 | BUSINFSS SERVICES 60 | HUTEL AND RESTAURANT 61 | $\begin{gathered} \text { IITHFR } \\ \text { SERVICES } \\ 62 \end{gathered}$ | $\begin{aligned} & \text { OFFICE } \\ & \text { SUPPLIESTOI } \\ & 63 \end{aligned}$ | $\begin{array}{r} A D V T G \text { ANO } \\ \text { TRAVFL (D) } \\ 64 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AGRICULTURAL PROD. |  | . 000000 | . 000020 | . 000000 | .000002 | .033340 | . 000590 | . 000000 | .000000 |
| FORESTKY PRODUCTS |  | . 000000 | . 000000 | .000000 | .000000 | .000000 | .000000 | .000000 | .000000 |
| FISH ANO FUR | 3 | .000000 | .000000 | . 000000 | . 000000 | .000972 | . 000000 | . 000000 | . 000000 |
| METAL ORES \& CONC. |  | .000000 | .000000 | .000000 | .020000 | .000000 | .000212 | .000000 | . 000000 |
| NUN-MFIAL MINERALS |  | .000000 | .00000 C | - 000000 | . 000000 | .000400 | . 000010 | . 002000 | .000000 |
| COAL | 6 | . 000000 | . 005464 | .000000 | .000000 | .000000 | .000111 | .000000 | - 000000 |
| OIL ANO NAT.GAS | 7 | $.00001 ?$ | .000631 | .000167 | . 000021 | . 000090 | .000053 | .000000 | . 000000 |
| MEAT PRODUCTS | 8 | .000000 | . 000000 | . 000000 | .000000 | .077459 | . 000000 | .000000 | .000000 |
| DAIRY PROUUCTS | $?$ | .800000 | . 000000 | . 000000 | . 000000 | .055520 | .000003 | . 000000 | . 000000 |
| FRUIT \& VEG.PRDD. 1 |  | . 000000 | . 000000 | .000000 | .000000 | .025032 | . 000000 | . 000000 | . 000000 |
| FEED.FLR.CEREALS I |  | .000000 | . 000000 | .000000 | .000000 | . 005657 | . 0000048 | . 000000 | . 000000 |
| BAKEHY PRINOCTS 1 |  | . 000000 | .000000 | . 000000 | .000000 | .033791 | .000000 | . 000000 | . 000000 |
| SUGAR, CONFECT. 1 |  | . 000000 | . 00000 C | . 000000 | . 000000 | .006517 | . 200000 | .000000 | .000000 |
| DTHER FODO PROD. I |  | . 000000 | .000000 | .000000 | . 000000 | .019857 | .000798 | . 000000 | . 000000 |
| SOFT IRINKS I | 13 | .000002 | .000000 | .000000 | . 000000 | . 012246 | . 000000 | . 000000 | . 002566 |
| ALCOHOLIC REV. 1 |  | - 000000 | . 000000 | .009000 | . 00000 C | .000000 | . 000000 | . 000000 | .027026 |
| TOBACCO PRODUCTS 1 |  | .000000 | .000000 | -000000 | . 000000 | .000000 | .000000 | - 000000 | . 000000 |
| RUBBER PRIOUCTS 1 |  | . 000000 | .000000 | .000000 | .000000 | . 000000 | .000931 | .030733 | .000000 |
| LEATHER PRODUCTS 1 |  | .000000 | . 000000 | .000000 | .000000 | .000000 | .000876 | . 002520 | . 002095 |
| SYNTMET, TEXIILES 2 |  | . 000000 | . 000000 | .000000 | .000000 | .000000 | .000674 | .000000 | . 000000 |
| COTTUN, YARN, CLOTH? |  | .000040 | . 000000 | . 000000 | .000000 | . 007512 | .003920 | . 000000 | . 000000 |
| KNITTEI) PRODUCTS 2 |  | . 000900 | . 000000 | . 000000 | .000000 | .000000 | .000000 | .000000 | . 000000 |
| CLOTHING 2 | 23 | .000187 | - 000000 | .000000 | .000000 | . 000597 | . 000000 | . 009000 | . 000000 |
| OTHER TEXTILES 2 | 24 | .000946 | .000000 | .000000 | .000042 | .703017 | . 204744 | . 000000 | . 000000 |
| SAWMILL PROD. 2 | 25 | .000019 | . 001608 | .000078 | .000000 | . 000000 | .000054 | . 000000 | .000000 |

TARLF 9 INDUSTRY INPUT AND FINAL EXPENDITURE COEFFICIENTS - AGGREGATIUN M (SEF GHAPYER 4 )

| INDUSTRY(COLUMNS) COMMOOITYIROWS) |  | $\begin{gathered} \text { COMMUN: - } \\ \text { CATIONS } \\ 57 \end{gathered}$ | UTILITES $\begin{array}{r}\text { U }\end{array}$ | FINANCE,INS. REAL FSTAIE 59 | BUSINESS SERVICES 60 | MOTFL ANO RESTAURANT 61 | $\begin{gathered} \text { ITHER } \\ \text { SERVICES } \\ \text { O2 } \end{gathered}$ | $\begin{gathered} \text { OFFICF } \\ \text { SUPPLIESIU) } \\ 63 \end{gathered}$ | ADVIG. ANU IRAVEL(D) क4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FURNITURE, FIXTRS |  | . 000016 | . 000000 | .000000 | . 000000 | . 000375 | . 000007 | .000000 | .000000 |
| OTHER WOOO PROD. 27 |  | .000040 | .000000 | .000000 | .000000 | . 000000 | . 006158 | .000263 | . 000000 |
| PULP AND PAPER | 28 | .000000 | . 000000 | .000000 | .000733 | .004949 | .000597 | . 002180 | . 000000 |
| OTHER PAPER PROD. 2 |  | .000192 | . 000000 | . 000044 | .000302 | .005013 | .001036 | .116084 | . 000000 |
| PRINTED MATTEK | 30 | .008110 | .000304 | .001214 | .001109 | .000000 | . 001130 | .577542 | .288772 |
| STEEL MILL PROO. 3 |  | .000000 | - 000000 | .000000 | .000000 | .000000 | .000079 | .000000 | .000000 |
| SMELT. EREF. PROD. 3 |  | .000000 | . 000000 | .000000 | .000000 | .000000 | . 000683 | . 000000 | .000000 |
| OTH.PRIMARY METAL 3 |  | .000000 | .000000 | . 000000 | .000000 | . 000000 | .000246 | . 000000 | . 000000 |
| STRUCTURAL METAL 3 |  | .000000 | .000000 | .000000 | .000000 | .000000 | .000000 | .000000 | .000000 |
| METAL STAMPINGS 3 | 35 | .000000 | .000000 | .000000 | .000000 | . 000000 | .000000 | . 000000 | .000000 |
| OTHER MFTAL PROO. 36 |  | .000091 | .000000 | .000000 | .000000 | . 090154 | . 001627 | .008507 | . 000000 |
| MACHINFRY (NES) 3 | 37 | .001024 | .001579 | .001388 | .000964 | .000057 | .000139 | . 000000 | . 000000 |
| AIRCRAFT \& PARTS 3 | 38 | .000000 | . 000000 | .000000 | .000000 | .000000 | . 000000 | .000000 | .000000 |
| MOTOR VEHICLES 3 | 39 | .000000 | .000000 | . 000000 | .000000 | .000000 | .000000 | .000000 | .000000 |
| VEHICLE PARIS | 40 | . 000000 | . 000000 | .000000 | .000000 | . 000000 | .000000 | .000000 | .000000 |
| ()TH. TRANSP. EQUIPG |  | .000000 | .000000 | .000000 | .000000 | .000000 | .000000 | .000000 | .000000 |
| FLEC. APPLIANCES 4 |  | . 000000 | .000000 | .000000 | .000000 | . 000000 | .000000 | .000000 | .000000 |
| ELEC. INT. EQUIP.4 |  | .000000 | . 000000 | .000000 | .000000 | .000000 | .000000 | .000000 | .000000 |
| COM.EQUIP., WIRE | 44. | . 008468 | .000000 | .000000 | .000000 | . 000000 | . 000016 | .000000 | .000000 |
| OTher elec. proo. |  | . 0000817 | . 000000 | . 000000 | .000000 | .000000 | . 000021 | . 000000 | .000000 |
| CLAY,LIME.CFMENT 46 |  | .000000 | .000000 | .000000 | . 000000 | .001080 | . 000012 | .000000 | . 000000 |
| A.O. NON-METALLIC |  | .000000 | .000000 | . 000000 | . 000000 | . 001276 | . 000087 | .000000 | .000687 |
| PFTR. PROD. 4 | 48 | .001865 | . 005496 | . 001392 | . 001625 | .005860 | . 008916 | .000000 | .000000 |
| PLASIIC, SYN. RESINA |  | .000000 | . 000000 | .000000 | .000000 | .000000 | .000272 | . 000000 | . 000000 |
| PAINT E VARNISH 5 | 50 | .000000 | . 000000 | . 0011854 | .000000 | . 000000 | .000000 | . 000000 | .000000 |

TABLF 9 INDUSTRY INPUT AND FINAL EXPENDITURE COEFFICIENTS - AGGREGATION M (SEE CHAPTER 4 )

| INOUSTRYICOLUMNSI COMMODITY(ROWS) | $\begin{gathered} \text { COMMIJNI- } \\ \text { CATIGNS } \\ 57 \end{gathered}$ | UTILITIES 58 | FINANCE,INS. REAL ESTATE 59 | QUSINESS <br> SERVICES <br> 60 | HOTEL AND RESTAURAVT 61 | OTHER SERVICES 62 | $\begin{gathered} \text { OFFICE } \\ \text { SUPPLIFSIDI } \\ 63 \end{gathered}$ | $\begin{array}{r} \text { ADVTG. AND } \\ \text { TRAVELID } \\ 64 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PHARM. SOAP, TOILETSL | .000044 | . 000040 | . 000000 | . 000000 | . 000580 | . 021865 | . 000000 | . 000000 |
| OTHER CHEM PROD. 52 | .000103 | .000231 | . 000000 | .000193 | .000085 | . 006480 | .008623 | .000559 |
| MISC. MFG. PROD. 53 | .000519 | .000000 | .000000 | . 001249 | .001507 | .012100 | . 074485 | .017181 |
| CONSTRUCTION 54 | .031801 | .044753 | . 016805 | .000000 | . 006697 | . 002602 | .000000 | .000000 |
| TRADE, WH. ERETAIL55 | . 004721 | . 004736 | .001844 | .002973 | . 029994 | . 015020 | . 095647 | .027221 |
| TRANSPORT. STORAGE56 | . 058083 | . 003756 | -.000555 | .001439 | .014189 | . 006466 | . 028928 | .089165 |
| COMMUNICATIUNS 57 | .021757 | .003736 | .008903 | .015216 | . 005644 | . 018039 | .000000 | .072752 |
| UTILITIES 59 | .007592 | .193518 | . 003101 | .001945 | .005351 | .006907 | .000000 | . 000000 |
| FIN.INSUR.RL.EST. 59 | .013780 | . 025418 | . 056990 | .030892 | . 036115 | . 066566 | . 000000 | .000000 |
| BUSINESS SFRVICE 60 | . 005253 | .005028 | . 007655 | .038122 | . 002690 | . 008019 | . 000000 | . 083064 |
| ACCOM. MEALS 61 | .000000 | . 000000 | .009000 | .000000 | .000820 | .000000 | . 000000 | .335131 |
| OTHER SERVICES 62 | . 035334 | .002341 | .009158 | .044770 | . 022812 | . 047292 | . 000000 | .025684 |
| OFFICE SUPPLIES 63 | .006328 | . 000946 | .012047 | .014249 | .002067 | . 011464 | .000000 | .000000 |
| ADVTG. AND TRAVELG4 | . 007825 | . 005346 | . 015636 | . 043251 | . 011255 | . 021833 | . 000000 | . 000000 |
| OPFRATING SUPPL. 65 | .008421 | .015576 | .021725 | .015091 | .023333 | .042083 | .000000 | . 000000 |
| NON-COMP. IMPORTS 66 | . 000000 | . 000000 | . 000000 | . 000000 | . 006544 | . 000000 | .000000 | . 000000 |
| BAL. OF PAYMNT ADJGT | .000000 | . 030000 | .000000 | . 000000 | .000000 | . 000000 | . 000000 | . 000000 |
| COMMODITY TAXES 68 | .002771 | .001404 | . 000312 | .001576 | . 003815 | .007526 | .054481 | . 028097 |
| SUBSIDIES 69 | -.059100 | -. 001263 | -.002101 | . 000000 | -.000139 | . 000000 | .000000 | .000000 |
| INDIR.TAXEGOV. SER 70 | .024574 | . 018596 | .171040 | . 008761 | . 023254 | . 014659 | .000000 | . 000000 |
| WAGFS \& SALARIES 71 | . 438895 | .178303 | . 154586 | .403823 | .313544 | .291641 | . 000000 | . 000000 |
| NET-ING.UNICTRP. T2 | .001995 | . 000564 | .107590 | . 328429 | . 114179 | . 270909 | . 000000 | . 000000 |
| SURPLUS 73 | . 374598 | - 481884 | .349216 | .043273 | .074899 | . 094516 | .000000 | . 000000 |
| SUA TOTAL (66-731 74 | . 781633 | .679494 | .779643 | .785863 | . 536097 | .679353 | . 054481 | .028097 |
| TOTAL INPUTS 75 | 1.000000 | 1.000000 | 1.000000 | 1.000000 | 1.000000 | 1.000000 | 1.000000 | 1.000000 |

TABLE 9 INOUSTRY INPUT ANU FINAL EXPENOITURE COFFFICIENTS - AGGREGATION M (SEE CHAPTER G)


TABLE 9 INDUSTRY INPUT AND FINAL EXPENOITURE COEFFICIENTS - AGGKEGATION Y (SEE (HAPTER \&)


TABLE 9 INOUSTRY INPUT ANO FINAL EXPFNOITURE COEFFICIENTS - AGGREGATION M (SEE CHAPTER \&I

| IND.65 E FINAL DE COMMODITY(ROWS) | MANO | OPERATING SUPPLIES(D) 65 | INTERMEDIATE INPUTS(1-65) 66 | NET FXPGRTS | RE-EXPIJRTS 68 | IMPIRTS 69 | INVENTORY CHANGE 70 | OTHFR FINAL DEMAND 71 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PHARM. SOAP, TOILET | 51 | . 026301 | . 002084 | .001710 | - $\operatorname{coc} 000$ | . 000000 | . 000000 | . 008011 |
| OTHER CHEM PROD. |  | . 029379 | . 011617 | . 024127 | .000000 | . 000000 | .000000 | .001985 |
| MISC. MFG. PROO. |  | .03:444 | . 005547 | .005701 | . 000000 | .000000 | . 000000 | . 013380 |
| CONSTRUCTIDN | 54 | . 000000 | . 015136 | .000000 | .000000 | .000000 | . 000000 | . 148413 |
| TRADE, WH.ERETAIL | 55 | .327151 | .031268 | .015763 | .000000 | . 000000 | . 000000 | .121933 |
| TRANSPORT, STORAGE | 56 | .020321 | .028555 | .078112 | . 000000 | . 000000 | . 000000 | .029100 |
| COMMUNICATIONS | 57 | . 000000 | . 009275 | . 003518 | . 000000 | .000000 | . 000000 | .011126 |
| UTILITIES | 58 | .000000 | .012176 | .002547 | .000000 | .000000 | .000000 | .011960 |
| FIN.INSUR.RL.EST. | 59 | .000000 | .027950 | .002778 | .000000 | . 000000 | . 000000 | .127959 |
| BUSINESS SERVICE |  | . 000000 | . 008380 | . 001128 | . 000000 | . 000000 | . 000000 | . 004949 |
| ACCOM. MEALS | 61 | . 000000 | . 006705 | .000000 | . 000000 | . 000000 | .000000 | .031185 |
| OTHER SERVICES | 62 | . 063181 | . 012822 | .000917 | .000000 | .000000 | . 000000 | . 034604 |
| OFFICE SUPPLIES | 63 | . 000000 | . 005148 | .000000 | .000000 | . 000000 | . 000000 | . 000000 |
| ADVTG. AND TRAVEL | 64 | .000000 | .019582 | .000000 | .000000 | .000000 | .000000 | . 000000 |
| OPERATING SUPPL. |  | .000000 | .025755 | .000000 | . 000000 | . 000000 | . 000000 | .000000 |
| NON-CDMP. IMPORTS |  | .000501 | . 003205 | -.000007 | . 000000 | . 000000 | .000000 | . 002234 |
| BAL OF PAYANT AOJ | 167 | .000000 | . 000000 | .112664 | . 000000 | . 000000 | . 000000 | .003402 |
| COMMODITY TAXES | 68 | .028853 | . 008621 | .000141 | .000000 | .000000 | . 000000 | .048980 |
| SUBSIDIES | 69 | .000000 | -. 004774 | .000000 | .000000 | . 000000 | . 000000 | . 000000 |
| INOIR.TAXEGOV.SER | 70 | .000000 | .029565 | .000000 | . 000000 | . 000000 | . 000000 | -. 001956 |
| WAGES E SALARIES |  | . 000000 | .251960 | .000000 | . 000000 | . 000000 | . 000000 | . 107774 |
| NET-INC. UNI CORP. |  | .000000 | . 056475 | .000000 | .000000 | .000000 | .000000 | .000000 |
| SURPLUS | 73 | .000000 | .154120 | . 000000 | .000000 | . 000000 | .000000 | . 014209 |
| SUB TOTAL (66-73) | 74 | . 029354 | .499172 | - 112798 | . 000000 | .000000 | .000000 | .174643 |
| TOTAL INPUTS | 75 | 1.000000 | 1.000000 | 1.000000 | . 000000 | . 000000 | .000000 | 1.000000 |

TABLE 10 Impact table without Import leakages - aggregation m (SEE Chapter a)


TABLE 10 IMPACT TABLE WITHOUT IMPQRT LEAKAGES - AGGREGATIGN M (SEE CHAPTER \&)

| COMMODITY(COLUMNS INDUSTRY(ROWS) | AGRICULTURE PRODUCTS | FORESTRY PROUUCTS 2 | $\begin{aligned} & \text { FISH } \\ & \text { CFUR } \\ & 3 \end{aligned}$ | METAL ORESECONC. 4 | NON-METAL <br> MINERALS <br> 5 | COAL <br> 6 | OIL ANO NATURAL GAS | PRODUCTS <br> 8 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FURNITURE, FIXTRS. 26 | . 000526 | . 000714 | . 001045 | .000340 | . 000580 | . 000627 | . 000429 | . 000573 |
| UTMER WOOD IND. 27 | .003984 | . 004314 | .003950 | .001385 | .003575 | . 001953 | .001951 | . 004416 |
| PULPEPAPER MILLS 28 | .006643 | . 006610 | . 004134 | . 003919 | . 014505 | . 004547 | . 005546 | . 017488 |
| OTHER PAPER INO. 29 | .007992 | .005459 | .003996 | . 003220 | .025955 | . 003398 | . 003749 | . 024982 |
| PRINT. PUBLISHING 30 | . 008802 | . 012467 | .005170 | . 006131 | . 010746 | . 008132 | . 014056 | . 018938 |
| IRON, STEEL MILLS 31 | .009297 | . 012919 | . 011724 | . 012692 | .010378 | . 012360 | .009276 | .010622 |
| SMELT.REFINING 32 | . 006401 | .007560 | .007093 | .149690 | . 007649 | .006205 | .007085 | . 006376 |
| OTH.PRIMARY METAL 33 | .005218 | .007377 | .007358 | .012599 | . 006484 | . 004843 | . 008214 | .005441 |
| STRUCTURAL METAL 34 | . 001859 | .002725 | .002627 | . 001656 | . 001815 | .001616 | . 001960 | .001735 |
| METAL STAMPING 35 | .004976 | .005537 | . 006041 | . 004089 | . 004497 | .003497 | .003952 | .010544 |
| OTHER METAL MFG. 36 | .013491 | .024825 | .013912 | . 012359 | . 015798 | . 014127 | . 012886 | .013447 |
| MACHINERY(NESIMFG37 | .020907 | .025640 | .024805 | .023012 | . 025355 | . 024992 | .024041 | .017031 |
| AIRCRAFTEPART MFG38 | .001491 | . 001438 | .000951 | .001170 | .001383 | .000923 | .001866 | . 001463 |
| MOTOR VEH. MFG. 39 | .001246 | . 001856 | .000865 | . 001029 | . 001539 | .001339 | .001042 | .001323 |
| VEHICLE PARTS MFG40 | . 005211 | . 010206 | .003032 | . 005463 | .008195 | .007193 | . 005318 | . 005854 |
| OTH. TRANSP. EOUIP. 41 | .001161 | . 001548 | .015795 | .001787 | . 001264 | . 002616 | .001363 | .001366 |
| ELECT.AOPLIANCE 42 | . 001119 | .001870 | .001213 | .001072 | . 001378 | .001253 | .001152 | .001119 |
| ELEC.IND. EQUIP, 43 | . 001898 | .003232 | .002034 | . 001895 | . 002614 | . 002331 | .002010 | .001869 |
| COM.EQUIP.EWIRE 44 | .003287 | .005182 | .010460 | .002970 | .003912 | .003433 | .003321 | . 003383 |
| OTH.ELEC.PROD. IN1245 | . 002865 | . 005208 | .002418 | . 002795 | .004117 | . 003566 | . 002837 | . 002971 |
| CLAY,LIME, CEMENT 46 | . 002864 | . 003645 | .004476 | . 004833 | .031301 | . 001910 | . 007982 | .002707 |
| NON-METAL MIN. 47 | .001974 | . 002886 | .003203 | . 001622 | . 003157 | .001835 | .001733 | .003156 |
| PETR. PRUD. IND. 48 | .063202 | .041937 | .054133 | .014003 | .038226 | . 015594 | .016328 | . 044125 |
| PLASTIC, SYN.RESIN49 | . 002332 | .002188 | .002477 | . 001981 | . 002705 | . 001635 | .002183 | . 004697 |
| PAINTEVARNISH MFG50 | .002445 | .004741 | .001420 | .002485 | . 003844 | .003321 | . 002702 | .002676 |

TABLE 10 IMPACT TAHLE WITHOUT :MPOKT LEAKAGES - agGREGATION M (SEE CHAPTER 4)


TABLE 10 Impact TABLE WITHOUT imp ORt LEAKAGES - AGGREGATION M (SEE CHAPTER \&)

| COMMODITY(COLUMNS) |  | OAIRY PRODUCTS 9 | FRUITEVEG。 PRODUCTS 10 | FEFD, FL OUR CEREALS II | $\begin{array}{r} \text { BAKERY } \\ \text { PRODUCIS } \\ 12 \end{array}$ | $\begin{aligned} & \text { SUGAR. } \\ & \text { CONFECT } \\ & 13 \end{aligned}$ | OTHER FOOD PRODUCTS 14 | $\begin{gathered} \text { SOF T } \\ \text { DR } 1 \text { NK S } \\ 15 \end{gathered}$ | ALCOHOLIC BEVERAGES 16 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AGRICUL TURE | 1 | .641457 | .246142 | .534186 | .135703 | . 111207 | . 224548 | .025717 | . 076340 |
| FORESTRY | 2 | . 009546 | . 010751 | .010273 | .012483 | .010525 | .011499 | . 006540 | .011282 |
| FISHING MUNTING | 3 | .004187 | . 009151 | .014900 | .010263 | .006701 | .137428 | .004223 | . 009046 |
| METAL MINES | 4 | . 005578 | . 014275 | . 005612 | .004500 | . 003571 | . 006386 | .005779 | . 006413 |
| non-metal mines | 5 | .002583 | . 004851 | . 004444 | .003236 | .003004 | . 003787 | .001947 | .003850 |
| COAL MINES | 6 | . 004264 | .008570 | .003713 | .003022 | . 004442 | .004037 | .003153 | . 004682 |
| PFIROLEUM NAT.GAS |  | .030780 | .018905 | .027539 | . 020965 | . 012787 | . 021325 | . 013295 | . 012806 |
| MEAT:POULTRY PROC |  | . 009078 | .047538 | .040655 | .046178 | . 004851 | .027212 | .005923 | .007439 |
| DAIRY FACTORIES | 9 | 1.039002 | . 024574 | .006264 | .017369 | .025258 | .014711 | .005390 | .003916 |
| FRUIT, VEG.CANNERS |  | . 006431 | . 993014 | . 003495 | . 026902 | .006835 | .015613 | .002455 | .003359 |
| FEED,FLR.CEREAL | 11 | . 056999 | . 026517 | 1.098985 | . 150126 | . 015415 | . 051788 | . 004171 | .016753 |
| 8ISCUIT.8AKERIES |  | .001292 | . 002246 | .001210 | .987575 | .007405 | .002067 | . 002275 | . 001699 |
| SUGAR, CONFECT. IND |  | . 012954 | .037241 | .013166 | . 050248 | 1.052034 | .023698 | . 093790 | . 004821 |
| OTHER FOOD INO. |  | . 029764 | .006535 | .101278 | .074009 | . 048844 | 1.015734 | . 030360 | .065893 |
| SOFT ORINK MFG | 15 | .000750 | .002198 | . 002599 | .001272 | .000498 | .000785 | 1.098354 | .001115 |
| ALCOHOL IC BEV.MFG |  | . 001581 | . 003393 | . 006249 | .002704 | .001637 | .004037 | .008909 | 1.045449 |
| TOBACCO PROD.IND. |  | . 000038 | . 000103 | .000088 | .000105 | .000031 | . 000065 | .000032 | . 000038 |
| RUHEER PROU. MFG. |  | . 006342 | . 006117 | . 007042 | .005371 | . 004195 | . 005479 | . 003665 | .005308 |
| LEATHER PROD. MFG. |  | .000380 | .000507 | .000520 | .000458 | . 000364 | .000508 | . 000548 | . 000574 |
| SYN.tExtile mills |  | .002034 | .007489 | .004727 | .002791 | .002045 | . 002979 | . 001317 | .002372 |
| COTTON, YARN, CLOTH |  | . 002899 | .003157 | .006848 | . 003160 | . 002644 | .006131 | . 001882 | . 002885 |
| KNITIING MILLS | 22 | . 000181 | . 000164 | . 000558 | .000197 | . 000181 | . 000246 | . 000091 | . 000122 |
| CLOTHING IND. | 23 | .000707 | .000699 | .001186 | .000694 | .000552 | .000756 | .000426 | . 000545 |
| OTHER TEXTILE IND |  | . 006848 | .005872 | .025511 | . 007884 | .007816 | . 009891 | . 002797 | .004140 |
| SAWMILLS | 25 | .002742 | . 00318 B | .002954 | .003042 | .002430 | . 004532 | . 001715 | . 003602 |

TABLE 10 IMPACT TABLE WITHOUT IMPORT LEAKAGES - AGGREGATION M (SEE CHAPTER 4)

| COMMODITYICOLUMNS I INOUSTRY(ROWS) | OAIRY PRODUCTS 9 | FRUITEVEG. PROUUCTS 10 | FEED,FL OUR CEREALS 11 | BAKERY product 12 | SUGAR. CONFECT. 13 | OTHER FUOD PROOUCTS 14 | $\begin{aligned} & \text { SOF T } \\ & \text { OR INKS } \\ & 15 \end{aligned}$ | AL COHOLIC BEVERAGES 16 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FURNITURE, FIXTRS. 26 | .000605 | . 000852 | .000773 | .000539 | . 000450 | .000723 | . 000428 | . 000728 |
| OTHER WOOD INO. 27 | . 004765 | $.00366 T$ | .003666 | .002595 | . 002045 | . 005059 | . 001768 | . 008572 |
| PULPEPAPER MILLS 28 | .020185 | .032270 | . 024204 | . 043768 | .037790 | . 032294 | .020400 | .033308 |
| OTHER PAPER INO. 29 | . 033913 | . 058325 | .036831 | .080159 | .063106 | . 046038 | . 021046 | .049799 |
| PRINT.PUBLISHING 30 | . 018961 | . 031525 | .025376 | . 028058 | . 021676 | . 031666 | . 053345 | . 056764 |
| IRON,STEEL MILLS 31 | .013189 | .052539 | . 013739 | . 010065 | .008045 | .017415 | .018114 | . 015761 |
| SMELT.REFINING 32 | . 007234 | . 017290 | . 007419 | . 000081 | . 004964 | . 008249 | . 007480 | . 007621 |
| OTH. PRIMARY METAL33 | . 006155 | .014123 | .006298 | . 005494 | .004372 | . 006990 | . 005998 | . 006328 |
| STRUCTURAL METAL 34 | . 001893 | . 003268 | .001941 | . 001444 | .001160 | .001940 | . 001472 | . 001607 |
| METAL STAMPING 35 | .017689 | .141075 | .014005 | . 010779 | . 008868 | . 025448 | . 042341 | . 030238 |
| DTHER METAL MFG. 36 | . 014698 | . 027352 | . 014469 | . 011474 | . 009408 | .014849 | . 011944 | .013605 |
| MACHINERY(NES)MFG37 | .018253 | . $01628 ?$ | .017341 | . 012323 | . 010463 | .015865 | . 008788 | .012003 |
| AIRCRAFTEPART MFG38 | .001491 | .001714 | . 001901 | .001681 | .001150 | . 001662 | . 001436 | .002420 |
| MOTOR VEH. MFG. 39 | .001328 | . 001555 | .001473 | . 001271 | .001027 | . 001269 | . 000928 | .001150 |
| VEHICLE PARTS MFG40 | . 006412 | . 010764 | . 006922 | .005718 | . 004730 | . 006352 | . 005408 | .006390 |
| OTH.TRANSP. EQUIP.41 | .001289 | . 001720 | . 002281 | . 001518 | .001087 | . 003459 | . 001077 | .001594 |
| ELECT.APPLIANCE 42 | . 001251 | .002577 | . 001211 | .000959 | .000792 | . 001272 | . 001090 | . 001155 |
| ELEC.INO. EQUIP. 43 | . 002002 | . 002338 | .001982 | . 001646 | . 001374 | .001903 | . 001346 | .001688 |
| COM.EQUIP.EWIRE 44 | . 003461 | . 004137 | .003710 | . 003062 | .002473 | . 004325 | . 002510 | .003073 |
| OTH.ELEC.PROD. INO45 | . 003164 | .003346 | . 003222 | .002784 | . 002338 | .003030 | . 002243 | .002832 |
| CLAY,LIME,CEMENT 46 | . 002972 | . 004601 | .003208 | . 002642 | .002197 | . 003299 | . 002085 | . 003608 |
| NON-METAL MIN. 47 | .006768 | .031914 | .003756 | .003696 | .002777 | .010949 | .005030 | .044690 |
| PETR. PROD. INO. 48 | . 050217 | . 029526 | .044629 | .032792 | .019408 | .033868 | . 020957 | . 019858 |
| PLASTIC,SYN.RESIN49 | .003831 | .004746 | .003314 | .020287 | . 006602 | . 005363 | .002728 | . 003915 |
| paintevarnish mfgso | .002933 | . 004248 | . 002800 | .002919 | . 002232 | . 002894 | .002353 | . 002824 |

TABLE 10 IMPACT TABLE HITHOUT IMPURT LEAKAGES - AGGREGATION M (SEE CHAPTER 4)

table 10 impact table without import leakages - aggregation m isee chapter a)

| COMmOOITYICOLUMNS) |  | tobaceo PRODUCTS 17 | RUBBER PRGDUCTS 18 | LEATHER PRODUCTS 19 | SYNTHETIC TEXTILES 20 | COTTON <br> YARN,CLOTH <br> 21 | KNITTEO <br> PROOUCTS <br> 22 | CLOTHING 23 | $\begin{aligned} & \text { OTHER } \\ & \text { TEXIILES } \\ & 24 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AGRICULTURE | 1 | .453402 | . 010811 | . 070528 | .013212 | . 009389 | . 01.13439 | . 026855 | . 026180 |
| FORESTRY | 2 | . 019022 | .006172 | . 009254 | .011000 | .004741 | . 007694 | . 006631 | .011051 |
| FISHING HUNTING | 3 | .001211 | .001039 | .001790 | .002919 | .001533 | . 002561 | . 017245 | . 002342 |
| METAL MINES | 4 | . 005019 | . 010466 | . 000487 | . 006449 | . 003529 | . 004540 | . 004802 | .007047 |
| non-metal mines | 5 | . 002283 | .007081 | . 003258 | . 005567 | . 002231 | .002763 | . 002171 | . 003963 |
| COAL MINES | 8 | .003128 | .008101 | . 005257 | . 005299 | .007287 | . 005258 | .003536 | . 006143 |
| PETROLEUM NAT.GAS |  | . 021544 | . 015763 | . 0111876 | . 018446 | . 008534 | .011071 | . 009637 | .013687 |
| MEA T, POULTRY PROC |  | . 010673 | . 003641 | . 092388 | .002861 | .001870 | . 002850 | . 003249 | .003414 |
| OAIRY factories | 9 | . 002814 | . 001928 | . 002708 | . 001794 | .001238 | .001795 | . 001795 | . 002176 |
| FRUIT, VEG.CANNERS |  | .001277 | . 000848 | .001728 | .000902 | . 000585 | .000813 | .000784 | .000959 |
| FEED,FLR.CEREAL | 11 | .040281 | .001932 | . 007728 | . 002459 | . 003021 | .002225 | . 003431 | . 003584 |
| BISCUIT, 8AKERIES |  | .001387 | .000934 | . 001333 | . 000779 | .000560 | .000865 | . 000848 | .001007 |
| SUGAR, CONFECT. INO |  | .003279 | .000531 | . 000870 | . 000759 | . 000450 | .000537 | . 000525 | . 000659 |
| OTHER FOOO IND. | 14 | . 007846 | . 006376 | .011097 | .018962 | . 008985 | . 007947 | . 007090 | . 009977 |
| SOFT DRINK MFG | 15 | . 000811 | . 000553 | . 000736 | .000425 | .000300 | .000490 | . 000478 | . 000569 |
| ALCOHOLIC BEV.MFG |  | .002915 | . 002029 | .002383 | . 001401 | .000839 | .001543 | . 001530 | . 001818 |
| TOBACCO PROD. IND. |  | 1.292550 | .000030 | .000195 | .000028 | . 000023 | .000030 | . 000038 | . 000037 |
| RUBBER PROD.MFG. |  | . 005646 | .995665 | . 064818 | .013999 | .010950 | .012800 | .016903 | . 030590 |
| LEATHER PROD.MFG. |  | . 000607 | . 010646 | 1.221720 | . 000718 | . 000571 | .004350 | . 008937 | .004227 |
| SYN.TEXTILE MILLS |  | . 002221 | . 024818 | . 013987 | 1.201433 | .158311 | . 316697 | .158006 | . 135444 |
| COTTON, YARN, CL OTH |  | . 002930 | -105389 | .042407 | .069303 | 1.181155 | .170521 | .203568 | .171715 |
| KNITTING MILLS | 22 | . 000184 | . 001168 | . 009972 | .013607 | . 004865 | .973799 | . 061057 | .019180 |
| CLOTHING INO. | 23 | .000703 | .004943 | .008432 | .014767 | .012885 | . 081268 | .983982 | . 023238 |
| OTHER TEXTILE IND |  | .007221 | . 031167 | . 027549 | .084762 | .078565 | .140137 | .165791 | .962907 |
| SAWMILLS | 25 | . 004550 | . 002170 | . 003760 | . 002526 | . 001536 | . 002188 | .002436 | . 004007 |

TABLE 10 IMPACT TABLE WITHOUT IMPGRT LEAKAGES - AGGREGATION M (SEE CHAPTER 4)

| COMMDOITY(COLUMNS) INOUSTRY(RDWS) | $\begin{array}{r} \text { TOBACCO } \\ \text { PRODUCTS } \end{array}$ $17$ | RUBBER PRODUCTS 18 | LEATHER PRODUCTS 19 | SYNTHETIC <br> TEXTILES <br> 20 | $\begin{gathered} \text { COTTON } \\ \text { YARN,CLOTH } \\ 21 \end{gathered}$ | KNITTED PRODUCTS 22 | CLOTHING 23 | $\begin{aligned} & \text { OTHER } \\ & \text { TEXTILES } \\ & 24 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FURNI TURE, FIXTRS. 26 | . 000770 | .000749 | .001077 | . 000978 | . 000797 | . 001556 | . 001886 | .009430 |
| DTMER WDOD IND. 27 | . 006954 | . 002834 | . 006308 | . 002623 | . 001859 | . 002576 | .002977 | . 007513 |
| PULPEPAPER MILLS 28 | . 057435 | .019232 | .026265 | . 041637 | .015700 | .026703 | . 020637 | . 034205 |
| OTHER PAPER IND. 29 | . 093201 | . 023542 | . 027304 | .020026 | . 017037 | . 028160 | . 022244 | . 045194 |
| PRINT. PUBLISHING 30 | . 040112 | .025819 | .030781 | . 016226 | .011367 | . 020992 | . 021545 | . 025311 |
| IRON, STEEL MILLS 31 | .010313 | .013820 | . 012283 | . 009686 | . 006185 | .007506 | .007601 | . 010855 |
| SMELT.REFINING 32 | . 006810 | . 018691 | . 009539 | . 010550 | . 005589 | . 006984 | . 007056 | .011380 |
| OTH.PRIMARY METAL33 | .006233 | .007336 | .006751 | .005590 | .003677 | .004763 | .005156 | .007919 |
| STRUCTURAL METAL 34 | . 001716 | . 001934 | . 001838 | . 001646 | .001086 | . 001374 | . 001454 | . 002104 |
| METAL STAMPING 35 | . 009111 | . 008669 | .007478 | . 006094 | .003307 | . 004215 | . 004564 | . 006327 |
| OTHER METAL MFG. 36 | .012863 | . 022085 | . 020725 | .011797 | . 008532 | .010330 | . 010004 | . 016192 |
| MACHINERY(NESIMFG37 | .015790 | .012488 | .015115 | . 013482 | . 009678 | .011287 | . 010142 | .013167 |
| AIRCRAFTEPART MFG38 | .001734 | .003162 | . 002068 | . 001747 | .001006 | .001455 | .001460 | . 001652 |
| MOTOR VEH. MFG. 39 | .001266 | .001185 | . 001606 | .001182 | . 000938 | .001129 | . 001242 | .001400 |
| VEHICLE PARTS MFG40 | .005575 | .009159 | . 006536 | . 006097 | . 004399 | . 005188 | . 004694 | . 006244 |
| OTH.TRANSP.EQUIP. 41 | .001231 | .001110 | .001. 263 | .001017 | . 000766 | .000986 | . 001152 | .001141 |
| ELECT.APPLIANCE 42 | . 001103 | .001420 | . 001513 | . 001065 | . 002367 | . 001086 | . 001172 | . 001368 |
| ELEC.IND. EQUIP. 43 | . 001864 | . 001833 | . 002207 | . 001815 | . 001398 | . DO1 594 | . 001801 | .001982 |
| COM.EQUIP.EWIRE 44 | . 003305 | .003806 | . 003921 | .003172 | . 002317 | . 002815 | . 002984 | .003490 |
| OTH.ELEC. PROD.INO45 | .003109 | . 003664 | .004018 | . 003734 | . 002459 | . 002969 | . 003054 | . 003650 |
| CLAY,LIME,CEMENT 46 | .003091 | . 002675 | . 002808 | . 002629 | .001726 | . 002206 | . 002133 | . 004285 |
| NON-METAL MIN. 47 | . 002508 | .006273 | .003303 | .004722 | .002003 | . 002849 | . 002852 | .004779 |
| PETR. PROD. IND. 48 | .034705 | . 021621 | . 017995 | . 027534 | . 012984 | .016756 | . 014737 | . 020742 |
| PLASTIC.SYN.RESIN49 | . 004191 | .017335 | .007085 | .020252 | .005382 | . 008627 | .008268 | .014012 |
| PAINTEVARNISH MFGSO | .002670 | . 007276 | .004579 | . 005281 | . 002608 | . 003241 | . 002716 | . 004150 |

TABLE 10 IMPACT TABLE WITHOUT [MPORT LEAKAGES - AGGREGATION M (SEE CHAPTER 4)


TABLE 10 IMPACT TABLE WITHOUT IMPORT LEAKAGES - AGGREGATION M (SEE CHAPTER 4)

| COMMOOITYICOLUMNSI |  | SAWMILL PRODUCTS 25 | FURNITURE, FIXTURES 26 | OTHER WOOD pronoucts 27 | $\begin{gathered} \text { PULP } \mathrm{E} \\ \text { PAPER } \\ 28 \end{gathered}$ | OTHER PAPER PRODUCIS 29 | $\begin{gathered} \text { PRINTEO } \\ \text { MATTER } \\ 30 \end{gathered}$ | steel mill PROOUCTS 31 | SMELT. \&REF. PROOUCTS 32 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AGRICULTURE | 1 | . 046101 | .013911 | . 029745 | . 029000 | .017940 | . 011462 | .008100 | . 005292 |
| FORESTRY | 2 | .417531 | .038326 | . 217505 | .237856 | .092543 | . 049488 | .004121 | . 002561 |
| FISHING HUNTING | 3 | . 000708 | . 000681 | .000591 | . 000935 | . 000742 | . 000510 | .000543 | . 000285 |
| metal mines | 4 | . 005182 | .018660 | . 006452 | .005391 | . 009215 | . 004305 | .162441 | . 561389 |
| NON-METAL MINES | 5 | . 001626 | . 002927 | .002437 | . 006894 | .007473 | . 002496 | .009657 | . 006925 |
| COAL MINES | 6 | .001953 | .006142 | . 002939 | . 014163 | . 007761 | . 004056 | . 061326 | .014142 |
| PETROLEUM NAT.GAS |  | .019537 | .010944 | .018496 | . 023233 | . 027367 | . 009999 | . 020116 | . 025594 |
| MEAT, POULTRY PROC |  | . 002686 | .002973 | .002590 | . 002319 | .002695 | . 002271 | .002278 | . 001421 |
| OAIRY FACTORIES | 9 | . 001795 | . 001858 | .001866 | . 002502 | . 002085 | . 001650 | . 001631 | . 001002 |
| FRUIT, VEG.CANNERS |  | .000779 | . 000779 | .000765 | .000681 | . 000794 | .000727 | .000712 | .000430 |
| FEED.FLR.CEREAL |  | . 007923 | .002281 | . 005012 | .005037 | .003035 | . 001922 | . 001349 | . 000888 |
| 8ISCUIT, 8AKERIES |  | .000851 | .000893 | .000868 | .000709 | . 001180 | . 000845 | .000786 | . 000484 |
| SUGAR,CONFECT. IND |  | . 000508 | . 000459 | . 000469 | . 000465 | . 000656 | . 000485 | . 000395 | . 000237 |
| OTHER FOOD IND. |  | . 004048 | .003927 | .003419 | . 005961 | . 004456 | . 002772 | .003269 | .001627 |
| SOFT DRINK MFG |  | . 000429 | . 000498 | . 000453 | . 000367 | . 000488 | .000501 | . 000399 | . 000254 |
| ALCOHOL IC BEV.MFC |  | .000780 | .002144 | .001100 | .001493 | .001628 | .001728 | .000672 | . 000528 |
| TOBACCO PROO.INO. |  | . 000037 | . 000040 | .000042 | . 000027 | .000031 | . 000021 | . 000034 | . 000021 |
| RUB8ER PROD.MFG. |  | .007564 | .026500 | .007096 | . 005991 | . 006896 | . 005380 | .006665 | . 004144 |
| LEATHER PROD. MFG. |  | . 000435 | .005779 | .000792 | . 000837 | .000774 | .000476 | . 000315 | .000233 |
| SYN.TEXTILE MILLS |  | .003175 | . 048919 | .005194 | .003140 | .006255 | .005606 | .001279 | . 001096 |
| COTTON, VARN, CLOTH |  | .003295 | .032394 | .003892 | . 003394 | .007530 | . 003847 | .001836 | .001487 |
| KNITIING MILLS | 22 | .000188 | .001405 | .000194 | .000267 | .000400 | . 000178 | . 000095 | .000070 |
| CLOTHING IND. | 23 | . 000726 | .002305 | . 000798 | .000716 | . 001065 | . 000499 | . 000582 | .000357 |
| OTHER TEXTILE INO |  | . 004943 | . 046581 | . 005224 | .011361 | . 026016 | .005153 | . 002448 | .001857 |
| SAWMILLS | 25 | .977012 | . 055277 | .170194 | .028503 | . 017291 | . 006604 | .002478 | .001672 |

TABLE 10 IMPACT TABLE WITHOUT IMPORT LEAKAGES - AGGREGATION M (SEE CHAPTER \&)

| COMMODITY(COLUMNS ) INDUSTRY(ROWS) | SAWMILL PRODUCTS 25 | FURNITURE FIXTURES 26 | OTHER WOOD <br> PRODUCTS <br> 27 | $\begin{gathered} \text { PULD E } \\ \text { PAPER } \\ 28 \end{gathered}$ | OTHER PAPER PROOUCTS 29 | PRINTED MATTER 30 | STEFL MILL PRODUCTS 31 | SMELT. GREF. PRODUCTS 32 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FURNITURE, FIXTRS. 26 | . 029881 | . 899030 | . 026591 | . 001343 | .001530 | .000534 | .000635 | . 000426 |
| OTHER WOOD IND. 27 | . 084762 | . 055334 | .997081 | .006970 | . 007840 | .002591 | . 003862 | . 001897 |
| PULPEPAPER MILLS 28 | . 011849 | . 023395 | . 013050 | 1.042204 | .387664 | .212492 | . 007936 | . 005168 |
| OTHER PAPER IND. 29 | .010187 | . 021936 | . 013259 | .023000 | . 956968 | .030762 | . 005880 | . 004529 |
| PRINT.PUBLISHING 30 | .012139 | . 021998 | . 016221 | .011832 | .054588 | 1.081427 | .010237 | .008005 |
| IRON, STEEL MILLS 31 | .012286 | .052651 | .016191 | . 010595 | .017527 | .007148 | 1.00521 .5 | . 040122 |
| SMELT.REFINING 32 | . 006991 | .028011 | .008641 | .007771 | .013981 | . 006959 | .133909 | 1. 307851 |
| OTH.PRIMARY METAL 33 | . 006596 | .029578 | .007583 | . 005882 | .015614 | .008467 | . 022989 | . 048644 |
| STRUCTURAL METAL 34 | .002790 | .004570 | .004397 | .001927 | . 002328 | . 001199 | . 0111300 | .004980 |
| METAL STAMPING 35 | .005531 | . 054146 | .013465 | . 004688 | .010716 | .003139 | .009002 | . 007398 |
| other metal mfg. 36 | .020333 | .072662 | . 026781 | .021035 | .017920 | . 010481 | . 057706 | .017649 |
| MACHINERYINESIMFG37 | .019482 | .020449 | .015282 | . 016323 | .014245 | . 010279 | . 029787 | . 021189 |
| AIRCRAFTEPARI MFG38 | . 001372 | . 002359 | . 001509 | . 001388 | . 001686 | .001737 | . 001384 | .002162 |
| MOTOR VEH. MFG. 39 | .001783 | .001857 | . 001758 | .001369 | .001357 | .000876 | . 001839 | .001170 |
| VEHICLE PARTS MFG40 | . 008929 | . 007794 | .007900 | .007322 | .006971 | . 004564 | .009141 | .006395 |
| OTH.TRANSP. EQUIP. 41 | .001497 | .003347 | . 001544 | .001309 | .001402 | . 000919 | . 002785 | .002076 |
| ELECT. APPLIANCE 42 | $.00153 ?$ | . 007634 | .002190 | . 001402 | .001291 | . 000798 | .001822 | . 001278 |
| ELEC.IND. EQUIP, 43 | . 002683 | . 004798 | .002442 | . 002268 | .002162 | .001373 | . 0003749 | .002115 |
| C.TM. EJUIP.EWIRE 4\% | .004453 | . 013680 | .004250 | . 003704 | .003812 | . 002587 | . 010643 | .004378 |
| aTH.FLEC.PROD.IND45 | . 004573 | .033963 | .003991 | .003782 | . 003869 | . 002415 | . 008548 | .003396 |
| CLAY.LIME, CEMENT 4\% | . 002901 | . 003831 | . 005054 | .004095 | .039013 | .002072 | .025002 | .011109 |
| NON-METAL MIN. 47 | . 003588 | .012802 | . 012632 | . 002823 | .004862 | .001693 | . 004662 | .002036 |
| PETR. PROT. IND. 48 | .031754 | .016155 | . 029607 | .028791 | .040992 | .013891 | . 025235 | . 018364 |
| PLASTIC, SYV.RFSIN49 | .003417 | .208310 | .010973 | . 003478 | .017331 | .003251 | . 002391 | .002327 |
| PAINTEVARNISM MHG5O | .005818 | .014815 | . 003154 | . 003583 | .004479 | . 002392 | .003952 | . 002466 |

TABLE 10 (MPACT TABLE WITHOUT IMPORT LEAKAGES - AGGREGATION M (SEE GHAPTER 4 )


TABLE 10 IMPACT TABLE WITHOUT IMPORT LEAKAGES - AGGREGATION M (SEE CHAPTER 4 I


TABLE 10 IMPACT TABLE WITHOUT IMPORY LEAKAGES - AGGREGATION M (SEE CHAPTER 4)


TABLE 10 IMPACT TABLE WIPHOUT IMPGRT LEAKAGES - AGGREGATION M (SEE CHAPTER 4)

| COMMODITY(COLUMNS ) INDUSYRY(ROWS | OTHER PRIMARY <br> METAL <br> 33 | STRUC TURAL <br> METAL. 34 | $\begin{array}{r} \text { METAL } \\ \text { STAMPINGS } \\ 35 \end{array}$ | OTHER METAL PRODUCTS 36 | MACHINERY IN.E.S.I $37$ | AIRCRAFT <br> \& PARTS <br> 38 | $\begin{array}{r} \text { MUIOR } \\ \text { VEHICLES } \\ 39 \end{array}$ | $\begin{gathered} \text { VEHICLE } \\ \text { PARTS } \\ 40 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PHARM. SOAP, TOLLETS1 | . 003118 | . 003385 | . 003481 | . 003396 | . 003376 | . 003120 | . 003369 | . 003480 |
| OTH.CHEMICALS INOS2 | . 028650 | .021759 | . 0229740 | . 025465 | .022949 | . 020825 | . 032322 | . 023804 |
| MISC. MFG. IND. 53 | .010888 | . 011854 | .010955 | .037889 | .019804 | . 082436 | . 020646 | .022927 |
| CONSTRUCTION 54 | . 026938 | . 016087 | .017095 | .017668 | .018790 | .021983 | .020092 | . 021955 |
| TRADE,WH, ERETAIL 55 | .073036 | . 067932 | . 070153 | . 076469 | . 065396 | . 060879 | . 089286 | . 083439 |
| TRANSPORT, STORAGE 56 | .071123 | .049339 | .059012 | .054293 | . 051271 | . 082116 | . 071207 | . 060188 |
| COMMUNICATIONS 57 | .014555 | . 016741 | . 015530 | . 020959 | . 068340 | . 019077 | .019540 | . 016138 |
| UTILITIES 58 | .049481 | . 030963 | .033215 | .031422 | . 024781 | .019850 | . 025785 | .032700 |
| FIN.INSUR.RL.EST. 59 | . 034974 | . 027858 | .032362 | . 035857 | . 046458 | . 035413 | .028907 | . 029241 |
| BUSINESS SERVICES60 | . 012450 | .009413 | .008648 | .012803 | .011788 | .014923 | .015320 | . 009180 |
| hotel. RESTAURANT 61 | .008057 | . 008695 | . 008228 | . 014857 | .013122 | .012115 | . 016898 | . 009709 |
| OTHER SERVICES 62 | .017495 | .019698 | . 028122 | .021191 | . 020235 | .019799 | .023802 | . 020016 |
| OFFICE SUPPLIES 63 | .006436 | . 007566 | .007484 | .008747 | .008635 | . 010258 | . 008386 | . 007004 |
| ADVTG. AND TRAVEL64 | . 024785 | .027102 | .025526 | . 047021 | . 041452 | . 038060 | . 053417 | .030152 |
| JPERATING SUPPL. 65 | . 080022 | . 091154 | .077773 | . 081895 | . 061686 | . 073379 | .070812 | . 089547 |
| NON-COMP.IMPORTS 66 | . 001287 | . 001296 | . 001356 | .001735 | . 002176 | .002617 | .005815 | . 002265 |
| BAL. OF PAYMNT AOJG7 | .000000 | .000000 | . 000000 | .000000 | . 000000 | . 000000 | . 000000 | . 000000 |
| COMMODIIY TAXES 68 | . 008758 | . 013530 | . 008498 | . 009436 | . 008188 | .012709 | .009017 | . 008635 |
| SUBSIOIES 69 | -. 009912 | -. 009113 | -. 008895 | -. 007654 | -. 009356 | -. 0005517 | -. 0006778 | -. 007551 |
| INDIR.TAXEGOV.SER 70 | . 029512 | .023710 | .025683 | .027333 | . 030256 | . 026971 | . 032536 | . 024691 |
| WAGES \& SAlARIES 71 | .570595 | .659580 | .598659 | . 644296 | .633192 | . 741222 | . 610252 | . 661643 |
| NET-INC.UNINCORP. 72 | . 028688 | . 025549 | .031597 | . 034914 | .030755 | .028996 | . 033249 | . 028569 |
| SURPLUS 73 | .371072 | . 285449 | . 343101 | . 289939 | .304788 | .193002 | .315909 | .281748 |
| SUB TOTAL (66-73) 74 | 1.000000 | 1.000000 | 1.000000 | 1.000000 | 1.000000 | 1.000000 | 1.000000 | 1.000000 |

TABLE 10 IMPACT TABLE WITHOUT IMPORT LEAKAGES - AGGREGATIDN M ISEE CHAPTER \&

| COMMODITY(COLUMNS) |  | $\begin{gathered} \text { OTHER } \\ \text { PORT } \end{gathered}$ | TRANS - <br> EQUIP. 41 | ELECTRICAL APPLIANCES 42 | $\begin{array}{r} \text { ELECTRIC } \\ \text { INO.EQUIP. } \\ 43 \end{array}$ | $\begin{aligned} & \text { COM E EQUTP. } \\ & \text { INCL. WIRE } \\ & \text { W4 } \end{aligned}$ | QTHER ELEC. PRODUCTS 45 | $\begin{gathered} \text { CLAY.LIME } \\ \text { CEMENT } \\ 46 \end{gathered}$ | ALL OTHER NON-METALLIC 47 | PETROL EUM Prooucts 48 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AGRICULTURE | 1 |  | .007500 | .010325 | . 008261 | .007766 | .009875 | .011017 | .009665 | . 009898 |
| FORESTRY | 2 |  | . 007939 | . 007481 | .005872 | .005305 | .006999 | .008627 | . 008435 | . 003762 |
| FISHING HUNTING | 3 |  | .000367 | .000542 | .000416 | .000424 | . 000511 | .000688 | .000600 | . 000427 |
| METAL MINES | 4 |  | . 040940 | .040816 | .036458 | .050450 | .037694 | . 013534 | . 033261 | . 017344 |
| NON-METAL MINES | 5 |  | . 003512 | .004410 | . 003509 | .003185 | . 004291 | . 072467 | .052981 | .004352 |
| COAL MINES | 6 |  | .010946 | .011518 | . 008700 | .005778 | . 006568 | .021415 | . 005461 | .003652 |
| PETROLEUM NAT.GAS | 7 |  | .010839 | . 011868 | .009477 | . 009438 | . 010471 | . 023718 | . 020064 | .596044 |
| MEAT, POULTRY PROC |  |  | .001810 | .002952 | .002265 | . 001987 | .002797 | .003022 | .002714 | . 001762 |
| DAIRY FACTORIES | 9 |  | .00131 .1 | . 002185 | . 001648 | .001413 | .002038 | . 002163 | .001862 | . 001211 |
| FRUIT, VEG. CANNERS |  |  | .000542 | . 000924 | .000708 | .000603 | .000879 | . 000944 | .000810 | .000521 |
| FEED,FLR.CEREAL | 11 |  | . 001218 | . 001752 | .001392 | .001256 | .001618 | . 001799 | .001666 | . 001555 |
| BISCUIT. BAKERIES |  |  | . 000624 | .001084 | .000822 | .000692 | .001035 | .001065 | .000920 | .000590 |
| SUGAR, CONFECT. IND |  |  | .000304 | . 000509 | .000386 | .000338 | .000480 | .000519 | .000457 | .000309 |
| OTHER FOOD IND. |  |  | . 002106 | . 003145 | . 002370 | . 002471 | .002982 | . 003893 | .003576 | .002529 |
| SOFT ORINK MFG | 15 |  | .000340 | .000636 | .000462 | .000383 | . 000610 | .000562 | .000495 | . 000316 |
| ALCOHOLIC BEV.MFG |  |  | .000878 | . 001983 | .001281 | .001069 | . 001987 | .001177 | .001210 | .000802 |
| TOBACCO PROD.INO. |  |  | . 000033 | . 000044 | . 000030 | .000026 | .000030 | .000038 | .000032 | .000022 |
| RUBBER PROD.MFG. |  |  | . 021784 | . 016794 | . 012831 | .018009 | . 028314 | . 008690 | .022031 | . 004956 |
| LEATHER PROD.MFG. |  |  | . 001352 | .000796 | .000665 | . 000554 | . 000888 | . 000466 | .000822 | .000293 |
| SYN.TEXTILE MILLS |  |  | . 002744 | . 002954 | .002856 | .004940 | .004721 | .001901 | . 019388 | . 001124 |
| COTTON, YARN, CL OTH |  |  | . 004949 | . 004301 | .004819 | . 006208 | . 006260 | .003397 | . 014836 | .001483 |
| KNITTING MILLS | 22 |  | . 000193 | .000163 | . 000168 | . 000178 | . 000188 | .000137 | .000242 | .000081 |
| CLOTHING IND. | 23 |  | .000630 | . 000682 | . 000585 | .000603 | . 000696 | . 000753 | .000969 | . 000400 |
| OTHER TEXIILE IND |  |  | .006425 | .004469 | . 004194 | . 004798 | .005236 | . 003934 | . 005534 | .002115 |
| SAWMILLS | 25 |  | . 010264 | . 004185 | .003537 | . 002514 | .003970 | . 002803 | .003653 | .002369 |

TABLE 10 IMPACT TABLE HITHOUT IMPCRT LFAKAGFS - AGGRFGATIUN M ISEE CHAPTFR 41

| COMMODITY(COLUMNS) (NDUSTRY(ROWS) | DIHFR TRANS PORT EQUIP. 41 | ELECTRICAL APPLIANCES 47 | $\begin{array}{r} \text { ELECTRIC } \\ \text { IND.EQJIP. } \\ 43 \end{array}$ | $\begin{aligned} & \text { COM. FQUIP. } \\ & \text { INCI. WIKF } \\ & 44 \end{aligned}$ | IITHER ELEC. PRODUCTS 45 | CLAY.LIME. CEMFNT 46 | $\begin{array}{r} \text { ALL OTHEK } \\ \text { NON-METALLIC } \\ 47 \end{array}$ | petroleum Protouct s 48 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FURNITURE, FIXTRS. 26 | . 003821 | . 008659 | . 005052 | . 001820 | . 023351 | . 000711 | . 002195 | . 000538 |
| OTHER WODO IND. 27 | .307491 | . 005647 | . 004255 | .003448 | .004332 | .002730 | . 005498 | .002947 |
| PULPEPAPER MILLS 28 | . 009389 | . 018981 | .014816 | .015003 | .018071 | . 026932 | .024258 | . 007301 |
| OTHER PAPER IND. 29 | .008657 | . 024597 | . 010690 | .010503 | .017810 | . 020261 | .035503 | .007873 |
| PRINT.PUBLISHING 30 | .014096 | . 027458 | .020361 | .017322 | . 026999 | .017779 | .017046 | .012938 |
| [RON,STFEL MILLS 31 | . 131510 | . 142816 | . 088216 | .052910 | .064970 | .021533 | .016707 | . 016483 |
| SMELT.REFINING 32 | . 061167 | . 056980 | . 060658 | .102290 | .069135 | .015936 | .023166 | . 011632 |
| OTH.PRIMARY METAL33 | . 050046 | . 057941 | . 058082 | . 135242 | . 062938 | . 008544 | .009984 | . 008414 |
| STRUCTURAL METAL 34 | . 010054 | .013787 | . 004888 | . 004092 | .004239 | .002700 | . 002339 | . 002342 |
| METAL STAMPING 35 | .016907 | . 069406 | . 045962 | .021646 | . 020108 | .006176 | .013563 | . 0111145 |
| Other metal mfg. 36 | . 111077 | .138870 | .064380 | . 036482 | .042937 | . 028374 | .029016 | .014133 |
| MACHINERY(NES)MFG37 | . 066568 | . 094040 | .034672 | .017395 | . 016853 | .021892 | .017938 | .019678 |
| AIRCRAFIEPART MFG38 | .003906 | . 003601 | .002275 | . 007963 | .003008 | .001779 | .003791 | . 002020 |
| MOTOR VEH. MFG. 39 | .002295 | . 003253 | .005322 | .001387 | . 006402 | .001920 | . 001564 | .001119 |
| VEHICLE PARTS MFG40 | .015004 | .017565 | .032814 | .009721 | . 050094 | .010322 | .011168 | . 006324 |
| OTH.TRANSP.EQUIP.41 | .986230 | . 003654 | . 002332 | .001711 | .001867 | . 001898 | .001339 | .001880 |
| ELECT.APPLIANCE 42 | . 004713 | .983937 | .025520 | . 005198 | .011108 | . 001931 | .001517 | .001219 |
| ELEC.IND. EQUIP. 43 | .008733 | .057167 | .899280 | . 037069 | . 069414 | . 005074 | .002685 | . 002085 |
| COM.EQUIP.EWIRE 44 | . 027101 | . 025296 | .108620 | 1.052702 | .218077 | . 005424 | . 004580 | . 003738 |
| OTH.ELEC. PROD. INO45 | .010883 | . 014140 | .059757 | . 039444 | . 916000 | .006365 | . 006018 | . 003388 |
| CLAY, LIME, CEMENT 46 | . 006543 | . 006742 | .013379 | .005037 | .005861 | 1.102743 | . 034754 | . 004185 |
| NON-METAL MIN. 47 | . 011989 | . 006794 | .007499 | .010897 | .025431 | . 016742 | 1.033692 | . 002306 |
| PETR. PROD. LND. 48 | .014925 | . 015611 | .012967 | . 012326 | .014430 | . 032385 | .027513 | 1.006954 |
| PLASTIC, SYN.RESIN49 | . 005518 | .007133 | .009743 | .023660 | .021637 | . 003247 | .011857 | .004131 |
| PAINTEVARNISH MFG50 | . 007225 | . 011104 | . 006376 | . 006524 | .007784 | .006231 | .005283 | . 003244 |

TABLE 10 impact rable hithout IMPQRT LEAKAGES - AGGREGAIION M (SEE CHAPTER 41

| COMMODITY(COLUMNS I NDUSIRYIROWS) |  | QIHER TRANSPORT EQUIP. 41 | ELECTRTCAL APPLIANCES 42 | $\begin{array}{r} \text { ELECTRIC } \\ \text { INO.EQUIP. } \\ 43 \end{array}$ | COM, EQUIP. <br> INCL. WIRE <br> 44 | OTHER ELEC. PROOUCTS 45 | CLAY,LIME. <br> CEMENT <br> 46 | ALL OTHER NON-METALLIC 47 | PETROLEUM PRODUCTS 48 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PHARM. SUAP, TOILE | 51 | . 002391 | . 004002 | . 002919 | . 002927 | .003175 | . 004792 | . 004399 | . 002984 |
| OTH.CHEMICALS IND | 552 | .019745 | .028836 | . 023872 | .033674 | .039002 | .034295 | . 063996 | . 064688 |
| MISC. MFG. IND. | 53 | .023255 | . 038618 | . 059149 | . 023224 | . 026895 | .012778 | .017556 | . 008674 |
| CONSTRUCTION | 54 | .017019 | . 017610 | . 015141 | .016595 | . 017143 | . 023236 | .021166 | . 050416 |
| TRAOE, WH.EREIAIL |  | .067085 | . 079772 | . 062608 | .056727 | . 069986 | .095506 | . 071358 | . 046231 |
| TRANSPORT, STORAGE | 56 | . 048061 | . 058645 | .045087 | .045768 | . 063261 | . 108851 | .065578 | .124998 |
| COMMUNICATIONS | 57 | . 015808 | . 025358 | . 021049 | . 019062 | .023050 | . 018461 | .016588 | . 014177 |
| UTILITIES | 58 | .030642 | .030227 | . 024000 | .024214 | .024906 | . 048815 | .070417 | .030869 |
| FIN.INSUR.RL.EST. | . 59 | . 035156 | . 043487 | .041429 | .049019 | . 049854 | .040102 | .041990 | .136070 |
| BUSINESS SERVICES | 560 | . 008416 | . 016214 | .014380 | . 010042 | .014410 | .012395 | .010729 | .022663 |
| HOTEL. RESTAURANT |  | . 008834 | . 020406 | .013004 | .010339 | .020058 | . 011734 | . 011314 | . 007344 |
| OTHER SERVICES | 62 | . 014949 | .021508 | . 017321 | . 016721 | . 018859 | .033520 | .020025 | .017746 |
| OFFICE SUPPLIES | 63 | .007603 | . 009125 | .010833 | .010368 | . 009798 | . 007966 | .006741 | .008400 |
| AOVTG. ANO TRAVEL | 64 | .027541 | . 064979 | .041162 | .032523 | . 063944 | .036363 | .035445 | .022060 |
| OPERATING SUPPL. |  | .054610 | .065619 | .068674 | .060988 | . 061887 | .127456 | .100519 | .061737 |
| NON-COMP.IMPORTS |  | .002673 | .002830 | . 002267 | .002759 | .003528 | . 001891 | . 006488 | .001040 |
| BAL OF PAYMNT AOJ | 167 | .000000 | .000000 | . 000000 | .000000 | .000000 | .000000 | .000000 | . 000000 |
| COMMODITY TAXES | 68 | . 008264 | . 009149 | .007889 | .007995 | . 008904 | .016105 | .009300 | .010471 |
| SUBSIDIES | 69 | -. 006012 | -. 007173 | -. 005655 | -. 005019 | $=.005930$ | $=.010107$ | -. 005368 | -. 0008144 |
| INDIR.TAXEGOV. SER | R 70 | .026207 | . 032157 | .030136 | .025565 | .027922 | . 035814 | .031604 | . 044918 |
| WAGES \& SALARLES |  | . 714578 | .656889 | .693943 | . 661374 | .636683 | . 548769 | .607163 | . 364954 |
| NET-INC.UNINCORP. | . 72 | . 027804 | . 034084 | . 028042 | .025492 | .032304 | .042870 | .030273 | . 044886 |
| SURPLUS | 73 | . 225486 | .272065 | .243377 | .281835 | . 296588 | . 364659 | . 320539 | .539875 |
| SU8 TOTAL (66-73) | 74 | 1.000000 | 1.000000 | 1.000000 | 1.000000 | 1.000000 | 1.000000 | 1.000000 | 1.000000 |

TABLE 10 IMPACT TABLE WITHOUT IMP ORT LEAKAGES - AGGREGATION M (SEE CHAPTER 4 )

| COMMODITYICOLUMNS) |  | PLASTIC. <br> SYN. RESINS $49$ | PAINT E <br> VARNISH 50 | SOAP, TOILET $51$ | OTH.CHEMICAL PRODUCTS 52 | MISC. MFG. PROOUCTS 53 | CONSTRUCTION | $\begin{aligned} & \text { TRAOE, } \\ & \text { WH.E RETAIL } \end{aligned}$ | TRANSPORT <br> AND STORAGE 56 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AGRICULTURE | 1 | . 014808 | . 120731 | . 054334 | . 013325 | .018773 | . 011802 | . 045411 | . 007572 |
| FIRFSTRY | 2 | . 015144 | .008420 | . 012974 | .007626 | .017226 | .025015 | . 008068 | .006777 |
| FISHING HUNTING | 3 | . 002730 | . 005425 | .011125 | . 002405 | . 000931 | .200462 | . 000858 | . 000299 |
| METAL MINES | 4 | .012869 | .014769 | . 009458 | . 024460 | . 036555 | .023457 | .004671 | . 004969 |
| NTN-METAL MINFS | 5 | .011716 | . 014630 | . 007005 | .027857 | . 004932 | . 015873 | .001421 | . 001952 |
| coar mines | 6 | .009342 | . 006694 | .005432 | .015348 | .008111 | .008312 | .001702 | . 002514 |
| PETROLEUM NAT.GAS |  | .038457 | . 036640 | .016332 | . 050345 | . 014121 | . 018738 | .017249 | . 029049 |
| MEAT, POULTRY PROC |  | .004079 | . 005358 | . 039762 | .004788 | .009573 | .001917 | .005250 | .001704 |
| DAIRY FACTORIES | 9 | . 002665 | . 004590 | .005755 | .002005 | .002307 | .001399 | .005712 | .001280 |
| FRUIT, VEG. CANNERS |  | .001073 | . 001718 | . 003176 | . 000845 | . 001006 | .000541 | .001637 | . 000537 |
| FEEO,FLR.CEREAL | 11 | . 002838 | .004070 | . 010832 | . 002825 | . 002657 | . 001858 | .007397 | . 001392 |
| 8ISCUIT, BAKERIES |  | .000983 | .001465 | . 002556 | . 000754 | .001131 | . 000532 | .002122 | .000631 |
| SUGAR, CONFECT. INO |  | . 000891 | . 001518 | . 005001 | .000777 | .000653 | . 000320 | .000997 | . 000289 |
| OTHER FOIO IND. | 14 | .019270 | .039030 | .080728 | .016969 | . 005654 | .002397 | . 005192 | .001525 |
| SOFT DRINK MFG | 15 | . 000561 | . 000896 | . 001597 | .000470 | . 000659 | . 000328 | . 000840 | .000329 |
| ALCOHOL IC BEV.MFG |  | .003359 | .004740 | .009784 | .003237 | . 002214 | .000915 | .002041 | .000731 |
| TOBACCO PROD.IND. |  | .000033 | . 000036 | . 000061 | .000030 | .000035 | . 000044 | . 000364 | . 000025 |
| RUPRER PROD.MFG. |  | .028308 | .020217 | . 006163 | .010605 | .021670 | . 009286 | .007271 | . 009880 |
| LEATHER PROD. MFG. |  | . 001111 | .000750 | .001054 | .000462 | .007343 | . 000527 | .000929 | .000409 |
| SYN.TEXTILE MILLS |  | . 031860 | .004655 | . 004914 | .003384 | .013928 | . 003831 | .004742 | . 001381 |
| COTTIN, YARN, CLOTH |  | .006190 | .004397 | .010742 | .003379 | .014029 | . 003819 | . 004661 | .002744 |
| KNITIING MILLS | 72 | . .000381 | . 000155 | .000256 | .000141 | .000976 | . 000244 | .000402 | .000104 |
| CLOTHING INO. | 23 | . 201038 | . 000635 | .000923 | .000566 | .003103 | . 000757 | . 003486 | .000482 |
| cther textile InO | 24 | . 008190 | .004670 | .017573 | . 005088 | .021071 | . 008998 | . 006444 | .003151 |
| SAWMILLS | 25 | . 003747 | .202514 | .003339 | .002990 | .012596 | .031146 | .003641 | . $00246 ?$ |

TABLE 10 IMPACT TABLE WITHOUT IMPDRT LEAKAGES - AGGREGATION M (SEE CHAPTER 4)


TABLE 10 IMPACT TABLE WITHUUT IMPORT LEAKAGES - AGOREGATITN M (SEE CHAPTER 4)


TABLE 10 IMPACY IABLE WITHOUT IMPORT LEAKAGES - AGGREGATION M (SEE CHAPTER \&)

| COMMOOITY(COLUMNS) <br> INOUSTRY(ROWS) |  | $\begin{gathered} \text { COMMUNI- } \\ \text { CATIONS } \\ 57 \end{gathered}$ | UTILITIES 58 | FINANCE,INS. REAL ESTATE 59 | BUSINESS SERVICES 60 | ACCOMMOOArIUN. MEALS 61 | $\begin{gathered} \text { OTMER } \\ \text { SERVICES } \\ 62 \end{gathered}$ | $\begin{gathered} \text { OFFICE } \\ \text { SUPPLIES } \\ 63 \end{gathered}$ | AOVTG. ANO IRAVEL 64 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AGRICULTURE | 1 | .003286 | . 003922 | . 038148 | .005500 | . 134015 | . 010988 | . 015438 | . 053725 |
| FORESTRY | 2 | .002610 | . 004243 | . 003869 | .002755 | .023195 | .005137 | .042484 | . 024086 |
| FISHING HUNTING | 3 | .000230 | . 000135 | .000281 | . 000354 | . 005249 | .003503 | . 000604 | .002369 |
| METAL MIMES | 4 | . 002342 | . 008284 | .005635 | .002638 | . 005544 | . 006383 | . 007741 | .005091 |
| NON-METAL MINES | 5 | .000902 | . 001293 | .001811 | .000670 | .002378 | . 001795 | . 003388 | . 002151 |
| COAL MINES | 6 | . 000700 | .009930 | .001035 | . 000807 | . 001845 | .001754 | . 004485 | .002486 |
| PETROLEUM NAT. GAS | 1 | . 004723 | . 009844 | .008603 | .004813 | . 014088 | .010437 | .013600 | .012370 |
| MEAT. POULTRY PROC |  | .000742 | .000770 | .001422 | .001684 | . 069225 | . 002731 | .003303 | .024993 |
| OAIRY FACTORIES | 9 | .000551 | . 000569 | .001071 | . 001254 | .056015 | . 001837 | . 002054 | .019877 |
| FRUIT, VEG. CANNERS |  | . 000229 | . 000244 | .000432 | .000552 | .025417 | . 000639 | .000806 | .009018 |
| FEEO, FLR -CEREAL |  | .000516 | .000570 | .003717 | . 000862 | .023330 | . 001998 | . 002537 | . 009388 |
| 8ISCUIT, BAKERIES |  | .000270 | . 000283 | .000568 | .000663 | .031642 | .000711 | .000979 | .011130 |
| SUGAR, CONFECT.INO |  | . 000127 | .000135 | . 000328 | .000293 | . 011485 | .000431 | .000539 | . 004411 |
| OTHER FODO INO. |  | .000693 | .000705 | . 001518 | .001342 | . 030871 | .003992 | . 003489 | .013679 |
| SOFT ORINK MFG | 5 | . 000154 | . 000181 | .000290 | . 000413 | . 012984 | .000403 | .000513 | . 007466 |
| ALCOHDLIC SEV.MFG |  | . 000447 | . 000368 | . 000849 | . 001445 | . 001354 | . 001211 | . 001680 | . 029580 |
| TOBACCO PROO. INO. |  | .000009 | . 000011 | . 000019 | .000012 | . 000219 | . 000022 | . 000056 | . 000096 |
| RUB8ER PROO.MFG. |  | .002227 | .002051 | . 002964 | .002825 | . 004260 | .005581 | . 037446 | . 005282 |
| LEATHER PROO. MFG. |  | .000192 | . 000125 | .000272 | .000346 | .000412 | . 001360 | . 004429 | .003118 |
| SYN.TEXTILE MILLS |  | . 000779 | .000516 | .000863 | . 001038 | .003217 | .003170 | . 006359 | . 003526 |
| COTTON, YARN, CL OTH |  | . 001144 | . 000657 | . 001107 | . 001181 | .010785 | .006783 | .008076 | . 005881 |
| KNITTING MILLS | 2 | . 000070 | . 000038 | . 000119 | .000052 | .000280 | .000208 | .000327 | . 000221 |
| CLOTHING INO. | 3 | . 000381 | .000187 | .000380 | .000228 | .001637 | .000626 | . 001176 | . 000981 |
| OTHER TEXTILE INO |  | .002113 | .001093 | . 001855 | . 001436 | . 007035 | .006861 | . 0099449 | . 005307 |
| SAWMILLS | 5 | . 001597 | . 004224 | . 003153 | . 000911 | . 002299 | .003044 | . 007426 | . 003596 |

TABLE 10 IMPACT TABLE WITHOUT IMPGRT LFAKAGES - AGGREGATIUN M (SEE CHAPTER 4 )

| COMMODITY(COLUMNS) (NOUSTRY(ROWS) | COMMUNI - <br> CATIONS 57 | UTILITIES 58 | FINANCF, INS. REAL ESTATE 59 | GUSINESS SFRVICFS 60 | ACCOMMODArION, MEALS 61 | $\begin{gathered} \text { OTMER } \\ \text { SERVICES } \\ 62 \end{gathered}$ | $\begin{gathered} \text { DFFICE } \\ \text { SUPPLIES } \\ 63 \end{gathered}$ | ADVTG. AND TRAVEL 64 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FURNITURE F IXTRS. 26 | . 000380 | .000421 | . 000633 | . 000294 | . 000882 | . 001912 | . 001259 | . 000797 |
| OTHER WOOD INO. 27 | . 002037 | .002747 | .003910 | .001096 | . 002451 | . 007832 | . 004562 | . 002909 |
| PULPGPAPER MILLS 28 | .005498 | . 006866 | . 006420 | . 008312 | . 017082 | .010284 | .175793 | . 071209 |
| OTHER PAPER IND. 29 | . 003107 | . 002049 | .004476 | . 004460 | .017213 | . 007745 | .134943 | .018579 |
| PRINT. PUBLISHING 30 | . 019035 | . 006103 | . 017884 | . 027199 | . 016533 | . 024101 | . 638403 | .326711 |
| IRON, STEEL MILLS 31 | . 004921 | .010805 | . 007820 | .005518 | . 008298 | .010745 | . 012969 | .008507 |
| SMELT.REFINING 32 | .003551 | .014598 | . 005213 | . 003820 | . 005399 | .007350 | . 011836 | .006472 |
| OTH.PRIMARY METAL33 | . 004231 | . 004248 | . 005687 | .003762 | .004229 | . 006059 | . 011239 | . 006295 |
| STRUCTURAL METAL 34 | .001439 | . 001918 | . 002643 | .001083 | .001436 | .004594 | .001943 | . 001544 |
| METAL STAMPING 35 | .001918 | . 002360 | .003291 | .002136 | .008486 | . 004128 | . 007437 | . 006253 |
| OTHER METAL MFG. 36 | . 006478 | .008271 | . 011069 | .007055 | .010330 | .019879 | . 020655 | .010793 |
| MACHINERYINESIMFG37 | . 005094 | . 007429 | .009033 | .007556 | .010603 | .014447 | . 012223 | .010159 |
| AIRCRAFTEPART MFG38 | . 000898 | . 000648 | . 000887 | . 036445 | . 001269 | .002752 | . 002542 | . 004825 |
| MOTIR VEH. MFG. 39 | . 000460 | . 000512 | . 000637 | .000502 | . 001107 | . 001681 | . 001884 | .001230 |
| VEHICLE PARTS MFG40 | .002357 | . 002543 | . 003050 | . 002580 | . 004748 | . 005168 | . 006286 | . 005320 |
| OTH.TRANSP.EQUIP.41 | . 000933 | . 000543 | . 000636 | .011379 | .001153 | .002516 | . 001447 | . 002700 |
| ELECT. APPLIANCE 42 | . 000564 | . 000646 | . 000877 | .000585 | . 000916 | . 002750 | . 001546 | . 000966 |
| ELEC.IND. FQUIP. 43 | .001226 | . 001506 | . 001600 | .000937 | .001521 | .002077 | . 002264 | . 001588 |
| COM.EQUIP.EHIRE \& 4 | .311096 | . 002559 | .003472 | .003760 | . 002891 | . 004487 | . 004295 | .003894 |
| OTH.ELFC.PROD.IND45 | . 002521 | . 001936 | .002586 | . 001476 | .002484 | .003819 | . 004408 | . 002898 |
| CLAY,LIMF,CEMENT 46 | . 002808 | . 004198 | . 005730 | . 001044 | . 003530 | . 004400 | .003379 | . 002910 |
| NUN-METAL MIN. 47 | .001233 | .001471 | . 002090 | .001203 | .004190 | . 003149 | . 003611 | . 004738 |
| ¢हTR. PRON. IND. 4 H | . 007505 | .014620 | .010898 | .007508 | .022473 | .015983 | .019826 | .019176 |
| PLASTIC.SYN. RESIN49 | .000907 | .000713 | .001218 | . 001125 | .002718 | . 002955 | . 009836 | .003560 |
| PAINTEVARVISH MFGSO | .001017 | . 001406 | .003484 | .001139 | .002164 | .002543 | . $\cos 143$ | . 002162 |

TABLE 10 IMPACT TABLE WITHOUT [MPORT LEAKAGES - AGGREGATION M (SEE CHAPTER 4)

## COMMODITYICOLUMNS

 INOUSTRY(ROWS)PHARM=SOAP, TOILETSI
OTH.CHEMICALS INOS? MISC. MFG. IND. 53 CONSTRUCTION 54 TRADE, WH. GRETAIL 55 TRANSPORI, STORAGESG COMMUNICATIONS 57
UTILITIES 58 FIN.INSUR.RL.EST. 59 BUSINESS SERVICESGO HOTEL. RESTAURANT $6 L$ OTHER SERVICES 62 OFFICE SUPPIIES 63 AOVTG. ANO TRAVELG4 OPERATING SUPPL. 65

NON-COMP.IMPORTS 66 8AL. OF PAYMNT ADJG7 COMmODITY TAXES 68 SUBSIDIES 69 INDIR. TAXEGOV.SER7O WAGES \& SALARIES 71 NET-INC. UNINCORP. 72 SURPLUS 73 SUB TOTAL(66-73) 74
COMMUNI-
CATIONS

57

| .001483 | .001192 | . 001633 |
| :---: | :---: | :---: |
| . 004640 | . 005585 | . 007663 |
| .003864 | .002817 | . 004679 |
| . 040139 | . 060114 | . 084751 |
| .023951 | .023131 | . 032712 |
| . 072544 | . 018459 | . 018794 |
| 1.025287 | . 008645 | . 015012 |
| . 006646 | 1.211341 | . 008297 |
| . 025268 | . 038724 | 1.010081 |
| . 008290 | . 009011 | . 012016 |
| . 004752 | . 003769 | . 008279 |
| .037947 | . 008318 | . 018263 |
| .008703 | . 002844 | . 013963 |
| . 014660 | . 011738 | . 022876 |
| . 018886 | .028241 | .032705 |
| .000519 | . 000406 | .000707 |
| .000000 | .000000 | .000000 |
| . 007902 | . 005823 | . 006716 |
| -. 063096 | -. 005142 | $-.004473$ |
| .034433 | .032712 | .179015 |
| . 555613 | . 309728 | .271984 |
| . 025284 | . 016953 | .137143 |
| .439343 | . 639520 | .408907 |
| 1.000000 | 1.000000 | 1.000000 |

BUSINESS ACCOMMODASERVICES TION. MEALS 60

| .003852 | .005564 |
| :--- | :--- |
| .010064 | .015819 |
| .006667 | .007359 |
| .009358 | .022035 |
| .022594 | .125378 |
| .022010 | .055877 |
| .068310 | .017061 |
| .006669 | .018842 |
| .041902 | .060880 |
| .943667 | .009602 |
| .015306 | .927697 |
| .049594 | .033461 |
| .026230 | .007027 |
| .049278 | .033399 |
| .026271 | .051377 |

OTHER SERVICES

| . 020916 | .003646 | . 004274 |
| :---: | :---: | :---: |
| . 019384 | .052102 | .021758 |
| . 020905 | . 078014 | .022679 |
| . 034296 | . 017521 | . 023156 |
| . 068626 | .139683 | . 096448 |
| . 044592 | .081280 | . 142136 |
| .028316 | . 028017 | .100017 |
| . 018442 | .024862 | . 017810 |
| . 114774 | .043523 | . 048174 |
| .013631 | .011013 | .088308 |
| .011708 | .015687 | . 320503 |
| . 924565 | .025019 | .053767 |
| . 014905 | 1.010372 | . 009473 |
| .036997 | . 048756 | 1.040918 |
| .056717 | . 055611 | .047342 |
| . 002315 | . 004549 | . 005951 |
| .000000 | .000000 | . 000000 |
| .013968 | . 064826 | . 040113 |
| -. 004456 | -. 006698 | -. 012076 |
| . 040706 | . 029079 | .035746 |
| .449923 | .587196 | . 551568 |
| .283110 | .048913 | .122067 |
| .214434 | . 272134 | . 256632 |
| 1.000000 | 1.000000 | 1.000000 |

TABLE 10 IMPACT TABLE WITHOUT IMPORT LEAKAGES - AGGREGATION M (SEF CHAPYER 41

| COMM.65,FINAL DEMANO |  | OPERATING SUPPLIES(0) | NET-EXPORTS | RE-EXPORTS | IMPORTS | INVENTORY CHANGE | $\begin{aligned} & \text { OTHER FINAL } \\ & \text { OEMAND } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| INDUSTRY(ROWS) |  | 65 | 66 | 67 | 68 | 69 | 70 |
| AGRICULTURE | 1 | . 045175 | 803.1 | 1.0 | -252.0 | -400.6 | 486.2 |
| FORESTRY | 2 | .009090 | 42.9 | 1.0 | -14.7 | -12.0 | 38.3 |
| FISHING HUNTING | 3 | .002340 | 23.9 | -9 | $-18.0$ | . 5 | 5.8 |
| METAL MINES | 4 | .022746 | 519.0 | .0 | -126.5 | 19.4 | . 0 |
| NON-METAL MINES | 5 | .005255 | 153.0 | 4.3 | -56.4 | 1.3 | 12.1 |
| COAL MINES | 6 | .006477 | 8.1 | . 0 | $-119.4$ | 2.4 | 47.0 |
| PETROLEUM NAT.GAS | 7 | . 018865 | 208. 5 | . 0 | -368.4 | 5.5 | 154.7 |
| MEAT, POULTRY PROC | . 8 | . 016744 | 69.7 | 1-9 | -76.1 | 19.2 | 1138.1 |
| DAIRY FACTORIES | 9 | .011451 | 24.2 | .0 | -12.1 | 9.0 | 706.1 |
| FRUIT, VEG.CANNERS |  | . 005198 | 8.8 | .6 | -110.8 | 16.7 | 335.9 |
| FEED, FLR, CEREAL | 11 | . 007435 | 68.9 | . 0 | -7.7 | 2.6 | 90.2 |
| BISCUIT.BAKERIES |  | .005721 | 3.6 | .0 | -11.8 | 5.7 | 396.9 |
| SUGAR, CONFECT. IND |  | . 002615 | 1.8 | . 2 | $-33.8$ | 3.2 | 193.0 |
| OTHER FOOD IND. | 14 | .012981 | 184.0 | 2.0 | $-139.6$ | 9.2 | 313.5 |
| SOFT DRINK MFG | 15 | . 002762 | .1 | . 0 | $-4.7$ | 1.4 | 133.8 |
| ALCOHOLIC BEV.MFG |  | .002002 | 88.6 | - 2 | $-61.0$ | 21.6 | 322.5 |
| TOBACCO PROD. INO. |  | . 000181 | 28.1 | . 0 | -9.2 | 4.7 | 231.8 |
| RUBBER PROD. MFG. |  | .052259 | 7.2 | .6 | $-59.8$ | 1.4 | 107.5 |
| LEATHER PROD.MFG. |  | .001847 | 15.3 | . 5 | $-44.6$ | 2.6 | 243.4 |
| SYN.TEXTILE MILLS |  | . 006905 | 20.1 | .7 | -66.8 | 1.6 | 14.4 |
| COTTON, YARN, CLIOTH |  | . 011191 | 10.9 | . 8 | -144.0 | 3.3 | 42.3 |
| KNITTING MILLS | 22 | .000590 | 1.7 | - 4 | $-39.7$ | 3.6 | 202.3 |
| CLOTMING IND. | 23 | .004112 | 8.0 | .6 | -61.7 | 14.8 | 816.4 |
| OTHER TEXTILE IND |  | .014517 | 11.8 | 2.0 | -196.4 | 10.3 | 196.0 |
| SAWMILLS | 25 | .004528 | 354.9 | - 1 | -39.2 | 13.7 | 6.7 |

TABLE 10 IMPACT TABLE WITHOUT IMPORT LEAKAGES - AGGREGATION M (SEE CHAPTER 4)

| COMM.65. FINAL DEMAND | OPERATING SUPPLIFS(D) | NET-EXPORTS | RE-EXPORTS | IMPORTS | INVENTORY CHANGE | $\begin{aligned} & \text { OTHER FINAL } \\ & \text { DEMAND } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| [NOUSTRY ${ }^{\text {(ROWS) }}$ | 65 | 66 | 67 | 68 | 69 | 70 |
| FURNITURE, FIXTRS. 26 | . 002499 | 2.3 | .2 | $-35.2$ | 7.0 | 358.3 |
| OTHER WOOO INO. 27 | . 004733 | 39.7 | . 6 | -32.5 | 9.7 | 11.3 |
| PULPEPAPER MILLS 28 | . 023658 | 1113.9 | . 3 | -65.0 | 2.4 | 31.5 |
| DTHER PAPER INO. 29 | . 019014 | 4.3 | . 5 | $-43.2$ | 6.8 | 71.5 |
| PRINT.PUBLISHING 30 | .027097 | 16.1 | 2.4 | $-144.7$ | 6.4 | 298.7 |
| IRON. STEEL MILLS 31 | . 056552 | 112.9 | 1.0 | $-122.2$ | 4.3 | . 0 |
| SMELT.REFINING 32 | .032839 | 823.1 | 11.0 | -77.4 | -1.5 | -68.7 |
| OTH.PRIMARY METAL 33 | .031530 | 60.2 | . 6 | $-101.0$ | 1.7 | 1.8 |
| STRUCTURAL METAL 34 | . 008474 | 4.4 | - 3 | $-23.9$ | . 8 | 1.4 |
| METAL STAMPING 35 | .023412 | 3.3 | 1.0 | -61.9 | 3.7 | 39.1 |
| OTHER METAL MFG. 36 | . 109463 | 29.9 | 4.9 | -255.8 | 1.6 | 126.9 |
| MACHINERYPNESIMFG 37 | . 141294 | 154.0 | 31.4 | -947.7 | 9.0 | 975.5 |
| AIRCRAFTEPART MFG38 | . 004107 | 99.2 | 33.0 | -211.9 | 10.6 | 329.1 |
| MOTOR VEH. MFG. 39 | .011155 | 27.0 | 2.1 | $-230.9$ | 18.5 | 1091.4 |
| VEHICLE PARTS MFG40 | . 070818 | 15.6 | 4.5 | -367.8 | 2.1 | 81.6 |
| OTH.TRANSP. EQUIP. 41 | .004955 | 17.8 | .7 | -41.9 | $-1.2$ | 178.2 |
| ELECT.APPLIANCE 42 | . 009067 | 6.4 | . 5 | -105.0 | 4.2 | 293.4 |
| ELEC.INO. EQUIP. 43 | .019187 | 15.0 | 2.6 | $-89.3$ | . 8 | 154.2 |
| COM.EQUIP.EWIRE 44 | . 026302 | 40.9 | 3.0 | $-124.6$ | 15.2 | 170.9 |
| OTH.ELEC.PROO.INO45 | .033160 | 5.8 | 1.2 | -91.7 | 2.4 | 178.8 |
| CLAY, LIME, CEMENT 46 | .005716 | 10.8 | . 3 | $-69.8$ | 7.2 | 28.0 |
| NON-METAL MIN. 47 | .014685 | 29.5 | . 6 | $-84.5$ | 5.1 | 34.6 |
| PETR. PROO. INO. 48 | .026680 | 10.2 | . 3 | $-137.8$ | 9.7 | 539.9 |
| PLASTIC.SYN.RESIN49 | .010900 | 30.7 | . 2 | -65.5 | 2.1 | 1.0 |
| PAINTEVARNISH MFG50 | .032450 | 1.3 | -1 | -7.5 | 1.2 | 15.1 |

TABLE 10 IMPACT TABLE WITHOUT IMPORT LEAKAGES - AGGREGATIUN M ISEE CHAPTER \&I

| COMM.65, FINAL DEMAND | OPERATING SUPPLIESIDI | NET-EXPORIS | RE-EXPIRTS | IMPORTS | INVENTORY ChANGE | $\begin{aligned} & \text { OTHER FINAL } \\ & \text { DEMANO } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (NDUSTRY(ROWS) | 65 | 68 | 67 | 68 | 69 | 70 |
| PHARM = SOAP, TOILFTSL | .030821 | 12.1 | . 6 | -58.1 | 7.9 | 319.1 |
| OTH.CHEMICALS INDS? | . 075189 | 171.1 | 2.7 | $-264.3$ | 6.1 | 79.1 |
| MISC. MFG. IND. 53 | . 047914 | 40.4 | 10.5 | $-361.0$ | 13.3 | 533.0 |
| CONSTRUCTION 54 | .021065 | . 0 | - 0 | . 0 | - 0 | 5911.9 |
| TRADE,WH.ERETAIL 55 | .368120 | 111.8 | . 0 | . 0 | 24.8 | 4857.1 |
| TRANSPORT, STORAGES6 | . 076581 | 558.2 | .0 | -80.9 | $-4.7$ | 1159.2 |
| COMMUNICATIONS 57 | . 032643 | 24.9 | .0 | -17.6 | . 0 | 443.2 |
| UTILIMIES 59 | . 026608 | 18.1 | . 0 | $-15.9$ | $-.3$ | 476.4 |
| FIN.INSUR.RL.EST. 59 | .056420 | 19.7 | . 0 | -83.4 | . 0 | 5097.2 |
| BUSINESS SERVICES60 | . 013677 | 8.0 | . 0 | -72.1 | . 0 | 197.2 |
| HOTFL, RESTAURANI 61 | .017988 | . 0 | . 0 | - 0 | . 0 | 1242.2 |
| OTHER SERVICES 62 | .077208 | 6.5 | - 0 | $-120.3$ | - 0 | 1378.4 |
| OFFICE SUPPLIES 63 | .012031 | . 0 | . 0 | . 0 | . 0 | . 0 |
| ADVTG. AND TRAVELG4 | . 053543 | - 0 | . 0 | . 0 | . 0 | . 0 |
| DPERATING SUPPL. 65 | 1.058441 | 0 | . 0 | . 0 | . 0 | . 0 |
| NON-CIMP. IMPORTS 66 | .007921 |  |  |  |  |  |
| BAL OF PAYMNT ADJGT | .000000 |  |  |  |  |  |
| COMMOOITY TAXFS 68 | . 041579 |  |  |  |  |  |
| SUBSIDIES 69 | $-.010217$ |  |  |  |  |  |
| INDIR.TAXEGOV.SFRTO | .034179 |  |  |  |  |  |
| WAGES E SALARIES 71 | . 557013 |  |  |  |  |  |
| NET-INC.UNINGORP. T? | .087745 |  |  |  |  |  |
| SURPLUS T3 | . 281774 |  |  |  |  |  |
| SUB TOTALI66-73) 74 | 1.000000 |  |  |  |  |  |

TABLF 11 IMPACT TABLE WITH [MPDRT LEAKAGES - AGGREGATION M (SEE CHAPTER \&)


TABLE 11 IMPACT TABLE WITH IMPORT LEAKAGES - AGGREGATION M (SEE CHAPIER 4 )

| COMMODI TYICOLUMNS) (INDUSTRY(ROWS) | AGRICULTURE PRODUCTS 1 | FORESTRY PRODUCTS 2 | $\begin{gathered} \text { FISH } \\ \text { EFUR } \\ 3 \end{gathered}$ | METAL <br> ORESECONC. <br> 4 | NON-METAL MINERALS 5 | COAL | CIL AND NATUKAL GAS 7 | $\begin{array}{r} \text { MEAT } \\ \text { PROOUCTS } \\ 8 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FURNITURE, FIXTRS. 26 | . 000361 | .000511 | .000773 | . 000214 | .000392 | . 000467 | . 000298 | . 000384 |
| OTHER WOOD INO. 27 | .003282 | .003720 | . 003227 | .001000 | .002912 | .001533 | . 001542 | .003488 |
| PULPEPAPER MILLS 28 | . 004444 | . 004467 | . 002362 | . 002441 | .010967 | .003050 | . 003763 | .013021 |
| OTHER PAPER IND. 29 | . 006191 | . 004054 | . 002598 | .002157 | .022886 | .002439 | .002791 | .021307 |
| PRINT. PUBLISHING 30 | . 006223 | .009347 | .003196 | . 004194 | . 007819 | .006024 | . 010894 | .014360 |
| IRON.STEEL MILLS 31 | .004720 | .006754 | . 006358 | .007353 | .005117 | .007229 | . 004739 | .005536 |
| SMELT.REFINING 32 | .003153 | .003696 | .003491 | .139546 | . 003949 | .003169 | . 003887 | .003046 |
| OTH.PKIMARY METAL 33 | .002765 | .004057 | . 004246 | .008791 | . 003516 | .002412 | .005285 | . 002843 |
| STRUCTURAL METAL 34 | .001184 | .001840 | . 001812 | . 000987 | .001077 | .000948 | .001267 | . 001056 |
| METAL STAMPING 35 | .002995 | . 003338 | .003940 | .002379 | .002530 | .001892 | . 002341 | . 007426 |
| OTHER METAL MFG. 36 | .007909 | .016189 | .007466 | . 006984 | .009283 | .008286 | . 007434 | .007710 |
| MACHINERY(NESIMFG37 | . 008440 | . 010791 | . 010151 | .009261 | . 010557 | .010355 | . 009885 | . 006486 |
| AIRCRAFTEPART MFG38 | .000829 | .000889 | .000523 | . 000737 | .000865 | .000567 | . 001328 | . 000821 |
| MOTOR VEH. MFG. 39 | .000819 | .001158 | . 000532 | .000593 | . 000943 | .000811 | . 000613 | . 000849 |
| VEHICLE PARTS MFG40 | .002067 | .004251 | .001156 | . 002218 | .003330 | . 002946 | . 002161 | .002302 |
| OTH.TRANSP. EQUIP. 41 | .000701 | .001000 | .012490 | .001211 | .000770 | .001888 | . 000900 | . 000845 |
| ELECT.APPLIANCE 42 | .000573 | .001085 | .000593 | .000524 | . 000720 | . 000650 | .000586 | .000576 |
| ELEC.INO. EOUIP. 43 | . 000971 | . 001823 | .000980 | .000946 | . 001404 | . 001244 | .001029 | .000945 |
| COM. EQUIP.EWIRE 44 | . 001921 | . 003164 | .007065 | . 001660 | . 002268 | . 001987 | . 001926 | . 001935 |
| OTH.ELEC.PROD. INO45 | .001863 | .003603 | .001493 | .001819 | .002771 | . 002433 | .001888 | . 001858 |
| CLAY,LIME, CEMENT 46 | .002064 | .002719 | .003428 | .003701 | .029987 | . 001331 | . 002231 | .001817 |
| NON-METAL MIN. 47 | .001110 | .001730 | .001922 | . 000914 | .002129 | .001077 | .001013 | . 001817 |
| PETR. PROD. IND. 48 | .054340 | . 036124 | .047147 | .010918 | .032453 | . 012880 | .013827 | . 034680 |
| PLASTIC,SYN.RESIN49 | .001094 | .000987 | .001089 | . 000934 | .001270 | . 000747 | . 001087 | . 002389 |
| PAINTEVARNISH MFG50 | .001960 | .004170 | . 001000 | .002039 | .003282 | .002896 | .002302 | .002089 |

TABLE II IMPACT TABLE WETH IMPORT LEAKAGES - AGGREGATION M (SEE CHAPTER

| COMMODITYICOLUMNSI INDUSTRY(ROWS) |  | FORESTRY PRODUCTS 2 | FISH \&FUR 3 | METAL <br> ORESECONC. | NON-METAL MINERALS 5 | COAL | NATURAL GAS |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PHARM. SOAP. TOILETSI | . 002932 | . 004281 | . 000597 | . 001943 | .003318 | . 002796 | . 001913 | . 014844 |
| OTH.CMEMICALS INDS2 | .028036 | .010897 | . 006113 | .023365 | . 026537 | . 0113186 | . 009553 | . 019000 |
| MISC. MFG. INO. 53 | .003071 | . 005259 | . 006385 | . 005682 | . 004606 | . 003418 | . 002930 | . 004376 |
| CONSTRUCTION 54 | . 030881 | .039710 | .058618 | .017670 | .017942 | . 014516 | . 033969 | .023791 |
| TRADE,WH.ERETAIL 55 | . 064576 | . 068250 | . 040271 | .034378 | .058933 | .047213 | .036293 | .247836 |
| TRANSPORT, STORAGESG | .053269 | . 062938 | . 049194 | .023920 | .041131 | .023005 | .035799 | .065353 |
| COMMUNICATIONS 57 | .009570 | .011562 | . 005847 | .005780 | .009607 | . 006871 | . 012674 | . 017460 |
| UTILITES 58 | .017570 | . 009987 | . 004934 | . 031321 | . 034635 | . 056404 | . 023539 | . 019854 |
| FIN.INSUR.RL.EST. 59 | . 046749 | . 104088 | . 029127 | . 022284 | . 031828 | . 040688 | .195240 | . 043194 |
| BUSINESS SERVICES60 | . 004658 | . 007984 | .003927 | .011099 | .011292 | .006230 | .029002 | .007741 |
| HOTEL. RESTAURANT 61 | .004088 | . 006346 | .002301 | .002837 | . 005359 | .003552 | . 007168 | .010859 |
| OTHER SERVICES 62 | . 008483 | .049791 | .004788 | . 009566 | . 025888 | . 022587 | . 016171 | . 013612 |
| OFFICE SUPPLIES 63 | . 004690 | . 006896 | . 002101 | . 003104 | . 004392 | .005336 | .008613 | . 007836 |
| AOVTG. ANO TRAVEL 64 | . 012054 | .019089 | .006600 | . 008594 | .016379 | . 010715 | .021981 | .033976 |
| OPERATING SUPPL. 65 | .051164 | .128532 | .011320 | .060998 | . 102482 | . 093286 | .058578 | .055212 |
| NON-COMP. IMPORTS 66 | .001758 | . 001138 | . 002543 | . 000476 | . 001162 | . 000618 | . 000523 | . 005151 |
| BAL. OF PAYMNT ADS67 | .000000 | . 000000 | .000000 | . 000000 | .000000 | .000000 | .000000 | .000000 |
| COMMODITY TAXES 68 | . 012925 | .015109 | .011313 | .006262 | .012235 | .006765 | .008391 | .012762 |
| SUBSIDIES 69 | -. 0111347 | -. 004335 | -. 005276 | -. 012285 | -. 003093 | -. 217339 | -. 002927 | -. 009902 |
| INDIR.TAXEGOV.SERTO | .061598 | .051142 | .016001 | .017979 | .031709 | . 013846 | . 050178 | .043928 |
| WAGES \& SALARIES 71 | .214992 | .523030 | .262402 | . 357343 | .408464 | .713768 | .286303 | .372063 |
| NET-INC.UNI NCORP. 72 | . 343110 | . 107186 | .349367 | . 015920 | .035706 | . 022199 | . 047396 | . 198116 |
| SURPLUS 73 | . 292825 | .231100 | .284888 | . 539350 | .432392 | . 405801 | . 546312 | .247688 |
| SUB TOTAL(66-73) 74 | .915859 | . 924352 | .921237 | .925043 | . 918575 | . 945659 | . 936176 | . 869906 |

TABLE 11 IMPACT TABLE WITH IMPORT LEAXAGES - AGGREGATION M (SEE CHAPTER 4)


TABLE II IMPACT TABLE WITH IMPORT LEAKAGFS - AGGREGATIUN M ISEF CHAPTER 4)

| COMMODITY(COL LMNS) INDUSTRY(ROWS) | DAIRY PRODUCTS 9 | FRUITEVEG. PRODUCTS 10 | FEED, FLDUR CEREALS 11 | BAKERY PRODUCTS 12 | $\begin{array}{r} \text { SUGAR. } \\ \text { CONFECT } \\ 13 \end{array}$ | OTHER FOOD PRIOUCIS 14 | $\begin{gathered} \text { SOFT } \\ \text { ORINK S } \\ 15 \end{gathered}$ | ALCUHOLIC BEVERAGES 16 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FURNITURE, FIXTHS. 26 | . 000406 | . 000579 | . 000501 | . 000359 | . 000303 | . 000484 | .000295 | . 000520 |
| OTHER WOOD IND. 27 | .003783 | . 002645 | . 002683 | . 001885 | . 001523 | .003993 | . 001284 | .007261 |
| PULPEPAPER MILLS 28 | .015243 | .024306 | . 017887 | .034161 | .030165 | . 024825 | . 014986 | . 025215 |
| OTHER PAPER IND. 29 | .029620 | . 050791 | . 031236 | . 071364 | . 056506 | .039929 | . 017639 | .043580 |
| PRINT.PUBLISHING 30 | .014381 | . 024336 | . 019118 | .021757 | .017062 | . 024610 | . 043712 | . 045979 |
| IRON, STEEL MILLS 31 | .007190 | .033892 | .007595 | . 005203 | . 004321 | .010301 | .011406 | .009303 |
| SMELT.REFINING 32 | .003510 | . 009424 | .003566 | .002905 | . 002468 | . 004131 | . 004051 | . 003905 |
| OTH.PRIMARY METAL33 | .003283 | . 008675 | .003309 | . 002968 | .002418 | .003854 | . 003592 | .003595 |
| STRUCTURAL METAL 34 | .001155 | . 002132 | . 001184 | .000879 | . 000718 | .001194 | . 000971 | . 001005 |
| METAL STAMPING 35 | .013262 | .113574 | . 009881 | . 006870 | .006321 | .019284 | .034055 | . 023585 |
| QTHER METAL MFG. 36 | . 008477 | .017505 | . 008159 | . 006556 | . 005520 | . 008644 | . 007556 | . 008188 |
| MACHINERY(NES)MFG37 | .006930 | .006196 | .006494 | .004733 | . 004110 | . 005954 | . 003492 | . 004647 |
| AIRCRAFTGPART MFG38 | .000835 | . 001001 | . 001044 | . 001058 | .000705 | .000985 | . 000955 | .001687 |
| MOTOR VEH. MFG. 39 | .000823 | . 000988 | .000927 | .000840 | . 000682 | .000790 | .000603 | .000721 |
| VFHICLE PARTS MFG40 | .002594 | .005597 | .002712 | . 002244 | .001912 | .002641 | .002559 | .002776 |
| OTH.TRANSP. EQUIP.41 | .000779 | .001087 | .001507 | . 000997 | .000710 | .002285 | .000732 | . 001088 |
| ELECT, APPLIANCE 42 | .000656 | .001602 | .000616 | .000500 | . 000424 | . 000680 | . 000660 | .000651 |
| ELEC.IND. EQUIP. 43 | .001010 | .001221 | .000986 | .000856 | . 000729 | . 000054 | .000732 | .000887 |
| COM.EQUIP.EWIRE 44 | .001947 | . 002356 | . 002087 | . 001780 | .001459 | .002475 | . 001500 | .001772 |
| OTH.ELEC.PROD.IND45 | .001976 | . 002020 | .001977 | .001747 | .001502 | .001860 | . 001438 | .001775 |
| CLAY,LIME,CEMENT 46 | .001979 | . 002864 | .002136 | .001764 | .001518 | .002158 | .001382 | . 002295 |
| NON-METAL MIN. 47 | . 004239 | . 020785 | . 002043 | .002005 | . 001624 | .006850 | .003139 | . 029607 |
| PETR. PROD. IND. 48 | . 039925 | .022133 | .034583 | .025931 | .015059 | . 025868 | . 016866 | .015077 |
| PLASTIC, SYN,RESIN49 | . 001859 | . 002197 | .001457 | .011530 | . 003543 | . 002914 | .001280 | .001854 |
| PAINTGVARNISH MFG50 | . 002283 | .003200 | . 002109 | .002203 | .001765 | .002221 | .001857 | .002210 |

TABLE 11 IMPACT TABLE WITH IMPORT LEAKAGES - AGGREGATIGN M (SEE GHAPTER 4 )

| COMMODITYICOLUMNS) INOUSTRY(ROWS) | DAIRY PROOUCTS 9 | FRUITEVEG. PRODUCTS 10 | FEEO, FLOUR CEREALS 11 | BAKERY PRODUCTS 12 | $\begin{array}{r} \text { SUGAR, } \\ \text { CONFECT } \\ 13 \end{array}$ | OTHER FOOD PRODUCIS 14 | $\begin{gathered} \text { SOFT } \\ \text { ORINKS } \\ 15 \end{gathered}$ | ALCOMOLIC BEVERAGES 16 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PHARM. SOAP, TOILETSI | . 005559 | . 007679 | . 014122 | . 009894 | . 005203 | . 028194 | . 002983 | . 003471 |
| OTH.CHEMICALS INOS2 | . 019506 | . 018759 | .019711 | .016026 | . 014388 | . 021724 | .020367 | .012650 |
| MISC. MFG. IND. 53 | . 004576 | . 005816 | . 005129 | . 005576 | .005129 | . 006089 | . 004080 | . 005143 |
| CONSTRUCTION 54 | . 024244 | .018910 | . 026846 | . 017270 | . 013696 | . 023550 | .013582 | . 014901 |
| TRADE, WH.ERETAIL 55 | . 070819 | . 084293 | . 086043 | . 084046 | .055801 | . 074483 | .048349 | .056402 |
| TRANSPORT, STORAGE56 | .056035 | .068368 | .154470 | . 075153 | . 053932 | . 081205 | . 045126 | .057597 |
| COMMUNICAIIONS 57 | . 013228 | . 017419 | . 016744 | . 016021 | .012002 | . 016849 | . 020150 | . 019297 |
| UTILITIES 58 | .021062 | .020611 | .022457 | .020139 | . 014994 | .017799 | .015273 | .021301 |
| FIN.INSUR.RL.EST. 59 | . 040826 | .036879 | . 039846 | . 040769 | .027156 | . 134098 | . 034465 | .026718 |
| BUSINESS SERVICES60 | . 007991 | .011486 | .008823 | . 017074 | . 009337 | . 012673 | . 015935 | .034802 |
| HOTEL, RESTAURANT 61 | . 012001 | . 022422 | . 016689 | . 018432 | .014419 | . 023594 | .040448 | .035498 |
| OTHER SERVICES 62 | . 017211 | . 020831 | .014316 | . 016744 | .011892 | .014875 | . 015196 | .016720 |
| OFFICE SUPPLIES 63 | .005870 | . 006592 | . 007373 | .006571 | . 004835 | . 006040 | . 006728 | .006340 |
| ADVTG. AND TRAVEL64 | . 037829 | .071541 | . 052287 | . 058544 | . 045837 | . 075418 | .130667 | .114419 |
| OPERATING SUPPL. 65 | . 060958 | .056777 | .054590 | . 054360 | . 047511 | .052136 | . 042356 | .056655 |
| NON-COMP.IMPORTS 66 | .005500 | .013705 | . 009941 | .015953 | .259639 | . 082940 | . 022211 | . 007289 |
| 8AL. OF PAYMNT ADJ67 | .000000 | . 000000 | . 000000 | .000000 | .000000 | . 000000 | . 000000 | . 000000 |
| COMMODITY TAXES 68 | .015442 | .010952 | . 014013 | . 016928 | . 007010 | . 011269 | . 014988 | . 011397 |
| SUBSIOIES 69 | -. 000847 | -. 006241 | -.022271 | -. 006684 | -. 004005 | -. 006931 | -. 003450 | -. 0004356 |
| INDIR. TAXEGOV. SER 70 | . 044728 | .032130 | .043362 | .029891 | .023418 | .030412 | .027253 | .032995 |
| HAGES E SALARIES 71 | .350084 | .432566 | .371530 | .516616 | . 353164 | .371736 | .488912 | . 395331 |
| NET - INC. UNI NCORP. 72 | . 201186 | .095603 | .177847 | . 092761 | .051293 | . 123321 | .043883 | .052774 |
| SURPLUS 73 | . 255515 | - 262097 | .249012 | .217517 | . 226100 | .245514 | .324004 | . 394002 |
| SU8 TOTAL (66-73) 76 | .863607 | .840813 | . 843434 | . 882982 | .916619 | .858262 | .918502 | . 889432 |



TABLE 11 (MPACT TABLE WITH IMPORT LEAKAGES - AGGREGATION M (SEE CHAPTER 4)

| COMMODITY(COLUMNS I (NDUSTRY(ROWS) | $\begin{gathered} \text { TOBACCD } \\ \text { PROOUCTS } \\ 17 \end{gathered}$ | $\begin{array}{r} \text { RUBBER } \\ \text { PRODUCTS } \\ 18 \end{array}$ | LEATHER PRODUCTS 19 | $\begin{gathered} \text { SYNTHETIE } \\ \text { TEXTILES } \\ 20 \end{gathered}$ | $\begin{gathered} \text { COTTON } \\ \text { YARN:CLOTH } \\ 21 \end{gathered}$ | KNITTED PRDOUCTS 22 | CLOTHING | $\begin{gathered} \text { OTHER } \\ \text { TEXTILES } \\ 24 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FURNI TURE, FIXTRS. 26 | .000532 | . 000464 | .000687 | . 000653 | . 000458 | . 000923 | . 001145 | . 008614 |
| DTHER WTID INO. 27 | .005710 | .001886 | . 004873 | . 001667 | . 001159 | .001515 | .001780 | .005879 |
| PULPEPAPER MILLS 28 | . 046046 | . 013131 | .019041 | . 031522 | .009958 | .017197 | . 012609 | .024738 |
| OTHER PAPER IND. 29 | .083877 | . 018604 | .021922 | . 014616 | . 012445 | .021078 | .015578 | .038209 |
| PRINT. PUBLISHING 30 | . 032111 | .019630 | . 023098 | . 010954 | .007365 | .014391 | . 014892 | . 018225 |
| IRON, Steel mills 31 | . 005346 | .007572 | . 0003338 | . 004443 | . 002662 | .003100 | .003211 | .005391 |
| SMELT.REFINING 32 | . 003275 | . 011668 | . 004626 | .005182 | . 002472 | . 002922 | . 002990 | .006187 |
| DTH.PRIMARY METAL33 | . 003400 | . 004034 | .003416 | . 002674 | .001683 | .002143 | .002365 | . 004691 |
| STRUCTURAL METAL 34 | . 001055 | .001214 | .001102 | . 000965 | .000592 | . 000733 | .000820 | . 001338 |
| METAL STAMPING 35 | . 006297 | . 005404 | . 004439 | .003251 | . 001603 | . 001985 | .002233 | .003629 |
| OTHER METAL MFG. 36 | .007303 | . 014842 | .013034 | . 006183 | . 004342 | .005046 | .004893 | .009712 |
| MACHINERYINESIMFG37 | . 006043 | .004711 | .006690 | . 004794 | .003359 | . 003773 | . 003451 | . 004756 |
| AIRCRAFTEPART MFG38 | .001054 | .001793 | . 001218 | .000928 | .000510 | . 000774 | .000776 | .000901 |
| MATAR VEH. MFG. 39 | .000813 | .000703 | .001083 | .000668 | .000541 | .000635 | .000789 | .000857 |
| VEHICLE PARTS MFG40 | . 002179 | . 005451 | . 002585 | . 002207 | .001530 | .001727 | . 001584 | . 002266 |
| DTH.TRANSP.EQUIP.41 | . 000773 | .000663 | . 000784 | . 000558 | .000420 | . 000545 | . 000670 | .000659 |
| ELECT.APPLIANCE 42 | . 000566 | . 000759 | .000826 | .000499 | .001361 | . 000461 | .000510 | .000660 |
| ELEC.IND. EQUIP. 43 | . 000940 | .000915 | .001141 | .000868 | . 000655 | . 000714 | .000725 | . 000968 |
| COM.EQUIP. EWIRE 44 | . 001879 | . 002275 | . 002254 | .001639 | .001191 | . 001399 | .001550 | . 001881 |
| OTH.ELEC.PROD.IND45 | . 001923 | .002189 | .002438 | .002183 | . 001388 | . 001591 | . 001646 | . 002119 |
| CLAY,LIME, CEMENT 46 | . 002129 | . 001587 | . 001805 | .001533 | .001002 | .001227 | . 001188 | .003130 |
| NDN-METAL MIN. 47 | . 001384 | . 004635 | . 001740 | .002613 | . 000954 | .001313 | .001307 | .002640 |
| PETR. PROD. IND. 48 | .026774 | .013988 | . 012348 | .018761 | .008119 | . 010144 | . 008983 | .013897 |
| PLASTIC.SYN.RESIN49 | .001867 | .009359 | .003004 | .010579 | .002219 | .003436 | .003216 | . 007082 |
| PAINTEVARNISH MFG50 | . 002051 | . 006014 | .003600 | .003967 | .001802 | .002113 | .001709 | .003017 |

TABLE 11 IMPACT IABLE WITH IMPORT LEAKAGES - AGGREGATION M ISEE CHAPTER 4 I


TABLE 11 IMPACT TABLE WITH IMPORT LEAKAGES - AGGREGATION M (SEE CHAPTER 4 )


TABLE 11 IMPACT TABLE WITH IMPORT LEAKAGES - AGGREGATION M (SEE CHAPTER 41


TABLE 11 IMPACT TABLE WITH IMPGRT LEAKAGES - AGGREGATION M (SEE CHAPTER \&)

| COMMOOITYICOLUMNS: (NOUSTRYIROWS: | SAWMILL <br> PROOUCTS <br> 25 | FURNITURE, FIXTURES 26 | OTHER WOOO PROOUCTS 27 | $\begin{gathered} \text { PULP E } \\ \text { PAPER } \\ 28 \end{gathered}$ | OTHER PAPER PROOUCTS 29 | $\begin{gathered} \text { PRINTEO } \\ \text { MATTER } \\ 30 \end{gathered}$ | STEEL MILL PROOUCTS 31 | SMELT.EREF. PROOUCTS 32 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PHARM. SOAP, TOILET5: | . 003405 | . 002179 | . 002823 | . 002954 | . 002857 | . 002010 | .002810 | .001583 |
| OTH.CHEMICALS INOSZ | .011515 | .019240 | .018726 | . 028354 | . 036629 | . 021421 | .018518 | .019390 |
| MISC. MFG. INO. 53 | .005057 | .028528 | . 007755 | . 004493 | . 029940 | . 004404 | . 004699 | . DOR804 |
| CONSTRUCTION 54 | . 228425 | .014062 | .022734 | . 021471 | .019057 | .013508 | .016105 | . 022551 |
| TRAOE, WH.ERETAIL 55 | . 080414 | . 088556 | .111437 | . 053420 | . 067474 | . 038341 | . 064303 | . 034087 |
| TRANSPORT, STORAGES6 | .077392 | .049849 | . 082688 | . 062356 | . 069930 | . 042602 | . 056507 | .039963 |
| COMMUNICATIONS 57 | .012372 | .016301 | .016117 | .009275 | . 018354 | . 030209 | . 009684 | . 006918 |
| UTILITES 58 | . 019894 | .018602 | .023080 | .057583 | .031050 | . 020047 | . 044323 | . 054237 |
| FIN.INSUR.RL.EST. 59 | .061398 | . 038124 | .053427 | .040762 | .042375 | .036059 | .020093 | .020747 |
| BUSINESS SERVICESGO | .007878 | .010267 | .007808 | .007464 | .009172 | . 008860 | .006783 | .011325 |
| MOTEL, RESTAURANT 61 | . 006390 | .013201 | . 009424 | . 005764 | . 011644 | . 015287 | . 005301 | .003723 |
| OTHER SERVICES 62 | . 029891 | .014537 | .021288 | .021913 | . 019452 | .026239 | .014633 | . 009058 |
| OFFICE SUPPLIES 63 | . 006373 | . 007355 | . 007344 | . 004850 | .007258 | . 009004 | .004427 | . 003550 |
| AOVTG. ANO TRAVELG4 | .019158 | .041557 | .028857 | .017590 | . 036589 | . 048915 | . 016056 | .011383 |
| OPERATING SUPPL. 65 | .106331 | .049965 | .079413 | . 084417 | .067160 | . 048331 | . 095815 | .047081 |
| NON-COMP.IMPORTS 66 | .001119 | . 005178 | . 001135 | . 001131 | . 001681 | .001027 | .000800 | .000470 |
| BAL OF PAYMNT AOJ67 | .000000 | . 000000 | . 000000 | .000000 | .000000 | . 000000 | . 000000 | .000000 |
| COMMOOITY TAXES 68 | . 011996 | . 007541 | .010605 | . 008360 | .008704 | . 008472 | . 007614 | .005703 |
| SUBSIOLES 69 | -. 004361 | -. 003940 | -. 004976 | -. 004224 | $-.004492$ | -. 003808 | -. 009009 | -.007949 |
| IMOIR. TAXEGOV. SER 70 | .034593 | . 024717 | .030110 | . 033769 | . 033267 | . 024488 | .020930 | . 023469 |
| WAGES E SALARIES 7I | .593302 | . 568380 | . 590991 | .457296 | . 506861 | . 602195 | .459962 | - 388241 |
| NET-INC.UNINCORP. 72 | . 070019 | . 047035 | . 057834 | . 038518 | . 033015 | . 039318 | .019973 | .015991 |
| SURPLUS 13 | . 213540 | . 205345 | .214654 | .374605 | .279914 | .243594 | .345764 | .382871 |
| SUP TOTAL (66-73) 74 | .920207 | . 854256 | .900353 | . 909456 | .858950 | .915285 | .845973 | .808796 |

TABLE II IMPACT TABLE WITH [MPORT LEAKAGES - AGGREGATIDN M (SEE CHAPTER 4)


TABLE 11 IMPACT TABLE WITH [MPORT LEAKAGES - AGGREGATION M [SEE [HAPTER \&)

| COMMODITY(COLUMNS) (NDUSTRY(ROWS) | OTHER PRIMARY <br> METAL <br> 33 | STRUC TURAL METAL 34 | METAL <br> STAMPINGS <br> 35 | OTHER METAL PRODUCTS 36 | $\begin{gathered} \text { MACHINERY } \\ \text { (N.E.S.) } \\ 37 \end{gathered}$ | AIRCRAFT \& PARTS 38 | MOTOR <br> VEHICLES <br> 39 | VEHICLE PARTS 40 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FURNITURE, FIXTRS. 26 | .001002 | . 000635 | .001952 | .003936 | .002210 | . 000645 | .001673 | .000773 |
| OTHER WOOD INO. 27 | . 003394 | . 002688 | . 005839 | .005405 | .003647 | . 003251 | . 002038 | . 002627 |
| PULPEPAPER MILLS 28 | .007159 | . 007592 | . 008078 | .008795 | . 014906 | . 006402 | .007513 | . 010529 |
| OTHER PAPER IND. 29 | .005345 | . 009325 | .011393 | .009298 | . 00628 t | .005167 | .008279 | .017928 |
| PRINT. PUBLISHING 30 | .008765 | .009992 | .009622 | . 015745 | . 016419 | .012909 | .014724 | . 009525 |
| IRON, STEEL MILLS 31 | .162403 | .293761 | .256461 | .181041 | .090309 | . 027619 | .037465 | . 112087 |
| SMELT.REFINING 32 | . 354895 | . 045393 | .057260 | . 062678 | . 041923 | .024285 | .016907 | . 044170 |
| OTH.PRIMARY METAL33 | .920635 | . 022192 | . 052814 | . 058920 | .043728 | . 032078 | . 025383 | . 070315 |
| STRUCTURAL METAL 34 | .009192 | .813129 | .011160 | .031936 | . 020248 | .007889 | .003075 | . 005118 |
| METAL STAMPING 35 | .020180 | . 058765 | .944459 | .072715 | .033943 | . 014888 | .014609 | . 028667 |
| OTHER METAL MFG. 36 | . 085629 | .165191 | .097506 | .816103 | .132910 | . 042566 | . 040177 | . 086727 |
| MACHINERY(NESIMFG 37 | .015397 | .034035 | .011336 | . 055387 | .784864 | .022920 | . 008461 | .013853 |
| AIRCRAFTEPART MFG 38 | . 001299 | . 001059 | .001031 | .011446 | . 004041 | 1.018865 | . 001354 | . 001237 |
| MOTOR VEH. MFG. 39 | .001112 | .003387 | .001402 | .006358 | . 008447 | .001180 | 1.002953 | .077868 |
| VEHILLE PARTS MFG40 | . 021525 | . 015542 | .030769 | .019097 | . 016158 | . 011797 | - 182650 | . 944866 |
| OTH. TRANSP. EQUIP. 41 | .004587 | .005269 | . 002111 | .009632 | .014040 | . 002147 | . 009924 | .002586 |
| ELECT.APPLIANCE 42 | . 002588 | . 005113 | .009842 | .031272 | . 016800 | .003562 | .003868 | . 005250 |
| ELEC.IND. EQUIP. 43 | .001873 | . 006129 | . 003581 | . 016041 | .018115 | . 002878 | . 004152 | . 008371 |
| COM.EOUIP.EWIRE 44 | .014000 | . 007167 | . 005678 | .029350 | . 017673 | . 024714 | . 008121 | .008450 |
| OTH.ELEC.PROO.1N045 | .003736 | . 007198 | .003032 | .012757 | .006728 | . 004465 | .008437 | . 005111 |
| CLAY,LIME, CEMENT 46 | . 007181 | .010518 | . 006553 | . 006153 | .005351 | .002245 | . 002812 | .006510 |
| NON-METAL M\&N. 47 | .002118 | .002581 | .004830 | .005710 | .002810 | . 003961 | . 014528 | . 004852 |
| PETR. PROO. IND. 48 | . 014408 | .011602 | .012027 | . 011198 | .009728 | .010692 | .008113 | .010332 |
| PLASTIC, SYN.RESIN49 | . 001544 | .001420 | . 004068 | .003261 | . 002118 | .004312 | . 002423 | .003472 |
| PAINTEVARNISH MFG50 | .003028 | .005091 | .011805 | . 005265 | . 004444 | .003020 | .011417 | .004213 |

TABLE II IMPACT TABLE WITH IMPORT LEAKAGES - AGGREGATION M (SEE CHAPTER 4)


TABLE 11 [MPACT TABLE WITH IMPORT LEAKAGES - AGGREGATION M (SEE CHAPTER 4)


TABLE 11 IMPACT TABLE WITH IMPORT LEAKAGES - AGGREGATION M (SEE CHAPTER \&)

| COMMOOITYICOLUMNS I INOUSTRY(ROWS) | OTHER TRANSPORT EQUIP. 41 | ELECTRICAL APPLI ANCES 42 | ELECTRIC INO.EQUIP. | COM.EQUIP. <br> INCL. WIRE <br> 44 | OTHER ELEC. PROOUCTS 45 | ClAY, IIME. CEMENT 46 | ALL OTHER NON-METALLIC 47 | PETROLEUM PRODUCTS 48 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FURNITURE, FIXTRS. 26 | .003267 | .007352 | .004227 | . 001398 | . 020920 | . 000475 | . 001893 | . 000314 |
| OTHER WOOO INO, 27 | . 006385 | . 004157 | . 003215 | .002531 | .003123 | . 002001 | . 004388 | . 002022 |
| PULPEPAPER MILLS 28 | . 006138 | .012873 | . 010414 | .010503 | .012306 | . 021266 | .018109 | .004198 |
| OTHER PAPER INO. 29 | . 004559 | .020154 | .007927 | .007757 | . 013884 | . 016759 | .030155 | .005720 |
| PRINT. PUBLISHING 30 | .009885 | .019858 | . 014926 | .012532 | .020075 | .013288 | . 012467 | .007383 |
| IRON, STEEL MILLS 31 | .100604 | .102613 | .063092 | .034833 | .045079 | .013471 | . 009788 | .009940 |
| SMELT.REFINING 3 ? | . 042245 | .034741 | .040608 | .071919 | .046367 | .010065 | . 015738 | .006337 |
| OTH.PRIMARY METAL33 | .037727 | . 040163 | . 041859 | .106132 | .043862 | . 004748 | . 006162 | .004141 |
| STRUCTURAL METAL 34 | . 007679 | .010013 | .003248 | .002809 | .002866 | . 001758 | .001512 | .001345 |
| METAL STAMPING 35 | .012389 | . 055965 | .035347 | .016140 | . 014235 | . 003658 | .010565 | . 007628 |
| OTHER METAL MFG. 36 | . 089209 | . 099352 | . 046040 | .024578 | .029133 | . 018448 | .021028 | . 006851 |
| MACHINERYINESIMFG3T | . 042258 | . 048963 | .019867 | .007287 | .006640 | .008766 | .006936 | . 005844 |
| AIRCRAFTEPART MFG38 | .002902 | . 002234 | .001392 | .006613 | .001833 | .001058 | .002863 | . 001006 |
| MOTOR VEH. MFG. 39 | . 001336 | . 001923 | . 004284 | .000813 | .005373 | . 001181 | .000931 | . 000528 |
| VEHICLE PARTS MFG40 | .007719 | .010091 | .023558 | . 004959 | . 040514 | .004158 | .005876 | . 002187 |
| OTH.TRANSP.EQUIP.41 | .970025 | . 002146 | . 001597 | .001093 | .001203 | . 001230 | .000817 | .001107 |
| ELECT.APPLIANCE 42 | . 002887 | .965545 | .017271 | .003851 | . 007967 | .001095 | .000816 | .000525 |
| ELEC.INO. EQUIP. 43 | . 005190 | . 039605 | .880063 | .027663 | . 056000 | .003041 | .001425 | .000877 |
| COM.EQUIP.EWIRE 44 | .018337 | .016160 | .086150 | 1.021911 | .162681 | . 003218 | . 002611 | .001789 |
| OTH.ELEC.PROO. 1 NO45 | .007466 | .010329 | .055162 | .035576 | .905010 | .004560 | .003955 | . 001824 |
| CLAY, LIME, CEMENT 46 | . 004385 | .004117 | .010195 | .003226 | . 003764 | 1.082536 | . 029367 | . 002671 |
| NON-METAL MIN. 47 | .007583 | .003930 | .004482 | . 006805 | .018738 | . 013465 | 1.003787 | .001113 |
| PETR. PROO. INO. 48 | .010793 | .010426 | .008917 | .008035 | . 009525 | .025957 | . 020933 | .998973 |
| PLASTIC, SYN.RESIN49 | .002672 | . 003231 | .004904 | .013037 | . 011345 | . 001459 | . 006252 | .002045 |
| PAINTEVARNISH MFG50 | .006136 | .009378 | .005173 | .005329 | . 006300 | .005369 | .004307 | .002209 |

TABLE 11 IMPACT TABLE WITH IMPORT LEAKAGES - AGGREGATION M (SEE CHAPTER 4 )

| COMMODITY(COLUMNS) (NDUSTRY(ROWS) | OTHER TRANSPORT EQIIP. 41 | ELECTRICAL APPLI ANCES 42 | $\begin{array}{r} \text { ELECTRIC } \\ \text { IND. EQUIP } \\ 43 \end{array}$ | COM.EQUIP. INCL. WIRE 44 | OTHER ELEC. PRODUCTS 45 | CLAY, LIME, <br> CEMENT 46 | ALL OYHER NON-METALLIC 47 | PETROLEUM PRODUCTS 48 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PMARM.SOAP, TOILETSI | . 001588 | .002839 | . 001987 | . 001913 | .002031 | . 003637 | . 003133 | . 001780 |
| OTH.CHEMICALS INOSZ | . 009688 | .014417 | .011789 | .018816 | . 019497 | .020247 | . 037067 | . 042549 |
| MISC. MFG. IND. 53 | . 018019 | . 026338 | . 051980 | . 016165 | . 017518 | .007338 | . 010178 | . 004312 |
| CONSTRUCTION 54 | . 013984 | . 013437 | .012009 | .013247 | .013413 | .020217 | .017918 | .040805 |
| TRADE,WH.ERETAIL SS | . 057225 | . 065489 | . 052393 | . 046989 | . 058231 | . 086739 | . 062074 | . 033499 |
| TRANSPORT, STORAGES6 | . 038974 | . 045898 | .035667 | . 036234 | .051904 | .098301 | .055737 | .109495 |
| COMMUNICATIONS 57 | .011990 | . 018888 | .017352 | .015810 | . 019034 | . 015462 | . 013564 | . 009157 |
| UTHLITES 58 | .024861 | .022769 | . 018304 | .018082 | .018309 | . 043027 | .063098 | . 0222431 |
| FIN. INSUR.RL.EST. S9 | . 028580 | . 034095 | . 034359 | .041952 | .041138 | .032821 | .034657 | .086181 |
| BUSINESS SERVICESGO | . 006046 | .012255 | . 011249 | . 007384 | .011028 | .009630 | .008077 | .012990 |
| HOTEL, RESTAURANT 61 | .007285 | . 017806 | . 011240 | .008723 | .017940 | .010403 | .009799 | . 004898 |
| OTMER SERVICES 62 | .011476 | .016313 | .013483 | . 013125 | . 014561 | .028717 | .016083 | .011641 |
| OFFICE SUPPLIES 63 | . 006468 | . 007343 | .009522 | . 009125 | . 008186 | . 006954 | .005673 | .005817 |
| ADVIG. AND TRAVEL64 | . 022690 | . 056793 | .035622 | .027459 | . 057286 | .032221 | .030707 | . 014524 |
| OPERATING SUPPL. 65 | .043727 | .050273 | . 057355 | .050149 | . 049129 | .116359 | . 089234 | .043672 |
| NON-COMP.IMPORTS 66 | .001726 | .001842 | . 001368 | . 001664 | . 002209 | .001189 | . 004650 | .000538 |
| BAL. OF PAYMNT ADJ67 | .000000 | .000000 | .000000 | .000000 | .000000 | . 000000 | .000000 | . 000000 |
| COMMODITY TAXES 68 | . 006975 | . 007296 | .006540 | . 006685 | . 007323 | .014700 | . 007952 | .007871 |
| SUBSIDIES 69 | -. 003465 | -. 004141 | -. 003450 | -. 003226 | -. 003936 | -. 006288 | -. 003807 | -. 004471 |
| INDIR.TAXEGOV.SER 70 | . 022027 | .026023 | . 025662 | .021142 | . 022686 | . 031620 | . 027105 | . 030990 |
| WAGES G SALARTES 71 | .627605 | .531428 | .601955 | .574519 | .528597 | .477954 | .532302 | . 262005 |
| NET-INC.UNINEORP. 72 | . 022658 | . 026358 | . 022398 | . 020222 | . 025795 | . 036934 | .024618 | .030294 |
| SURPLUS 73 | .176671 | . 203164 | .192009 | . 228254 | .236394 | .314793 | .267963 | . 389475 |
| SUB TOTAL166-731 74 | .854198 | .791971 | . 846481 | . 849259 | .819067 | .870902 | .860783 | .716703 |

TABLE Il IMPACT TABLE WITH IMPORT LEAKAGES - agGREGATION M (SEE GHAPTER 4 )

| COMMODITY(COLUMNS INDUSTRY(ROWS) |  | PLASTIC. <br> SYN. RESINS |  | PHARM. SOAP. TOILET 51 | OTH. CHEMICAL ProDut 52 | MISC. MFG. PRODUCTS 53 | CONSTRUCTION 54 | TRADE, WH. \& RETAIL | TRANSPORT AND STORAGE 56 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AGRICULTURE | 1 | .010397 | . 014675 | . 044026 | . 009759 | . 015026 | . 009180 | . 040095 | .006193 |
| FORESTRY | 2 | .011774 | . 005733 | . 009659 | . 005675 | .013631 | . 021146 | .006775 | .005974 |
| FISHING HUNTING | 3 | . 001604 | .003337 | .007801 | . 001563 | .000513 | . 000272 | .000612 | .000195 |
| METAL MINES | 4 | . 006550 | . 007636 | . 004581 | . 015977 | .024033 | . 012494 | . 002451 | . 002349 |
| NON-METAL MINES | 5 | . 006166 | . 008196 | .003570 | .017958 | .002402 | .010058 | . 000745 | . 001099 |
| COAL MINES | 6 | . 002488 | .001520 | . 001392 | . 004646 | . 001506 | .001511 | . 000438 | .000680 |
| PETROLEUM MAT.GAS | 7 | . 018018 | . 016869 | . 007078 | . 025592 | . 005914 | . 009014 | .009017 | . 015516 |
| MEAT, POULTRY PROC |  | .003080 | . 004142 | .037815 | . 003974 | . 008689 | .001333 | . 004861 | .001447 |
| DAIRY FACTORIES | 9 | . 002224 | . 004028 | .005204 | .001663 | . 001958 | .001121 | .005560 | .001157 |
| FRUIT, VEG. CAMNERS |  | .000681 | .001132 | .002277 | . 000544 | . 000660 | .000337 | . 001364 | .000376 |
| FEED.FLR.CEREAL I |  | .002042 | . 002950 | . 009211 | .002203 | .002075 | . 001453 | . 006767 | . 001188 |
| BISCUIT, 8AKERIES |  | .000812 | . 001264 | .002347 | .000616 | .000973 | .000501 | . 002051 | .000570 |
| SUGAR, CONFECT. INOL |  | .000603 | .001057 | . 004205 | . 000553 | .000473 | . 000216 | .000860 | . 000224 |
| OTHER FOOD IND. |  | .013162 | . 028025 | . 066329 | .012858 | .003368 | .001419 | .004215 | .001022 |
| SOFT DRINK MFG | 15 | .000460 | .000777 | .001473 | .000390 | .000566 | . 000254 | .000797 | . 000294 |
| ALCOHOLIC 8EV.MFG |  | .002486 | .003610 | .008132 | .002592 | . 001628 | .000622 | .001690 | .000555 |
| TOBACCO PROD.IND. 17 |  | .000026 | .000028 | .000053 | . 000024 | . 000029 | .000037 | .000363 | . 000022 |
| RUBEER PROD.MFG. |  | .023343 | . 015495 | .003938 | .008349 | .018150 | . 006498 | .005778 | . 007704 |
| LEATHER PROD.MFG. |  | .000872 | . 000502 | .000739 | .000308 | . 006373 | . 000345 | .000788 | .000293 |
| SYN.TEXTILE MILLS20 |  | .025029 | . 002188 | . 002495 | .001975 | . 008680 | .002044 | .003017 | . 000667 |
| COTTON, YARN, CLOTH2 |  | .002850 | . 001801 | . 005318 | .001455 | . 006941 | .001522 | . 002324 | .001279 |
| KNITTING MILLS | 22 | .000236 | .000077 | . 000145 | .000077 | .000702 | . 000140 | . 000300 | . 000062 |
| CLOTHING IND. | 23 | . 000741 | . 000421 | .000658 | .000397 | . 002698 | .000532 | .003185 | . 000376 |
| OTHER TEXTILE IND 24 |  | . 005266 | . 002436 | . 009489 | .003132 | . 016446 | . 005366 | . 004267 | .001833 |
| SAWMILLS | 25 | .002590 | . 001546 | . 002217 | . 002080 | .010388 | . 026777 | .003057 | .001945 |

TABLE 11 IMPACT TABLE WITH IMPORT LEAKAGES - AGGREGATION M (SEE CHAPTER 4)

| COMMODITY(COL UMNS ) (NDUSTRY(ROWS) | PLASTIC. <br> SYN. RESINS | $\begin{gathered} \text { PAINT \& } \\ \text { VARNISH } \\ 50 \end{gathered}$ | PHARM. $\begin{gathered} \text { SOAP. TOILEI } \\ 51 \end{gathered}$ | OTH.CHEMICAL PRODUCTS 52 | MISC. MFG. PRODUCTS 53 | CONSTRUCTION | TRADE, WH= E RETAIL | TRANSPDRT AND STORAGE 56 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FURMITURE F IXTRS. 26 | . 000438 | .000396 | .000566 | .000486 | . 007189 | .003700 | . 000909 | .000495 |
| DTHER WOOD INO. 27 | .003588 | . 002225 | . 002509 | . 005151 | . 014704 | .034817 | . 003043 | . 002406 |
| PULPGPAPER MILLS 28 | .045001 | .017943 | .031735 | . 015911 | .031331 | . 010983 | . 013159 | . 004469 |
| OTHER PAPER IND. 29 | .034780 | . 023332 | .049832 | . 021893 | .037897 | . 011970 | . 014276 | . 003915 |
| PRINT.PU8LISHING 30 | . 015594 | .030508 | .058212 | . 011919 | .027109 | .009299 | .028045 | .011833 |
| IRON, STEEL MILLS 31 | . 009596 | .015901 | .009752 | . 01.5174 | .028535 | .043709 | . 006070 | . 006950 |
| SMELT.REFINING 32 | .013510 | . 014583 | . 007405 | . 036812 | . 034331 | .021916 | .003678 | .003441 |
| OTH.PRIMARY METAL33 | .011699 | .005909 | .004774 | . 009244 | . 026936 | . 037218 | . 004068 | . 004319 |
| STRUCTURAL METAL 34 | .001222 | . 001322 | .001318 | . 001225 | .003357 | .023310 | .001496 | . 001824 |
| METAL STAMPING 35 | .008916 | . 039696 | .013798 | . 012174 | .027533 | . 018090 | .004613 | . 002490 |
| OTHER METAL MFG. 36 | .009729 | . 012604 | .019952 | . 008288 | . 026272 | .060185 | .009709 | . 008911 |
| MACHINERY(NESIMFG37 | . 005446 | . 004442 | .005743 | .004901 | .011683 | .013723 | .009365 | .005031 |
| AIRCRAFTEPART MFG38 | .001552 | . 001749 | .001994 | .005872 | . 007856 | . 001889 | .001835 | . 002649 |
| MOTOR VEH. MFG. 39 | . 000800 | . 000731 | .000806 | .000710 | .001418 | . 001571 | .008915 | .001015 |
| VEHICLE PARTS MFG40 | . 002754 | . 003083 | .002513 | . 003234 | . 008524 | . 005030 | .003857 | .005716 |
| OTH.TRANSP.EOUIP.41 | .000803 | .000944 | . 001214 | .000786 | . 001854 | . 001765 | .001338 | .007396 |
| ELECT.APPLIANCE 42 | . 000664 | . 000875 | . 001482 | .000653 | . 004492 | . 003769 | .000999 | .000598 |
| ELEC.IND. EQUIP. 43 | .001087 | .000907 | .001040 | .001081 | . 006004 | .007006 | . 002165 | . 0011135 |
| COM.EQUIP.EWIRE 44 | . 002190 | .001984 | . 002163 | .002799 | .007616 | .019419 | .008122 | . 002688 |
| OTM.ELEC.PROO.INO45 | .002965 | .002574 | .002295 | .007476 | .020233 | .012675 | .003670 | .002733 |
| CLAY,LIME, CEMENT 46 | .004070 | .008155 | . 002552 | . 004374 | . 004900 | . 053651 | .002446 | .003424 |
| NON-METAL MIN. 47 | . 002278 | .018509 | .021473 | .004273 | . 012654 | .011178 | .002237 | .001613 |
| PETR. PRDD. IND. 48 | .043674 | .043102 | . 017223 | .057329 | .013708 | . 023051 | . 023554 | . 041837 |
| PLASTIC, SYN.RESIN49 | .795709 | . 048654 | . 004175 | .021543 | .036405 | . 002116 | .002200 | .000699 |
| Paintevarnish mfg 50 | . 019428 | .953122 | . 002344 | . 006900 | .005956 | .007635 | . 002201 | .002011 |

TABLE 11 IMPACT TABLE HITH IMPORT LEAKAGES - AGGREGATION M (SEE CHAPTER 4)

| COMMODITYICOL UMNSI INDUSTRY(ROWS) |  | PLASTIC. <br> SYN. RESINS $49$ | PAINT E <br> VARNISH <br> 50 | $\begin{array}{r} \text { PHARM. } \\ \text { SOAP, IOILET } \\ 51 \end{array}$ | OTH.CHEMICAL PRODUCTS 52 | MISC. MFG. PROOUCTS 53 | CONSTRUCTION $54$ | $\begin{gathered} \text { TRADE, } \\ \text { RETAIL } \\ 55 \end{gathered}$ | TRANSPORT AND StORAGE 56 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PHARM. SOAP, TOILETS |  | .013644 | .014204 | .931798 | . 014983 | . 008163 | . 001894 | .003928 | . 001661 |
| OTH.CHEMICALS INDS |  | .323832 | .188934 | . 095858 | 1.053377 | .048372 | .011966 | .011273 | . 006559 |
| MISC. MFG. IND. | 53 | . 013181 | .006751 | .023932 | .011185 | .869775 | . 010202 | .009623 | . 004037 |
| CONSTRUCTION | 54. | .024282 | .016776 | .016633 | . 022668 | . 014687 | 1.012032 | .018210 | .057595 |
| TRAOE, WH.ERETAIL |  | .058420 | .057798 | .069570 | . 054240 | .077991 | .094806 | . 969739 | .065892 |
| TRANSPORT, STORAGE |  | . 060935 | . 064398 | .067605 | . 061256 | . 043789 | .064575 | . 051058 | 1.075616 |
| COMMUNICATIONS | 57 | . 016701 | .022625 | .031821 | . 012611 | . 019150 | .011501 | .034272 | . 018374 |
| UTILITIES | 58 | .043187 | . 023314 | . 018928 | .059667 | . 019944 | . 013691 | .021861 | .010302 |
| FIN.INSUR.RL.EST. 5 |  | . 032769 | .039905 | . 037584 | .033035 | .041190 | . 030584 | .068913 | .036857 |
| BUSINESS SERVICESGO |  | .009016 | .016401 | .029378 | .007922 | .010090 | .019098 | .013222 | .007172 |
| MOTEL, RESTAURANT 6 |  | .013462 | .029792 | .061005 | . 009049 | .018835 | .007067 | .021460 | .009000 |
| OTHER SERVICES 6 | 62 | . 016730 | .022807 | .029705 | .018271 | . 016229 | .027276 | .018313 | .017100 |
| OFFICE SUPPLIES 6 | 63 | . 006210 | .008526 | .008589 | .006237 | .016766 | .005227 | . 017049 | . 009787 |
| ADVTG. AND TRAVELG |  | . 042624 | .095737 | .197238 | .028336 | .060183 | .021372 | .057669 | .021271 |
| OPERATING SUPPL. 6 |  | . 066351 | .043783 | . 045154 | .055975 | .063661 | .035616 | .042556 | .048310 |
| NON-COMP.IMPORTS 66 |  | . 003631 | . 004126 | .008131 | .002959 | . 004532 | .001042 | . 002199 | .000970 |
| BAL. OF PAYMNT ADJ6 |  | . 000000 | .000000 | .000000 | .000000 | .000000 | .000000 | .000000 | .000000 |
| COMMODITY TAXES 6 |  | .007560 | . 008485 | . 013435 | . 006925 | . 009129 | .035602 | .017436 | .029732 |
| SUBSIDIES | 69 | -.004166 | -. 004432 | -. 005398 | -. 004594 | -. 004016 | $-.004103$ | -. 014503 | -. 031369 |
| INDIR.TAXEGOV.SER 7 |  | . 026029 | . 026762 | .027992 | . 027392 | . 023941 | .025080 | . 039338 | . 040167 |
| WAGES \& SALARIES 7 |  | .413425 | .476848 | .472895 | .402297 | .524582 | .561987 | .527230 | . 544618 |
| NET-INC. UNINCORP. |  | . 025576 | . 034589 | .056277 | . 024688 | . 040654 | .068172 | .123897 | .050162 |
| SURPLUS | 73 | .344226 | .257691 | . 275484 | . 381647 | .245227 | . 168378 | .246052 | .304133 |
| SUB TOTALI66-731 | 74 | .816281 | . 804069 | . 848816 | . 841314 | . 844050 | .856157 | . 941649 | . 938414 |

TABLE II IMPACT TABLE WITH IMPOAT LEAKAGES - AGGREGATION M ISEE CHAPTER 4)

| COMMDDITYICOLUMNS [NOUSTRY(ROWS | $\begin{gathered} \text { COMMUNI - } \\ \text { CATIDNS } \\ 57 \end{gathered}$ | UTILITIES 58 | FINANCE,INS. real estate 59 | BUSINESS <br> SERVICES <br> 60 | ACCDMMODATION. MEALS 61 | $\begin{gathered} \text { OTHER } \\ \text { SERVICES } \\ 62 \end{gathered}$ | $\begin{array}{r} \text { OFFICE } \\ \text { SUPPLIES } \\ 63 \end{array}$ | $\begin{gathered} \text { ADVTG. AND } \\ \text { TRAVEL } \\ 64 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AGRICULTURE I | . 002683 | . 003286 | . 036947 | .004572 | .114737 | . 009112 | . 011245 | . 044890 |
| FORESTRY 2 | .002051 | .003662 | .003147 | . 002087 | . 021818 | . 003981 | .031394 | .019124 |
| FISHING HUNTING 3 | .000175 | .000086 | . 000189 | . 000262 | .003613 | . 003252 | .000317 | .001582 |
| METAL MINES 4 | . 001153 | .005987 | .003999 | . 001357 | .003570 | . 003931 | .003426 | . 002613 |
| NON-METAL MINES 5 | .000516 | . 000764 | .001128 | .000345 | .001473 | . 001020 | . 001547 | .001112 |
| COAL MINES 6 | .000170 | . 004689 | .000267 | .000196 | .000455 | .000496 | .001030 | . 000589 |
| PETRDLEUM NAT.GAS 7 | . 002388 | . 005366 | . 005276 | . 002481 | .006910 | . 005387 | .005742 | .005784 |
| MEAT, POULTRY PROC. 8 | . 000622 | . 000648 | .001247 | . 001480 | .064906 | . 002294 | . 002362 | . 023094 |
| DAIRY FACTDRIES 9 | . 000493 | . 000508 | .000995 | .001171 | . 054820 | .001691 | . 001646 | .019269 |
| FRUIT, VEG. CANNERS10 | . 000158 | . 000168 | .000313 | .000393 | .018817 | . 000444 | . 000498 | .006619 |
| FEED.FLR.CEREAL 11 | .000425 | . 000475 | . 003511 | .000726 | .020874 | .001713 | .001881 | . 008174 |
| BISCUIT, BAK ERIES 12 | .000242 | . 000253 | .000531 | . 000618 | .030762 | . 000643 | . 000778 | .010735 |
| SUGAR, CONFECT. IND13 | .000097 | .000103 | . 000274 | .000234 | . 009719 | . 000329 | .000372 | .003728 |
| OTHER FDOD IND. 14 | .000449 | . 000461 | .001078 | . 000918 | . 023484 | .002771 | . 001955 | .009933 |
| SOFT ORINK MFG 15 | .000137 | . 000164 | .000268 | .000385 | .012565 | . 000362 | .000396 | .007183 |
| ALCOHDLIC 8EV.MFG16 | .000346 | . 000281 | .000700 | .001177 | .001052 | .000934 | . 001123 | . 024776 |
| TOBACCO PROD. 1 ND. 17 | .000008 | .000009 | .000017 | .000011 | .000207 | . 000019 | .000049 | . 000089 |
| RUBBER PROD. MFG. 18 | . 001615 | .001484 | .002210 | . 002074 | . 002997 | . 004153 | . 029718 | .003605 |
| LEATHER PROD. MFG. 19 | .000138 | .000087 | .000208 | . 000258 | . 000306 | . 001066 | . 003401 | . 002501 |
| SYN. TEXtile mills 20 | . 000388 | . 000260 | . 000457 | .000645 | . 001575 | .001668 | .003197 | .001803 |
| COTTON, YARN, CLITH21 | . 000498 | . 000272 | .000491 | .000522 | .005610 | .003389 | . 003411 | . 002803 |
| KNITTING MILLS 22 | . 000043 | .000023 | .000094 | .000031 | .000181 | .000124 | .000178 | . 000134 |
| CLOTHING IND. 23 | .000317 | . 000146 | .000324 | .000175 | .001400 | . 000458 | . 000817 | . 000775 |
| OTHER TEXTILE IND 24 | .001262 | .000629 | .001123 | .000812 | . 004176 | . 004138 | . 005494 | . 002922 |
| SAWMILLS 25 | . 001291 | .003610 | . 002646 | .000657 | . 001770 | .002368 | . 004992 | .002470 |

TABLE 11 【MPACT TABLE WITH IMPORT LEAKAGES - AGGREGATION M (SEE CHAPTER \&)

| COMMODITYICOLUMNS) INDUSTRY(ROWS) | $\begin{gathered} \text { CDMMUNI- } \\ \text { CATIONS } \\ 57 \end{gathered}$ | UTILITIES 58 | FINANCE.INS. REAL ESTATE 59 | BUSINESS SERVICES 60 | ACCOMMODA- <br> TION, MEALS 61 | $\begin{gathered} \text { OTHER } \\ \text { SERVICES } \\ 62 \end{gathered}$ | $\begin{gathered} \text { OFFICE } \\ \text { SUPPLIES } \\ 63 \end{gathered}$ | ADVTG. AND TRAVEL 64 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FURNITURE, FIXTRS. 26 | . 000294 | .000333 | .000525 | .000216 | .000713 | .001720 | .000795 | .000570 |
| OTHER WDOD INO. 27 | . 001724 | . 002371 | .003319 | .000842 | .001927 | .006789 | .003103 | .002117 |
| PULPEPAPER MILLS 28 | .003974 | . 005994 | .004752 | . 006144 | .013219 | .007473 | .133406 | .052648 |
| OTHER PAPER IND. 29 | .002490 | .001567 | .003885 | .003637 | .014267 | . 006119 | .120377 | . 014587 |
| PRINT.PUBLISHING 30 | . 015634 | . 004726 | .014667 | .022375 | .012783 | . 019489 | . 535787 | .273671 |
| IRON, STEEL MILLS 31 | . 002859 | . 008395 | .004891 | .003305 | . 004509 | . 006672 | . 006493 | .004388 |
| SMELT.REFINING 32 | . 001931 | . 012461 | . 003166 | .002157 | .003032 | .004309 | .005770 | .003273 |
| OTH.PRIMARY METAL33 | . 002684 | .002828 | .003892 | .002337 | .002351 | . 003756 | . 006366 | .003563 |
| STRUCTURAL METAL 34 | . 001143 | . 001525 | .002148 | .000780 | .000978 | . 004070 | . 001150 | .001018 |
| METAL STAMPING 35 | . 001233 | .001566 | .002262 | .001322 | . 005471 | . 002582 | . 004266 | . 003814 |
| OTMER METAL MFG. 36 | .004273 | . 005450 | .007552 | .004513 | .006347 | . 015071 | .012634 | . 006262 |
| MACHINERYINESIMFG37 | .002191 | .003068 | .004190 | .003917 | .004398 | . 008243 | .004861 | .004149 |
| AIRCRAFTEPART MFG38 | . 000588 | .000441 | .000622 | .032993 | .000843 | . 002186 | . 001494 | .003571 |
| MOTOR VEH. MFG. 39 | . 000299 | . 000326 | .000422 | .000319 | .000768 | .001328 | .001371 | . 000834 |
| VEHICLE PARTS MFG40 | .000991 | . 001068 | .001321 | .001060 | . 001975 | .002157 | . 002409 | .002081 |
| OTH.TRANSP. EOUIP. 41 | .000694 | . 000358 | . 000436 | .011002 | . 000797 | . 002178 | .000904 | .002070 |
| ELECT.APPLIANCE 42 | .000349 | . 000378 | . 000547 | .000352 | .000530 | . 002287 | .000842 | . 000537 |
| FLEC.IND. EQUIP. 43 | .000708 | . 000989 | . 000981 | .000518 | .000864 | . 001255 | . 001134 | .000834 |
| COM.EQUIP.EHIRE 44 | . 007900 | . 001651 | .002295 | . 002655 | . 001832 | . 003142 | . 002469 | . 002415 |
| OTH.ELEC. PROD. 1 ND45 | . 001774 | . 001336 | .001828 | .000983 | . 001667 | . 002831 | . 002569 | .001812 |
| CLAY, LIME, CEMENT 46 | .002258 | . 003413 | .004709 | .000745 | .002717 | . 003654 | .002135 | .002059 |
| NON-METAL MIN. 47 | .000744 | .000917 | .001334 | .000704 | .002519 | .001972 | . 001843 | . 002736 |
| PETR. PROD. IND. 48 | . 006207 | .012957 | . 009445 | .006322 | .017961 | . 013121 | . 013694 | . 014685 |
| PLASTIC, SYN.RESIN49 | .000388 | . 000317 | . 000596 | . 000486 | . 001351 | . 001337 | .004110 | . 001511 |
| PAINTEVARNISH MFG50 | . 000846 | . 001206 | .003172 | .000945 | .001756 | . 002146 | .002117 | . 001611 |


| COMMODITYICOLUMNSI INDUSTRYIROWSI | COMmUNICATIONS 57 | UTILITES | finance, ins. REAL ESTATE | business SERVICES 60 | ACCOMMODATION, MEALS 61 | $\begin{gathered} \text { OTHER } \\ \text { SERVICES } \\ 62 \end{gathered}$ | $\begin{gathered} \text { OFFICE } \\ \text { SUPPLIES } \\ 63 \end{gathered}$ | ADVTG. AND travel 64 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PHARM. SOAP, TILLETSI | . 001165 | . 000936 | .001300 | . 003422 | . 004457 | . 017940 | . 002296 | . 003204 |
| OTH.CHEMICALS INO52 | . 002437 | . 003162 | . 004342 | . 007079 | . 008426 | . 011090 | . 027466 | .011307 |
| MISC. MFG. INO. 53 | . 002288 | . 001626 | . 002822 | . 003908 | . 004355 | . 014181 | . 046984 | . 013319 |
| CONSTRUCTION 54 | . 039412 | . 059210 | . 083955 | . 008562 | . 019942 | . 032894 | . 013381 | . 020343 |
| trade, wh.eretall 55 | . 022115 | . 021214 | . 030584 | . 020487 | . 118978 | . 064525 | . 127007 | . 088625 |
| trans port, storagesg | . 069032 | . 016452 | . 016554 | . 019667 | . 049690 | . 040564 | . 067669 | . 131320 |
| communications 57 | 1.024093 | . 007742 | . 013865 | . 066843 | . 015109 | . 026391 | . 022216 | . 094701 |
| UTILITIES 58 | . 005754 | 1.206663 | . 007157 | . 005638 | . 016335 | . 016381 | . 017831 | . 013966 |
| FIN.INSUR.RL.EST. 59 | . 023339 | . 036225 | 1.007435 | . 039491 | . 055755 | .110568 | . 033258 | . 041205 |
| business servicesgo | . 007137 | . 007710 | .010444 | . 939408 | . 007748 | .011539 | . 007696 | . 077993 |
| hotel, restaurant 61 | . 004405 | . 003445 | . 007875 | . 014840 | . 926654 | . 010831 | . 012577 | . 318541 |
| other services 62 | . 035243 | . 007207 | . 016706 | . 046180 | . 030308 | . 920637 | . 018643 | . 047615 |
| OFFICE SUPPLIES 63 | . 008426 | . 002581 | . 013663 | . 015860 | . 006393 | . 014335 | 1.008230 | . 008179 |
| ADVIG. AND TRAVELG4 | . 013578 | . 010728 | . 021607 | . 047808 | . 030120 | . 034224 | . 038890 | 1.034708 |
| OPERATING SUPPL. 65 | . 017039 | . 025921 | . 030457 | . 024087 | . 046251 | . 052796 | . 041769 | . 039340 |
| NON-COMP.IMPORTS 66 | . 000316 | . 000259 | . 000478 | . 000492 | . 011703 | . 001400 | . 002901 | . 004704 |
| 8AL. Of Paymit adj 67 | . 000000 | . 000000 | . 000000 | . 000000 | . 000000 | . 000000 | . 000000 | . 000000 |
| COmmodity taxes 68 | .007596 | . 005528 | . 006403 | . 006263 | . 011255 | . 013398 | . 062814 | . 038771 |
| SUBSIDIES 69 | -. 062771 | -. 003842 | -. 004118 | -. 004898 | -. 005004 | -. 003859 | -. 004980 | -. 010848 |
| Indir.taxegov. Serto | . 033479 | . 031621 | .177845 | . 020287 | . 044425 | . 038712 | . 022684 | . 031491 |
| WAGES \& SALARIES 71 | . 539714 | . 291684 | . 254053 | . 498957 | . 488323 | .418190 | . 462073 | . 477480 |
| NET-INC.UNINCORP. 72 | . 023295 | . 015310 | . 135022 | . 331845 | . 173749 | . 279301 | . 039207 | . 110865 |
| SURPIUS 73 | . 430166 | . 626136 | .397743 | . 112097 | . 196746 | .194891 | . 205274 | . 216039 |
| SUB TOTAL166-731 74 | . 971795 | . 966696 | . 967426 | . 965042 | .921197 | .942033 | . 789974 | . 868503 |

TABLE IL IMPACT TABLE WITH IMPORT LEAKAGES - AGGREGATION M (SEE CHAPTER 4)

| COMM. 65 ,FINAL OEM | ANO | OPERATING SUPPLIES(D) 65 | NET-EXPORTS | RE-EXPORTS | IMPORTS $68$ | INVENTORY CHANGE 69 | OTHER FINAL dEMANO 70 | $\begin{gathered} \text { IMPOR T } \\ \text { COEF. } \\ 71 \end{gathered}$ | $\begin{array}{r} \text { RE-EXPORT } \\ \text { COEF } \\ 72 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AGRICULTURE | 1 | . 036737 | 803.1 | 1.0 | -252.0 | $-400.6$ | 486.2 | . 092917 | . 001283 |
| FORESTRY | 2 | .006085 | 42.9 | 1.0 | $-14.7$ | $-12.0$ | 38.3 | .016899 | .023846 |
| FISHING HUNTING | 3 | .001517 | 23.9 | .9 | $-18.0$ | . 5 | 5.B | .147219 | .035891 |
| METAL MINES | 4 | .008893 | 519.0 | . 0 | $-126.5$ | 19.4 | . 0 | .158091 | . 000089 |
| NON-METAL MINES | 5 | . 002161 | 153.0 | 4.3 | $-56.4$ | 1.3 | 12.1 | .298327 | . 027155 |
| COAL MINES | 6 | . 001204 | B. 1 | . 0 | $-119.4$ | 2.4 | 47.0 | . 664191 | .000246 |
| PETROLEUM NAT.GAS | 7 | . 007910 | 208. 5 | .0 | -368.4 | 5.5 | 154.7 | .383179 | . 000139 |
| MEAT, POULTRY PROC |  | . 014853 | 69.7 | 1.9 | -76.1 | 19.2 | 1138.1 | . 046058 | . 026400 |
| OAIRY FACTIRIES | 9 | . 010687 | 24.2 | .0 | -12.1 | 9.0 | 706.1 | . 013327 | .001404 |
| FRUIT, VEG.CANNERS |  | . 003744 | 8.8 | . 6 | $-110.8$ | 16.7 | 335.9 | .251640 | . 059174 |
| FEEO,FLR.CEREAL |  | . 006232 | 68.9 | .0 | -7.7 | 2.6 | 90.2 | . 015914 | .000189 |
| BISCUIT, BAKERIES |  | . 005346 | 3.6 | .0 | $-11.8$ | 5.7 | 396.9 | .025373 | . 007267 |
| SUGAR,CONFECT. IND |  | . 002094 | 1.8 | . 2 | -33.8 | 3.2 | 198.0 | .110908 | .087369 |
| OTHER FOOD INO. | 14 | . 008980 | 164.0 | 2.0 | $-139.6$ | 9.2 | 313.5 | .226915 | . 012152 |
| SOFT DRINK MFG | 15 | .002542 | . 1 | .0 | -4.7 | 1.4 | 133.8 | . 026263 | .109756 |
| ALCOHOLIC BEV.MFG |  | .001332 | B8. 6 | .2 | $-61.0$ | 21.6 | 322.5 | .151022 | . 002465 |
| TOBACCO PROO.IND. |  | . 000157 | 28.1 | . 0 | -9.2 | 4.7 | 231.8 | . 029431 | . 000427 |
| RUBBER PROO.MFG. |  | . 040640 | 7.2 | . 6 | $-59.8$ | 1.4 | 107.5 | . 165022 | . 076528 |
| LEATHER PROO. MFG. |  | . 001280 | 15.3 | . 5 | $-44.6$ | 2.6 | 243.4 | .137440 | . 034396 |
| SYN. TEXTILE MILLS |  | .003317 | 20.1 | . 7 | $-66.8$ | 1.6 | 14.4 | . 230048 | .032830 |
| COTTON, YARN, CLOTH |  | .004801 | 10.9 | - $B$ | $-144.0$ | 3.3 | 42.3 | . 395095 | .065197 |
| KNITTING MILLS | 22 | . 000368 | 1.7 | . 4 | $-39.7$ | 3.6 | 202.3 | .153861 | . 174122 |
| CLOTHING INO. | 23 | . 003465 | 8.0 | . 6 | -61.7 | 14.8 | 816.4 | .067546 | .067937 |
| other textile Imo |  | . 008391 | 11.8 | 2.0 | $-196.4$ | 10.3 | 196.0 | . 322594 | .147233 |
| SAWMILLS | 25 | .002837 | 354.9 | . 1 | -39.2 | 13.7 | 6.7 | .100925 | .000234 |

TABLE 11 IMPAC

| COMM 65 , FINAL DEMAND | OPERATING SUPPLIES(D) 65 | NET-EXPORT S | RE-EXPORTS 67 | IMPORTS $68$ | INVENTORY CHANGE 69 | DTHER FINAL DEMAND 70 | IMPORT CDEF. 71 | $\begin{array}{r} \text { RE-EXPORT } \\ \text { COEF } \\ 72 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FURNITURE, FIXTRS. 26 | .001585 | 2.3 | . 2 | -35.2 | 7.0 | 358.3 | . 087293 | . 067851 |
| OTHER WOOD IND. 27 | .003038 | 39.7 | .6 | -32.5 | 9.7 | 11.3 | . 091100 | . 014422 |
| PULPEPAPER MILLS 28 | .015593 | 1113.9 | . 3 | $-65.0$ | 2.4 | 31.5 | .108473 | . 000255 |
| OTHER PAPER IND. 29 | . 013248 | 4.3 | .5 | $-43.2$ | 6.8 | 71.5 | . 071136 | . 102393 |
| PRINT. PUBLISHING 30 | .018127 | 16.1 | 2.4 | -144.7 | 6.4 | 298.7 | . 145028 | . 130049 |
| IRON.STEEL MILLS 31 | .026305 | 112.9 | 1.0 | $-122.2$ | 4.3 | -0 | . 147879 | .008729 |
| SMELT.REFINING 32 | .014557 | 823.1 | 11.0 | -77.4 | $-1.5$ | $-68.7$ | . 120877 | . 013130 |
| OTH.PRIMARY METAL 33 | .015316 | 60.2 | . 6 | -101.0 | 1.7 | 1.8 | . 173067 | . 009270 |
| STRUCTURAL METAL 34 | .004546 | 4.4 | - 3 | -23.9 | . 8 | 1.4 | . 097146 | .061853 |
| METAL STAMPING 35 | .012989 | 3.3 | 1.0 | -61.9 | 3.1 | 39.1 | .162890 | .238296 |
| OTHER METAL MFG. 36 | . 068386 | 29.9 | 4.9 | -255.8 | 1.6 | 126.9 | .216197 | .141483 |
| MACHINERY(NES)MFG37 | . 059201 | 154.0 | 31.4 | -947.7 | 9.0 | 975.5 | . 563621 | . 169399 |
| AIRCRAFTEPART MFG38 | . 002357 | 99.2 | 33.0 | $-211.9$ | 10.6 | 329.1 | .418775 | .249603 |
| MOTOR VEH. MFG. 39 | . 006697 | 27.0 | 2.1 | $-230.9$ | 18.5 | 1091.4 | . 205467 | . 072178 |
| VEHICLE PARTS MFG40 | .029786 | 15.6 | 4.5 | -367.8 | 2.1 | 81.6 | .529069 | . 223546 |
| OTH. TRANSP. EQUIP. 41 | .002707 | 17.8 | .7 | -41.9 | $-1.2$ | 178.? | .178846 | .037520 |
| ELECT.APPLIANCE 42 | .004995 | 6.4 | . 5 | $-105.0$ | 4.2 | 293.4 | .307260 | . 067674 |
| ELEC.IND. EQUIP. 43 | . 0111069 | 15.0 | 2.6 | $-89.3$ | - 8 | 154.2 | .291391 | .149305 |
| COM EQUIP.EWIRE 44 | .015767 | 40.9 | 3.0 | $-124.6$ | 15.2 | 170.9 | .250010 | . 069450 |
| OTH.ELEC.PROD. IND45 | .023402 | 5.8 | 1.2 | -91.7 | 2.4 | 178.8 | .250643 | .167462 |
| CLAY, LIME,CEMENT 46 | .003190 | 10.8 | . 3 | -69.8 | 7.2 | 28.0 | .134998 | . 025865 |
| NON-METAL MIN. 47 | .008924 | 29.5 | . 6 | $-84.5$ | 5.1 | 34.6 | .306153 | .018800 |
| PETR. PROD. IND. 48 | . 018630 | 10.2 | - 3 | $-137.8$ | 9.7 | 539.9 | .100851 | . 024351 |
| PLASTIC,SYN.RESIN49 | . 004954 | 30.7 | - 2 | -65.5 | 2.1 | 1.0 | .398424 | .007636 |
| PaINTEVARNI SH mfg 50 | . 029447 | 1.3 | . 1 | -7.5 | 1.2 | 15.1 | . 045611 | .070370 |

TABLE II IMPACT TABLE WITH IMPDRT LEAKAGES - AGGREGATIDN M (SEE CHAPTER 4)

| COMM.65,FINAL OEMANO | OPERATING SUPPLIES101 65 | NET-EXPORTS | RE-EXPORTS 67 | $\begin{array}{r} \text { IMP QR TS } \\ 68 \end{array}$ | INVENTORY CHANGE 69 | OTHER FINAL <br> OEMANO 70 | $\begin{gathered} \text { IMPORT } \\ \text { COEF } \\ 71 \end{gathered}$ | $\begin{array}{r} \text { RE-EXPORT } \\ \text { COEF } \\ 72 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PMARM. SOAP, TOILET51 | .025740 | 12.1 | .6 | -58.1 | 7.9 | 319.1 | . 124212 | .047967 |
| OTH.CHEMICALS INOS2 | . 042604 | 171.1 | 2.7 | $-264.3$ | 6.1 | 79.1 | .310381 | . 015559 |
| MISC. MFG. IND. 53 | .028012 | 40.4 | 10.5 | -361.0 | 13.3 | 533.0 | . 386028 | . 205597 |
| CONSTRUCTION 54 | . 015244 | . 0 | - 0 | - 0 | . 0 | 5911.9 | . 000000 | -000000 |
| TRAOE,WH.ERETAIL 55 | .348393 | 111.8 | - 0 | - 0 | 24.8 | 4857.1 | . 000000 | . 000000 |
| TRANSPORT, STORAGE 56 | . 059353 | 558.2 | . 0 | $-80.9$ | -4.7 | 1159.2 | . 026817 | . 000000 |
| COMMUNICATIONS 57 | . 022578 | 24.9 | . 0 | $-17.6$ | .0 | 443.2 | . 016750 | . 000000 |
| UTILITIES 58 | . 017568 | 18.1 | . 0 | -15.9 | $-.3$ | 476.4 | . 012536 | . 000332 |
| FIN. INSUR.RL.EST. 59 | .043194 | 19.7 | . 0 | $-83.4$ | . 0 | 5097.2 | . 012048 | . 000000 |
| BUSINESS SERVICES6O | . 009264 | 8.0 | . 0 | $-72.1$ | .0 | 197.2 | . 096999 | . 000000 |
| HOTEL, RESTAURANT 6I | . 014235 | . 0 | . 0 | . 0 | . 0 | 1242.2 | . 000000 | . 000000 |
| OTHER SERVICES 62 | . 067648 | 6.5 | . 0 | -120.3 | . 0 | 1378.4 | . 054336 | . 000000 |
| OFFICE SUPPLIES 63 | . 009586 | . 0 | . 0 | . 0 | . 0 | . 0 | . 000000 | . 000000 |
| ADVTG. AND TRAVELS 4 | . 041702 | . 0 | .0 | .0 | . 0 | . 0 | . 000000 | .000000 |
| OPERATING SUPPL. 65 | 1.039192 | . 0 | .0 | . 0 | .0 | . 0 | . 000000 | . 000000 |
| NON-COMP.IMPORTS 66 | . 005424 |  |  |  |  |  |  |  |
| BAL. OF PAYMNT A0J67 | .000000 |  |  |  |  |  |  |  |
| COMmODITY TAXES 68 | . 039085 |  |  |  |  |  |  |  |
| SUBSIOIES 69 | -. 007521 |  |  |  |  |  |  |  |
| INOIR. TAXEGOV. SER 70 | .025803 |  |  |  |  |  |  |  |
| WAGES \& SALARIES 71 | .393955 |  |  |  |  |  |  |  |
| NET-INC. UNINCORP. 72 | .075380 |  |  |  |  |  |  |  |
| SURPLUS 73 | .193442 |  |  |  |  |  |  |  |
| SUB TOTAL (66-73) 74 | .725567 |  |  |  |  |  |  |  |

Valuation Conversion Coefficients, 1961 - Aggregation M
(See Chapter 4 for definitions and qualifications)

| Commodity |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 |
| 1 Agriculture Products | . 103820 | . 001691 | . 204918 | . 053226 | . 282399 |  |
| 2 Forestry Products | . 065710 | . 010204 | . 058092 | - | . 192366 |  |
| 3 Fish \& Fur | . 020942 | . 026621 | . 058414 | . 022130 | . 388486 |  |
| 4 Metal Ores \& Conc. | . 065924 | . 018694 | . 119372 | . 000026 | - |  |
| 5 Non-Metal Minerals | . 038820 | . 047152 | . 603772 | . 019179 | . 352919 | - |
| 6 Coal | . 051969 | . 537171 | . 608138 | . 041837 | . 385092 | - |
| 7 Oil and Natural Gas | - | . 245291 | . 230439 | . 000601 | . 432555 | - |
| 8 Meat Products | . 049874 | . 000358 | . 054452 | . 059299 | . 192768 | . 003256 |
| 9 Dairy Products | . 003827 | . 019956 | . 063524 | . 077724 | . 197355 | - |
| 10 Fruit \& Veg. Products | . 025008 | - | . 071733 | . 106982 | . 228132 | . 002702 |
| 11 Feed, Flour Cereals | . 026572 | . 001384 | . 246402 | . 112847 | .257135 | - |
| 12 Bakery Products | . 045867 | . 005333 | . 052668 | . 102496 | . 250944 | . 000177 |
| 13 Sugar, Confect. | - | . 018472 | . 083442 | . 071209 | . 302959 | . 046066 |
| $\therefore$ 14 Other Food Products | . 041789 | . 004029 | . 087162 | . 078107 | . 264602 | . 002306 |
| 15 Soft Drinks | - | . 024390 | . 041017 | . 150730 | . 117444 | . 074678 |
| 16 Alcoholic Beverages | . 000518 | . 016382 | . 043171 | 1.252324 | . 380538 | . 257037 |
| 17 Tobacco | - | . 028589 | . 011472 | . 342403 | . 142160 | . 545053 |
| i8 Rubber Products | . 202621 | . 000307 | . 021034 | . 184628 | . 296059 | . 062138 |
| 19 Leather Products | . 022958 | . 014218 | . 034349 | . 201630 | .330206 | . 063264 |
| ?) Synthetic Textiles | . 008578 | . 018538 | . 026736 | . 214632 | . 378678 | . 048959 |
| 21 Cotton Yarn, Cloth | . 038294 | . 029008 | . 033571 | . 212295 | . 402225 | . 073114 |
| 22 Knitted Products | . 022567 | . 016455 | . 022216 | . 287023 | . 392711 | . 058513 |
| 23 Clothing | . 012927 | . 019506 | . 036346 | . 244088 | . 379587 | . 056886 |
| $2{ }^{2} 4$ Other Textiles | . 016624 | . 033532 | . 055460 | . 154683 | . 313339 | . 059196 |
| 25 Sawnill Products | . 083248 | . 051647 | . 171469 | . 012250 | . 121483 | - |
| 26 Furniture, Fixtures | . 004423 | . 014475 | . 024695 | . 222116 | . 283814 | . 064988 |
| 27 Other Wood Products | . 055847 | . 010218 | . 075186 | . 135395 | . 195268 | . 042195 |
| 28 Pulp \& Paper | . 031608 | . 041943 | . 064320 | . 139251 | . 203399 | . 074213 |
| 29 Other Paper Products | - | . 016649 | . 048417 | . 184659 | . 370131 | . 051444 |
| 30 Printed matter | . 066017 | . 010429 | . 011425 | . 049136 | . 187419 | . 020958 |
| 31 Steel Mill Products | . 029348 | . 023142 | . 120749 | . 075171 | - | - |
| 32 Smelt. \& Ref. Products | . 027602 | . 014396 | . 133994 | . 021416 | -. 000422 | - |
| 33 Other Primary Metal | . 037650 | . 003819 | . 048639 | . 104962 | . 044490 | - |
| 34 Structural Metal | - | . 029554 | . 034785 | . 166373 | . 174768 | . 066084 |
| 35 Metal Stampings | . 028207 | . 020246 | . 026840 | . 126594 | . 189161 | . 064474 |
| 36 Other Metal Products | . 065479 | . 016128 | . 027413 | . 165726 | . 240945 | . 044473 |
| 37 Machinery (N.E.S.) | . 109030 | . 016791 | . 011106 | . 075441 | . 196866 | . 030504 |
| 38 Aircraft \& Parts | . 019749 | . 004058 | . 015411 | . 001800 | . 033081 | . 058571 |
| 39 Motor Vehicles | . 011119 | . 008297 | . 020703 | . 113174 | . 197342 | . 094044 |
| 40 Vehicle Parts | .232185 | - | . 017644 | . 065457 | . 542400 | . 032913 |
| 41 Ocher Transport Equip. | . 011807 | . 010151 | . 012597 | . 082144 | . 094568 | . 035538 |
| 42 Electrical Appliances | . 023124 | . 040289 | . 018243 | . 181309 | . 240905 | . 072568 |
| 43 Electric Ind. Equip | . 035640 | . 024910 | . 010735 | . 138714 | . 105787 | . 046830 |
| 44 Com. Equip. Incl. Wire | . 075572 | . 013982 | . 009272 | . 132209 | . 141119 | . 087099 |
| 45 Other Elec. Products | . 019983 | . 028770 | . 009321 | . 186369 | . 319105 | .109716 |
| 46 Clay, Lime, Cement | . 051543 | .065647 | . 127666 | . 128674 | . 341212 | . 057505 |
| 47 All Other Non-Metallic | . 072146 | . 000740 | . 074522 | . 097878 | . 324255 | . 058079 |
| 48 Petroleum Products | .099725 | . 019687 | . 286545 | .064770 | - 319158 | . 240440 |

TABLE 12 (Cont'd)
Valuation Conversion Coefficients, 1961 - Aggregation M
(See Chapter 4 for definitions and qualifications)

| Commodity |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 |
| 49 Plastic, Syn. Resins | . 112046 | .007182 | . 016234 | . 060314 | . 163333 | . 012500 |
| 50 Paint \& Varnish | . 042553 | - | . 016040 | . 170624 | . 410707 | . 002370 |
| 51 Pharm. Soap, Toilet | . 049332 | . 001119 | . 022213 | . 133317 | . 401257 | . 061446 |
| 52 Oth. Chemical Products | . 042494 | . 012132 | . 076669 | . 066521 | . 212114 | . 067360 |
| 53 Misc. Mfg. Products | . 102160 | . 044146 | . 028482 | . 120918 | . 317965 | . 055912 |
| 54 Construction | - | - | - | - | - | - |
| 55 Trade, Wh. \& Retail | - | - | - | - | - | - |
| 56 Transport and Storage | - | - | - | - | - | - |
| 57 Communications | - | - | - | - | - | - |
| 58 Utilities | . 065687 | - | . 270335 | - | - | - |
| 59 Finance, Ins. Real Estate | - | - | - | - | - | - |
| 60 Business Services |  | - | - | - | - | - |
| 61 Accommodation, Meals | - | - | - | - | - | - |
| 62 Other Services | - | - | - | - | - | . 018771 |
| 63 Office Supplies | - | - | - | - | - | - |
| 64 Advtg. and Travel | - | - | - | - | - | - |
| 65 Operating Supplies | - | - | - | - | - | - |
| 66 Non-Comp. Imports | . 080756 | - | .211814 | . 039720 | - | - |

nATE DUE
biglotheque stais oin canad


1010442890

## 3805


[^0]:    /1/ The Tables for 1961 were preceded in Canada by Tables for the year 1949. See D.B.S. cat. \#13-513 [1960]. The accounting structures of the two sets of Tables are quite different. The consequences of these differences for the analytical uses of the Tables are discussed in Appendix A.

[^1]:    /1/ The terms "supply" and "demand" refer, respectively, to the "value of the quantity supplied" and the "value of the quantity demanded," and not to supply and demand functions. Thus the equality of supply and demand is an identity, and does not represent an equilibrium position derived from the intersection of supply and demand functions. Since there is no provision for inventory changes in this example, "supply" is equal to the value of the quantity domestically produced plus the value of the quantity imported; "demand" is equal to the value of the quantities used by industries as intermediate inputs plus the values of the quantities purchased for final uses (final demands).

[^2]:    T1/ Table 21 of D.B.S. cat. \#13-201 [annual] shows estimates of Gross Domestic Product at Factor Cost in the prices of the current year for each of fifteen industrial groups. Tables 22 to 24 give the comparable industrial detail for some of the major components of GDP $f$. However, the figures for any industry are not completely consistent ${ }_{\text {because wages, salaries }}$ and supplementary labour income and the inventory valuation adjustment are calculated from establishment returns while the other components are calculated from company returns. On the other hand, the Input-Output Tables and the Indexes of Real Domestic Product by Industry are calculated almost completely on an establishment basis (see Section 2.1 and Chapter 5).

[^3]:    /1/ For an alternative presentation of the same information see MATUSZEWSKI et al.[1967].

[^4]:    /1/ This excludes import duties which are part of the producers' values of imports.

[^5]:    /1/ The reader is reminded that the categories of final demands in the preliminary Tables being published in Volumes 1 and 2 are highly aggregated. The categories shown are net exports, re-exports, value of the physical change in inventories (for all industries combined), and other final demand.

    12/ For reasons which are explained in Appendix A, Section A. 10.
    13/ See Section 4.2.

[^6]:    /1/ This convention is not followed for inventories of goods in process and finished products held by producers. The value assigned to these inventories is calculated on the basis of the costs of production of the commodities excluding the element of profit which is realized when the commodities are sold.

[^7]:    /1/ Trade of Canada statistics value exports free on board the point of consignment for export. Often this level of valuation coincides with the producers' level but in some cases estimates of transportation and trade margins had to be subtracted from Trade of Canada values, particularly when the exporter was not the original producer of the commodity, in order to express exports at producers' values.

[^8]:     detailed description of the treatment of interest and dividends, including the measurement of the production of financial institutions, such as banks.

[^9]:    /1/ See Appendix A, Section A. 9 for more complex models which cannot be expressed in the form of impact tables.

[^10]:    /1/ The reader is reminded that, for each industry, total inputs are defined to be equal to total output.
    /2/ In fact it is possible to calculate these total effects precisely, as indicated in Section A.l of Appendix A. However, it is interesting to note that the methods often used with computers involve the calculation of a relatively small number of rounds of impact with an extrapolation for the effects of subsequent rounds.

[^11]:    /1/ Projections of imports and exports are usually made in detail because detailed time series are available. The value of the physical change in inventories is usually projected as being zero for each commodity.

[^12]:    /1/ Summary data on imports and exports of transportation and other services appear in The Canadian Balance of International Payments and International Investment Position, D.B.S. cat.非 67-201 [annual]; see Section 4.2 for information on the detailed estimates made for the 1961 Input-Output Accounts.

[^13]:    /1/ Trade of Canada publications use the term exports to signify net exports.

[^14]:    /1/ Inventories can either be a source of supply or a final demand for commodities, depending on whether there is decumulation or accumulation of inventories. Under the customary assumption of no change in inventories they play neither role.

[^15]:    /1/ See MATUSZEWSKI et al. [1963] and [1964], and STONE and BROWN [1962].

[^16]:    /1/ See Chapters 4 and 5 and Appendix B.

[^17]:    /1/ The commodity and industry classification systems for the worksheet level of detail and for aggregations $S, M$ and $L$ appear in Appendix $B$ and are described in Chapter 5.

[^18]:    /1/ Contact: Input-Output Research and Development Staff Economic Statistics Branch Dominion Bureau of Statistics Tunney's Pasture, Ottawa.

[^19]:    /1/ Includes Military Pay and Allowances.
    /2/ Includes Net Income of Farm Operators from Farm Production.

[^20]:    /1/D.B.S.cat. 非12-501 [1960], p.8.

[^21]:    /1/ D.B.S. cat. \# 12-502 [1959]
    /2/ D.B.S. cat. \# 12-521 [1961]
    /3/ D.B.S. cat. 非 12-524 [1964]

[^22]:    * entered as negative final expenditure in Tables 1,8 and 13

[^23]:    /1/ Refer to D.B.S. cat. 142 -211 [1965].

[^24]:    $/ 1 /, / 2 /$ No allowance is made for import leakages in these expressions see Section 3.3.

[^25]:    /1/ This model is an extension to rectangular Input-Output systems of a model developed by Professor Leontief; see LEONTIEF [1967].

[^26]:    /1/ These models can be easily derived from commodity-by-industry tables. See GIGANTES and PITTS [1965].

[^27]:    /1/ See, for example, STONE (ed.) [1963].
    121 See GIGANTES [1969].

[^28]:    /1/ See Section A.9.

[^29]:    /1/ Which will still be a non-proportional function of industry output.
    /2/ See CHENERY and CLARK [1959], p. 63.

[^30]:    /1/ See footnote on p. 159.

[^31]:    /1/ See footnote on p. 159.

