

BENGT HÖGLUND

LARS WERIN

**The
production
system
of
the
Swedish
economy**

AN INPUT-OUTPUT STUDY

INDUSTRIENS UTREDNINGSSINSTITUT



THE PRODUCTION SYSTEM
OF THE SWEDISH ECONOMY
An Input-Output Study

ACTA UNIVERSITATIS STOCKHOLMIENSIS

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BENGT HÖGLUND and LARS WERIN

THE PRODUCTION SYSTEM
OF THE SWEDISH ECONOMY

An Input–Output Study



ALMQVIST & WIKSELL

STOCKHOLM

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PREFACE

When a question of undertaking an input-output study of the Swedish economy was discussed in the middle of the 1950's, the institute considered that such a study would be of great value for Swedish industry. We therefore became one of the institutions participating in a working-committee appointed by the University of Stockholm to advise on research. To make a more detailed study of the engineering industries, we took an active part in the research work and financed that part of the study. This book is published in the series *Stockholm Economic Studies*. As part of the work was done within the institute, it has been considered appropriate, after permission had been obtained from the University, to issue the book in our publication series as well.

Stockholm, January 1964

The Industrial Institute for Economic and Social Research

Lars Nabseth

ACKNOWLEDGMENTS

In 1957 the Ford Foundation generously gave a grant to the University of Stockholm for the purpose of the project dealt with in this book, covering the dominating part of the expenses. In addition, contributions have been made by some Swedish institutions. The Industrial Institute for Economic and Social Research (Industriens Utredningsinstitut) has actively taken part in the research work in order to make possible a more detailed study of the engineering industry. The Agriculture Economics Research Institute (Jordbrukets Utredningsinstitut) made a special study of the input structure of agriculture for the purpose of the project. Statens råd för samhällsforskning and Svenska Handelsbanken Foundation for Social Science Research gave financial contributions. The larger part of the grant from Statens råd för samhällsforskning was used to cover publication costs.

In order to give advice for the research work the University furthermore appointed a working-committee. Members of this committee were Professor Bent Hansen of the National Institute of Economic Research (Konjunkturinstitutet), fil. dr Jan Wallander of the Industrial Institute for Economic and Social Research and fil. lic. Halvdan Åstrand of the Agriculture Economics Research Institute. They were later replaced by Professor Börje Kragh, Professor Ragnar Bentzel and agr. lic. Sven Holmström respectively. Hansen became chairman of the working-committee and was later replaced by Bentzel.

The task of carrying out the study was given to the authors of this book, fil. lic. Bengt Höglund and fil. lic. Lars Werin. Mr. Per Sevaldson of the Norwegian Central Bureau of Statistics was engaged as supervisor and adviser during the first part of the research work.

The University wishes to record its thanks to all those who have contributed to the research work and to the publication of this volume.

Stockholm, January 1964

Håkan Nial

Rector of the University of Stockholm

PREFACE

This book is an account of a study of the way in which the Swedish economy functions in its production of goods and services. The producing part of the economy—the production system—has been represented by a production model. One main part of the study has consisted in the construction of this model, including the estimation of numerical values of its constants. Another main part has been the application of the model to special situations with the purpose of describing and analyzing the properties of the production system it refers to.

The book contains a complete account of the study; however, the data and the procedures used in estimating the constants of the model and other relevant magnitudes are described only summarily. A full account of the source material and of the ways in which it has been used is given in a supplementary mimeographed volume. This is in Swedish and has the title *Input-output-tabeller för Sverige år 1957* (Input-Output Tables for Sweden 1957).

The task of carrying out the study was given to us by the University, and a temporary research institute was organized and attached to the University. We are both responsible for the general planning of the study, for the formulation of the theoretical model, for the drawing up of principles for the estimation and for the derivation of results from the applications. The collection of statistical data and the carrying out of the estimation has been divided between us in the following general way. Höglund is foremost responsible for data collection and estimation concerning mining, iron and metal industry, metal manufacturing and engineering industry, rubber industry, chemical industry, trade and defense. Werin is foremost responsible for non-metallic mineral industry, wood industry, pulp and paper industry, graphical industry, food and beverage industry, forestry, building and construction, civil state activities and local-government activities. Mr. Carlaxel Carlström, who was also a member of the project, is in the same way responsible for textile industry, leather industry and transportation. He has contributed to various other parts of the study as well.

The major parts of the statistical material used consist of a special survey material and of the statistics for manufacturing industry of the Board of Trade (Kommerskollegium). The filling out of the questionnaires for the survey was certainly often very intricate and time-consuming. We want to thank all firms, institutions and authorities who nevertheless

spent time and effort in doing it. We also want to thank the Board of Trade for generously letting us use its material; we thank the personnel of this institution for their readiness in helping us in many different ways. The Board of Trade, furthermore, gave us work-room in its premises during two years. We also thank all other institutions, authorities and organizations who assisted us in various ways. We thank the Industrial Institute for Economic and Social Research for valuable help in preparing the manuscript and seeing it through the press.

The clerical work has been performed by Mrs. Jane Grimm and Mrs. Märta Persson. The manuscript has been translated into English by Mr. Kenneth Dutfield.

Stockholm, March 1963

Bengt Höglund Lars Werin

CHAPTER I

The Problem and the Theoretical Framework

It is a familiar observation that a significant part of the total amount of goods produced and services performed in a modern economy is used up in the actual production, as inputs in the form of raw materials, semi-manufactured goods, goods added and the like. If, therefore, a given amount of a commodity or group of commodities is to be supplied for some special purpose, for example for household consumption or for export, the total production required includes not only the amounts directly required for consumption or export but also the amounts of goods and services which are used up in the production and which themselves emerge from different kinds of production.

From another point of view, these facts imply that an important part of the goods and services consumed in the production are themselves produced. Production of a given commodity requires the production of other commodities, which in turn requires the production of other commodities etc. A consequence of this is that different stages of production cannot be carried out independently of one another. There will be a complicated network of relations between them, and the specific properties of these will depend on the input structure in each special kind of production.

This interdependence between different kinds of production has an important effect in the use of non-produced commodities and services, for example labour services. Experience has shown that these are utilised as inputs in every kind of production.¹ Now when the supply of a given amount of a particular commodity requires the production of other commodities too, this implies that the input of non-produced goods and services will not be limited to the amount directly used in the production of a commodity. Added to it will be the input involved in the necessary production of other commodities so that the total input consists of the sum of these two amounts.

The object of study in the present work is the relation between the supply

¹ The validity of this statement depends of course on what is meant by "non-produced" goods and services. Reference here is to the word as it is generally understood. It will be more exactly defined below.

of finished goods on the one hand, and on the other the total production necessary and the total input of non-produced goods and services. The purpose has been to find numerical expressions for these relations, valid for Sweden. For this purpose it is necessary to use a model, referring to the actual production system. This model can be regarded as a consistent formulation of a group of hypotheses concerning the way in which the production system functions. These hypotheses must obviously be well founded, in the sense that they must all express realistic and relevant properties of the production system to be studied. It is essential also that the model be constructed in such a way that an estimate of its parameters and an empirical test of its validity can be carried out, not merely in principle but also in practice. Experience, not least from economic research, shows that it is often difficult to satisfy both these demands at the same time, so that in each case a compromise between them has to be made.

In what now follows, the terms used in the model will be explained and the assumptions on which it has been constructed be presented. It will be clear that the model is what is generally called an input-output model. This model is often associated with the name of Wassily Leontief, because of the pioneer work carried out by him. Particularly interesting is the close relationship existing from the systematic-analytical aspect between this model and the main lines of development in economics. Three examples from different epochs deserve to be mentioned. The first is from François Quesnay, who in his celebrated *Tableau Économique*, published in 1756, set out his views on the manner in which the net product from agriculture was distributed and utilised in a society. The second example is Léon Walras, whose great achievement was the formulation of conditions on which the equilibrium of an entire social economy depends. Walras used a system of equations with coefficients stating the relation between supply of the commodities which individuals require, and the total consumption of non-produced goods; his work was published in 1873. The third example is linear programming and activity-analysis, which in recent years have attracted more and more attention and come into increasingly extensive use. One of the basic ideas in this kind of analysis is that production can be described with the help of a set of processes, in each of which production and consumption of different commodities and services are found in a constant proportion and with the characteristic that it can be utilised at different levels. A certain production activity can thus be understood as a choice of the levels at which available processes shall be utilised. It is now a well-known fact that an input-output model can be regarded as a special linear activity-model, the special characteristics being that the number of available processes is equal to the number of produceable

commodities, and that each process gives production of a single commodity.

The model used thus refers to a *production system*. By this term we mean that part of an economic system whose activity consists of the production of commodities and services, which we shall henceforward consistently call "commodities". The commodities available within an economic system can then be divided into two groups, according to whether they are produced within its production system or not. Commodities in the former group are called *produced commodities*, and in the latter *primary commodities*. The production system obtains its character partly from the goods produced, and partly from the technique used in production. An essential factor is that production implies the input of commodities, and that this input can consist of both produced and primary commodities.

The amounts of commodities used in a given production depend on the particular method of production used. The production method will be determined to a large extent by the nature of the commodity produced. In general, however, it must be assumed that a commodity can be produced in more than one way, and, this being the case, the produced commodity does not exclusively determine the manner in which production will be carried out. When alternatives are available, it is generally assumed that the choice made between them is based on optimisation of one kind or another, for example by selecting the alternative which requires the lowest production costs. An important question is then whether the existing possibilities of variation are actually utilised to such an extent as to be of fundamental importance for the problems studied. One of the essential assumptions on which the present investigation is based is that this is often not the case and that we can approximately assume that each commodity is matched by a certain method of production.

By *production model* we mean a formal expression for the characteristics regarded as relevant in a given production system. In the following presentation of the production model used, we shall take as a starting-point an economic system with n produced commodities and m primary commodities.¹

A question of special interest for this study is the amounts of different commodities which are consumed in the production, and this consumption will therefore be taken as a starting-point in constructing the model. A

¹ The term "model" will consistently be used for the group of numerically unspecified and for the group of numerically specified equations (with the assumptions appertaining thereto), i.e. both for "model" and "structure" in the nomenclature of the Cowles Commission. It should invariably be apparent from the context which of the two is meant.

production method will be represented by a *process*, which is characterised by the relation between produced and consumed amounts of the goods concerned. In accordance with the above it is assumed that each produced commodity is matched by *one* process, and that each process leads to the production of *one* commodity. It will be assumed for each process that it can be utilised for the production of different amounts of the commodity in question and that there will thereby be a constant relation between the produced amount and the consumed amounts of different commodities. This implies that the input of each separate commodity in production of a given commodity is proportional to the produced amount (*proportionality assumption*). If a_{ij} and b_{kj} refer to the input of a produced commodity i and a primary commodity k respectively in the production of a unit of the commodity j , and x_j the produced amount of commodity j , the input being designated by a negative figure and the output by a positive one, the following expression for the utilisation of a process will be obtained:

$$\begin{bmatrix} -a_{1j} \\ \dots \\ 1 - a_{jj} \\ \dots \\ -a_{nj} \\ -b_{lj} \\ \dots \\ -b_{mj} \end{bmatrix} x_j \quad (1)$$

This expression is a product of a vector and the magnitude x_j . The elements of the vector state the constant relation assumed to prevail between the produced and consumed amounts of the commodities. Such a vector will be used to characterise each of the n processes within the model. In consideration of the fact that these elements will occur as coefficients within equation systems they will be called *input coefficients*. The magnitude x_j states the produced amount and at the same time the level at which the process is utilised. It can assume arbitrary non-negative values. As the produced commodity can also be consumed within the process which produces it, the net result in the utilisation of a process need not be the amount stated by x_j ; it can be less, as is shown by the fact that the above vector contains the element $1 - a_{jj}$.

It will also be assumed that the processes can be utilised jointly for the production of several commodities, one for each process, and that in this case the net result for each commodity is equal to the sum of the produced and consumed amounts in the utilisation of the separate processes (*ad-*

ditivity assumption). This means that the production method used to produce a given commodity is independent of whether other commodities are produced at the same time or not. It is also independent of what the produced commodity is to be used for.

With these characteristics of the processes, any activity within the production system can be expressed by the vectors which state the n processes together with suitable values of x_j for the actually produced amount. When referring to the production system the term *activity* will be used as a synonym for “production activity”. Formally, such an activity is composed of a non-negative linear combination of the separate processes, and conversely every such combination constitutes an activity. The following expression is obtained for a given activity:

$$\begin{bmatrix} 1 - a_{11} \\ -a_{21} \\ \dots \\ -a_{n1} \\ -b_{11} \\ -b_{21} \\ \dots \\ -b_{m1} \end{bmatrix} x_1 + \begin{bmatrix} -a_{12} \\ 1 - a_{22} \\ \dots \\ -a_{n2} \\ -b_{12} \\ -b_{22} \\ \dots \\ -b_{m2} \end{bmatrix} x_2 + \dots + \begin{bmatrix} -a_{1n} \\ -a_{2n} \\ \dots \\ 1 - a_{nn} \\ -b_{1n} \\ -b_{2n} \\ \dots \\ -b_{mn} \end{bmatrix} x_n = \begin{bmatrix} y_1 \\ y_2 \\ \dots \\ y_n \\ w_1 \\ w_2 \\ \dots \\ w_m \end{bmatrix} \quad (2)$$

The sum expressed in the left-hand side of the equation gives the net result of the activity within the production system. The total is made up of a vector with an element for each commodity, produced as well as primary. Such a vector has been written as the right-hand side of the expression. The elements y_i refer to produced commodities, and the elements w_k to primary commodities. If the x_j 's as has been previously assumed, are non-negative numbers, each y_i will consist of the sum of a positive number and a set of negative numbers. The elements y_i in the expression can therefore obtain both positive and negative values (and also zero value), which implies that the net result for a produced commodity can consist of either net production or net consumption. The question of whether a net consumption can be economically meaningful depends on the circumstances in which the model is used and above all on how inventory reduction and import are dealt with. As regards the elements w_k , however, each element consists of a sum of nonpositive numbers. They cannot, therefore, obtain positive values.¹ Correspondingly, there is only *use* of primary commodities within the production system, not *production* of them.

¹ Exceptions are subsidies and losses.

In the above expression, the n first rows refer to the produced commodities, and the m following rows to primary commodities. The expression can thus be divided into two systems, each referring to one of the two sets of commodities. These two systems are expressed below in the form of matrix equations; for primary goods, the symbols have been changed so that a positive quantity states consumption:

$$(I - A)X = Y \quad (3)$$

$$BX = W \quad (4)$$

The two systems refer to the production model used in the investigation.

Although it is theoretically possible for production activity to result in net consumption of produced goods, it is not necessary in view of the manner in which the model is generally used to take this possibility into account. The result which emerges from a given activity within the production system can therefore be called the *final product*. This is defined as Y in expression (3). The final product, when the processes are utilised to a given extent, is made up of the total output of a commodity minus the amount of the commodity used within the production system.

The total product X and the final product Y can both be said to represent supply of commodities, X being total supply. Part of it is used within the production system. This use is called *intermediate use*. Corresponding to it is a demand within the system itself, called *intermediate demand*. Intermediate use and demand are determined wholly by the nature of the production system together with the level of activity. The remainder consists of the final product, which is thus made up of the total product minus the intermediate use. The final product is the quantity of each commodity available for consumption outside the production system, and it therefore represents at the same time the *final supply* of produced goods. Use outside the production system is called *final consumption* and the corresponding demand is accordingly called *final demand*.

While the final product is entirely defined by expression (3), there can be different types of final consumption and final demand, depending on the kind of activity or the purposes outside the production system to which consumption and demand refer. The specification of such types does not depend on the nature of the production system and can be made exclusively with regard to the special problems to be studied. Consumption of commodity i for final demand h will be denoted by z_{ih} . It is assumed that there are p different kinds of final demand. As the size of the final product is defined by the nature of the activity carried on within the production system, and the size of final consumption is regarded as determined by factors out-

side the system, it cannot in general be assumed that the final product and the total final consumption for each commodity are equal. Whether this is the case depends on the definition of the special types of final consumption and, more particularly, on whether these include inventory-changes, defined as the differences between total supply and total consumption. If such an inventory-change item is included in the final consumption, the final product and the total final consumption will be equal by definition. Otherwise, equality is not necessary but is dependent on actual conditions in regard to production and consumption.

For each activity actually carried on within the production system, the variables of the model will assume special values. These special values can be used to construct a table, the composition of which corresponds to the expression for the production model. Such a table is called an *input-output table*. It can refer either to the total activity during a certain period, or to a part of that activity, for example the part connected with deliveries for a special kind of final demand. In most cases, however, the input-output table is a statement of the total activity within an economic system. The table contains figures of consumption for different purposes during a special period. The following symbols will be used to demonstrate such a table:

x_{ij} = input of produced commodity i when process j is used
 w_{kj} = input of primary commodity k when process j is used
 z_{ih} = input of produced commodity i for final demand h
 v_{kh} = input of primary commodity k for final demand h

These magnitudes are combined in a table of the following kind:

	Use within production system	Final consumption
Produced commodities	$x_{11} \ x_{12} \ \dots \ x_{1n}$ $x_{21} \ x_{22} \ \dots \ x_{2n}$ $\dots \ \dots \ \dots \ \dots$ $x_{n1} \ x_{n2} \ \dots \ x_{nn}$	$z_{11} \ z_{12} \ \dots \ z_{1p}$ $z_{21} \ z_{22} \ \dots \ z_{2p}$ $\dots \ \dots \ \dots \ \dots$ $z_{n1} \ z_{n2} \ \dots \ z_{np}$
Primary commodities	$w_{11} \ w_{12} \ \dots \ w_{2n}$ $w_{21} \ w_{22} \ \dots \ w_{2n}$ $\dots \ \dots \ \dots \ \dots$ $w_{m1} \ w_{m2} \ \dots \ w_{mn}$	$v_{11} \ v_{12} \ \dots \ v_{1p}$ $v_{21} \ v_{22} \ \dots \ v_{2p}$ $\dots \ \dots \ \dots \ \dots$ $v_{m1} \ v_{m2} \ \dots \ v_{mp}$

The table contains a row for each commodity, i.e. $n + m$ rows in all. It also contains a column for each process utilised within the production system and for each type of final demand, i.e. $n + p$ columns in all. Each row in the

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table shows how the commodity corresponding to the row has been used for different purposes during the observed period. We can therefore obtain information on the direct use of each commodity by reading along a row. Each column in the table shows similarly the use of different commodities for the special purpose to which the column refers. This use can thus refer to a special activity within the production system or to a special type of final demand.

The table can be expressed as a matrix, divided into four sub-matrices. It will then obtain the following form:

$$\begin{array}{cc} [x_{ij}] & [z_{ih}] \\ [w_{kj}] & [v_{kh}] \end{array}$$

The different sub-matrices each refer to a different kind of use:

$[x_{ij}]$ is quadratic of the order n and states input of produced commodities within the production system.

$[w_{kj}]$ is of the order $m \times n$ and states input of primary commodities within the production system.

$[z_{ih}]$ is of the order $n \times p$ and states input of produced commodities for final demand. On the supply side, the final product from the production system corresponds to this consumption.

$[v_{kh}]$ finally is of the order $n \times h$ and states the consumption of primary commodities for final demand.

While the first three sub-matrices are directly linked to activity within the production system, $[x_{ij}]$ and $[w_{kj}]$ stating use within the system, and $[z_{ih}]$ the consumption of goods produced within the system, $[v_{kh}]$ represents a use unconnected with activity within the production system either on the production or the consumption side.

An input-output table contains direct information concerning economic activity, but it also plays an important part in estimating input coefficients within the production model. Of the four types of magnitudes included in the table, x_{ij} and w_{kj} refer to use within the production system. The following relations apply for these in accordance with the assumptions stated:

$$x_{ij} = a_{ij}x_j \quad (5)$$

$$w_{kj} = b_{kj}x_j \quad (6)$$

If x_{ij} , w_{kj} and x_j are known, it is obvious that the coefficients a_{ij} and b_{kj} can be obtained as a group of quotients between the figures for input and output. The consumption figures can be taken direct from the table, and the output figures for the goods are as a rule relatively easy to obtain.¹

¹ Cf. chapter III.

It is therefore customary to use an input-output table to estimate input coefficients. One problem which arises in this connection is how the magnitudes in the table are to be measured. The model demands only that the magnitudes shall be additive within each row, and this admits of different units of measurement for different commodities. For several reasons, however, it is not possible in practice to use any other measurement-unit than one referring to value.¹ This implies that the magnitudes in the table will be additive within each column also. The sum of the figures in a column will then also refer to cost of producing the corresponding commodity, and if profit and loss are included among the primary commodities, the total costs will be equal to the value of the production. The following applies in such a case:

$$\sum_i x_{ij} + \sum_k w_{kj} = x_j \quad j = 1, 2, \dots, n \quad (7)$$

This procedure will have certain consequences for the model. According to (5) and (6), (7) can be written in the following way:

$$\sum_i a_{ij} x_j + \sum_k b_{kj} x_j = x_j \quad j = 1, 2, \dots, n \quad (8)$$

From this we get immediately:

$$\sum_i a_{ij} + \sum_k b_{kj} = 1 \quad j = 1, 2, \dots, n \quad (9)$$

This expression means that the sum of all the input coefficients for each process is equal to 1.

As all the magnitudes in the table are additive, each given final product Y can be added to a total amount. If $[1]$ denotes a row vector of the order n , the following will be obtained as an expression of this total amount:

$$[1] Y = [1] (I - A) X \quad (10)$$

In this expression $[1] (I - A)$ forms a row vector of the order n in which an arbitrary element j is equal to $1 - \sum_i a_{ij}$. It follows then from (9) that

$$[1] (I - A) = [1] B \quad (11)$$

The combination of (4), (10) and (11) gives

$$[1] Y = [1] B X = [1] W \quad (12)$$

This means that for an arbitrary final product Y , its total amount is equal to the total amount of primary goods consumed in producing it.

¹ The essential reason is that the commodity in practice will be represented by a commodity-group; cf. chapter II.

The input-output table shows the direct use of goods for different purposes, among them for different types of final demand. We can take z_{jh} as an example of such consumption. It refers to the amount of a produced commodity j consumed for the final demand h . The commodity j is produced within the process j . In the corresponding column of the table we shall find information on the amount of different commodities used when this process is employed. It can be assumed that part of this use was for the purpose of producing z_{jh} . The used commodities are either produced or primary. The produced commodities emerge by utilisation of corresponding processes within the system. In the same way, these processes must use produced and primary commodities, the use of produced commodities demanding the utilisation of different processes within the system. Generally speaking, this implies that an outward delivery from the system of an amount z_{jh} presupposes that all those processes are utilised which, in the way indicated above, are directly or indirectly affected by the production in question. We can therefore say that there is a direct and an indirect output involved in outward deliveries from the system. Theoretically, the entire output—and with it all activity within the system—can be referred directly or indirectly to different kinds of final consumption. The same applies to the consumption of primary commodities within the system. This consumption can be wholly referred to the production of final products for different kinds of final consumption.

The previously stated production model gives the specific properties of these general connections. The expression

$$(I - A)X = Y \quad (13)$$

states the relation prevailing between the total product and the final product, and explicitly the final product which emerges where there are given values for the total product. Assuming that the inverse-matrix exists, the following expression can be obtained:

$$X = (I - A)^{-1}Y \quad (14)$$

Instead, the above equation explicitly states the total product corresponding to the given amounts of the final product. If this expression is combined with (6) we obtain

$$W = B(I - A)^{-1}Y \quad (15)$$

This expression explicitly states the amount of primary commodities used for the given amounts of the final product. These two expressions give specific information as to the direct and indirect relations between final consumption on the one hand, and production and consumption of primary commodities on the other, stated above in general terms.

The meaning of the above expressions becomes clearer if we start from the separate elements in the matrix $(I - A)^{-1}$. These elements are indicated by A_{ij} . Each element A_{ij} will give the total product of commodity i required for delivering a unit of commodity j . This total amount includes the direct use of commodity i in the production of commodity j , previously referred to as a_{ij} , and the indirect use which is due to the above-described repercussions within the system. The difference between A_{ij} and a_{ij} will thus give the indirect consumption of commodity i for the production of a unit of commodity j .

Corresponding figures can be obtained for the use of primary commodities. In this case the term $b_{ki}A_{ij}$ refers to the amount of primary commodity k utilised within process i for producing a unit of commodity j . If this expression is totalled over all processes, we obtain an expression for the total amount of primary commodity k used within the production system in producing a unit of commodity j . As there is a certain degree of correspondence between the meaning of such an expression and that of the elements A_{ij} , the sum will be referred to as B_{kj} . We thus obtain:

$$B_{kj} = \sum_i b_{ki} A_{ij} \quad (16)$$

We can now state the meaning of the two terms A_{ij} and B_{kj} :

A_{ij} = total production of commodity i for a final product unit of commodity j
 B_{kj} = total use of primary commodity k for a final product unit of commodity j

The terms a_{ij} and b_{kj} and A_{ij} and B_{kj} are all, on the assumptions made, constants expressing different kinds of relations within the model, regardless of the extent to which the activity is carried on. By connecting these constants with figures referring to the activity during a special period, information can be obtained on the significance of this activity in different respects. Figures of this kind for the activity during a certain period can be obtained from, among other sources, the input-output table, and as example we can revert to the symbol used above, z_{jh} , for final consumption of commodity j for final demand of type h . $A_{ij}z_{jh}$ then gives the total production of commodity i necessary for delivery of the amount z_{jh} for final consumption. Terms of this kind can now be summed in different ways, and provided that the magnitudes included satisfy certain requirements as to the unit of measurement employed, these sums can supply a variety of significant data on the activity which has taken place. Some examples follow:

$\sum_i A_{ij}z_{jh}$ This summation is for all processes within the production system, the result obtained being an expression for the total production

- required within the production system for producing an amount z_{jh} of commodity j .
- $\sum_j A_{ij}z_{jh}$ Summation for all commodities used for final demand h , giving an expression for the total production of commodity i required for producing the amounts of all commodities used for final demand h .
- $\sum_h A_{ij}z_{jh}$ Summation for all types of final consumption of commodity j , giving an expression for the total production of commodity i required for producing the total final consumption of commodity j .

Corresponding expressions can be made for primary commodities. The starting-point will be $B_{kj}z_{jh}$, which can be totalled in different ways in the same manner. The following expressions are obtained:

- $\sum_k B_{kj}z_{jh}$ Summation for all primary commodities, giving an expression for the total amounts of primary commodities used in producing the amount z_{jh} of commodity j . (This sum, as explained above, will always be equal to z_{jh} .)
- $\sum_j B_{kj}z_{jh}$ Summation for all commodities used for final demand h , giving an expression for the total amount of primary commodity k required to produce the amount of all commodities used for the final demand h .
- $\sum_h B_{kj}z_{jh}$ Summation for all types of final consumption of commodity j , giving an expression for the total amount of primary commodity k consumed in producing the total final consumption of commodity j .

As the model, in the way shown by expression (1), refers to amounts of different commodities used in the production of each commodity, an expression can be obtained which, with given commodity-prices, gives the production costs of each commodity. If the prices of commodities produced are denoted by p_i and the prices of primary commodities by r_k , and if it is further assumed that the price for each commodity produced is equal to the cost of producing it, a system like the following will be obtained

$$(I - A')P = B'R \quad (17)$$

Provided that the inverse exists the following can be obtained

$$P = (I - A')^{-1}B'R \quad (18)$$

In this expression the relation between the prices of commodities produced and the prices of primary commodities is explicitly stated. In the given conditions the model can thus be used for examining the effect of different kinds of price changes.

The elements in the matrix $(I - A')^{-1}B'$ consist of the same magnitudes indicated above as B_{kj} , which state the total use of a primary commodity k for a final product unit of commodity j . The expression (15) states therefore that the price of a commodity produced is equal to the value of the total quantity of primary commodities consumed in producing it.

The problem expressed in equation (15) concerns the use of primary commodities for a certain final product, while the problem expressed in equation (18) concerns the prices to be set for the different commodities so that the total costs of primary commodities consumed will be covered. The two problems, both of which are solved by using the same coefficient matrix—in transposed forms—are said to be dual.

CHAPTER II

Further Specification of the Model

A. Extent and Subdivision of the Production System

The previous chapter contained a statement of the problems studied, and a description of the theoretical model used. Although this description contains expressions with economic meaning, such as commodity, production, supply, demand etc., and thus implies a certain connection with activities within an economic system, it is made in such general terms that a specification is necessary when the system is to be applied to the study of a particular economic system. Such a specification is the purpose of this chapter.¹

The basic term of the production model is “commodity”, and the application of the model to a special economic system is largely a matter of defining the exact relation between this theoretical term and different observable magnitudes within the economic system studied. In other words, we must decide which magnitudes within the economic system are to be regarded as commodities in the meaning of the model. This empirical interpretation or operational definition of the terms of the model can be made in more than one way, and every such interpretation endows the model with a special meaning. However, it is by no means immaterial which alternative is chosen. Each interpretation gives descriptive information in the form of an input–output table, for instance, but different interpretations will mean that the premises of the model will be satisfied with varying degrees of exactness, and the reliability will therefore vary according as different interpretations are used. In general, the importance which should be attached to the reliability in some definite respect depends on the particular purpose for which the model is to be used. This implies that the intended use of the model is important for the choice between alternative interpretations. This becomes more immediately obvious if we want the model to supply a certain definite piece of information. If this information concerns a special commodity or group of commodities, classification of the commodities involved must be made in such a way that this information will be given.

¹ Problems connected with the definition and classification of production systems of the type used here will be the subject of more detailed examination elsewhere by Bengt Höglund.

The economic system to be studied is the Swedish economy in 1957 and the neighbouring years. Information as to the activity carried on can be obtained from statistical publications and other sources. With regard to the commodities and services occurring within this system, the industrial statistics contain a specification of about 2,300 commodity numbers, and for each number a corresponding commodity or service is stated.¹ This statement refers only to manufacturing industry and does not therefore include such branches of activity as agriculture, forestry, building, trade, communications etc. In addition, trade statistics show the import of commodities and services under about as many commodity numbers as those covered by the industrial statistics.² This information gives some idea of the number of commodities and services existing within the economic system. The number, of course, depends on the basis of classification used. The statistics for trade and industry supply examples of a basis of classification which is of particular interest, as these statistical sources of information are employed to a large extent within the investigation.

It is of course impracticable to allow the production model to embrace such a large number of commodities as that found, for instance, in the industrial and trade statistics. If we further consider the problems which it is proposed to study with the model, it will be found that they very rarely render it necessary to give the results of the analysis in such detail. Most of the problems of interest refer to collections of commodities. This does not necessarily mean that such wealth of detail in the model is of no importance. The reliability we seek to achieve in the analysis may very well demand more detailed information in the model than is of immediate interest as far as a statement of the results is concerned. For practical reasons, however, there is a limit to the number of commodities the model can deal with, and this number is much less than the number covered by the industrial and trade statistics. The term "commodity" within the model will therefore correspond to a group of commodities or services in the statistics of production, trade etc. The term *commodity-group* will hereafter be used for such a group of commodities or services, to be considered from the point of view of the model as a single commodity. The connecting link between the model and a special economic system will chiefly consist, then, of a classification of the commodities and services into groups which can suitably be regarded as commodity-groups in this sense.

As a division into commodity-groups can be made in different ways, a choice as between different alternatives must be made. The general aspects

¹ Cf. *Industri. Berättelse för år 1957*. Stockholm 1959. Table 2.

² Cf. *Handel. Berättelse för år 1957*. Stockholm 1959. Table 2.

which are of importance in this respect can be summarised under the following three points:

- (1) The composition of each commodity-group must be such that the production of commodity-groups fulfils, as exactly as possible, the assumptions regarding processes embodied in the model;
- (2) There must be a practical possibility of estimating a numerical expression for the process corresponding to each produced commodity-group;
- (3) The division into groups must be sufficiently detailed to give results with the desired level of specification in respect to commodity-groups.

In principle, the most important point with regard to division into groups is that stated under (1), while (2) and (3) fix certain actually given limits within which division must be made.

The model is made on the assumption that the processes will fulfil three conditions. *Firstly*, each process must lead to the production of *one* commodity, and *one* process must correspond to each produced commodity. *Secondly*, there must be *proportionality* between produced and consumed quantities. *Thirdly* there must be *additivity* between the processes. In practice, a process in the sense of the model will refer to a commodity-group, and this will be of direct importance in the first place for the condition regarding proportionality between produced and consumed quantities. In principle, classification into groups can be regarded as an aggregation problem, in which the assembling of the commodities mentioned in statistical publications into groups has its counterpart in an aggregation of processes for the separate commodities into processes for commodity-groups. The processes obtained through an operation conceived in this way will constitute an average of more fundamental processes for separate commodities with production figures for these separate commodities during a special period as weights, and it will be such a "derived" process which, according to the model, is utilised in the production of each commodity-group. The problem is then whether this process is unchanged when the production of the commodity-group varies, which is what has been assumed in the model. This is obviously the case if the original processes are the same or if they are always utilised in the same proportions. This provides a general criterion for the formation of commodity-groups. A commodity-group should consist of commodities for which at least one of the following conditions is fulfilled:

- (a) all commodities within a group are produced with the help of the same process;

(b) all commodities within a group are produced in a constant ratio to another.¹

This criterion for the assembling of commodities into groups is easy to use as long as it is a question of deciding whether condition (a) or condition (b) is fulfilled or not. Provided that suitable observations are available—this may, however, be a troublesome limitation—condition (a) can be decided by comparing input coefficients, and condition (b) by an examination of the use of two commodities. The conditions, however, are of such a nature that we cannot as a rule expect them to be completely fulfilled in any practical cases. The important thing, therefore, will be the question of what importance is to be attached to divergences from the ideal cases, and in this respect it is more difficult to create definite criteria. Let us assume that two processes differ only in the fact that one of them consumes commodity *s* but not commodity *t*, while the other consumes commodity *t* but not commodity *s*, and that there is nothing to show that the two processes are always utilised in a constant ratio to each other. The importance of this difference will depend on the processes *s* and *t*. If these two processes are similar, it is obvious that the divergences between the first two processes are of no importance. If they are dissimilar, on the other hand, the importance of the assumed divergence will depend on whether the difference between processes *s* and *t* is a large or a small one. In order to evaluate the difference between the first two processes we must, then, first evaluate the difference between the processes *s* and *t*. Before we can do this, however, we must take a further step back, etc., etc. This means that it is the total effects within the production system which are decisive for the question of whether the assumed divergences between two processes are of greater or lesser importance. To calculate these total effects, however, a production model must be used, and the production model envisaged is intended precisely for this type of calculations.

The same difficulty recurs if we have grounds to assume that the relation between the production of two commodities varies within certain limits, and if we want to find out the importance of this variation. It will then be necessary to estimate the difference between the two processes, and we shall find ourselves again confronted with the same difficulty as before. While condition (a) refers entirely to conditions within the production system, the further difficulty arises for condition (b) that it refers to conditions partly outside the production system. The question of whether two com-

¹ With this formulation it is sufficient if one of the conditions is fulfilled. Another sufficient condition can be expressed as a combination of (a) and (b). If the commodities in a group can be divided into sub-groups for which (a) is valid, it suffices if (b) is valid for sub-groups as wholes.

modities are produced in a definite ratio, depends on the composition of the final product, and it must be assumed that this is determined by different types of final demand, and thus by activities outside the production system. Such activities can vary without regard to the constants of the model.

In spite of these difficulties in using the above-mentioned criteria exactly, they can serve as a starting-point for more general considerations in the formation of commodity-groups. If we attend first of all to condition (a) on similarity between processes, it is possible to divide the commodities concerned into groups according to the raw material which is predominant in production. Examples of such raw materials are ores and other minerals, metals, wood, agricultural produce and so on. It is further possible to take account of the special production technique used in the manufacture of different commodities. Certain types of production are characterised by changes brought about in the raw material as a result of mechanical or chemical processes such as casting, rolling, forging, turning, planing, spinning, weaving, grinding, crushing, electrolysis and so on. Other types consist to a large extent of the assembling of parts into completed finished machines etc. Examples are the manufacture of motor cars, cycles, clothing, shoes, joinery and the like. A third type of production is the kind of activity consisting of transport and distribution of goods. These groups are mentioned as typical examples. In reality, production shows a number of variations and combinations as far as techniques are concerned. The important thing is that such distinguishing characteristics can be used to a certain extent in applying condition (a) as a criterion for the assembling of commodities into groups.

According to condition (b) such commodities can be assembled into groups which are produced in a constant relationship to one another. The reason for this can be found either on the production or the consumption side. In the former case goods are produced together for technical reasons. Familiar examples of this are meat and hides, gas and coke. It can be said of such commodities that they are not particularly important and that they do not give rise to any more difficult problems where they exist. The latter case refers to commodities which are complementary in use, and this is a characteristic which it is much more difficult to utilise. The complementary nature of the commodities must apply to every kind of consumption, otherwise different variations in the activities where consumption occurs can lead to different composition of the total consumption and thus also of the production of the commodities. This means, among other things, that the more a group of commodities is concentrated on one special type of consumption, the greater is the probability that the total consumption and

the total production of these commodities will occur in a definite mutual relationship. We may therefore justifiably assume that for a commodity-group consisting of apparatus chiefly bought by private households, for instance, or mainly consumed for investment in a certain branch of industry, there is a tendency for a more unified variation within the group than in relation to commodities outside the group. In the application of this rule, however, export in particular enters into the question as an element of uncertainty. Even if a group of commodities can be expected to be consumed uniformly within the country, this need not necessarily apply to export, the composition of which is determined by other factors.

In principle, divergences as regards either of the conditions (a) or (b) lose importance, the more exactly the other condition is fulfilled. It follows from this that commodities regularly produced in relatively small amounts are of minor importance in a group of commodities, since the corresponding processes obtain small weight-figures when an appraisalment is made.

Each division into groups must be carried out within the limits set by the practical possibility of estimating the processes of the commodity-groups, and this is what is aimed at in point (2) above. A factor of importance in this connection is the classification used for the already existing statistics which the study used. Most important are the industrial statistics of the Swedish Board of Trade (*Kommerskollegium*). These are based on a division of industry into 12 main groups. These in their turn are divided into sub-groups, totalling 94. Several sub-groups are finally divided into detail-groups. This classification refers to commodities as well as to establishments, so that, corresponding to each group, there is both an aggregation of commodities and an aggregation of establishments which chiefly produce these commodities. It was an advantage in carrying out the investigation to make use of the results of analyses and calculations carried out by the Board of Trade and stated in the annual industrial report or in the records of the Board. For the greater part of industry, therefore, classification into commodity-groups has been made on the basis that each group corresponds to one or more sub-groups in the industrial statistics. The most important exception to this rule is the engineering industry, for which there were special reasons why a more detailed classification was undertaken. As the groups were tied in this way to an already existing classification, the possibilities of making a choice as regards classification were naturally limited. There is, however, no evidence that this involved more difficulty in fulfilling conditions (a) and (b) above.

A special problem arises through the fact that the classification into groups refers to both commodities and establishments. The commodities constitute the starting-point for the production model. In estimating con-

sumption for different types of production, however, the establishments are the starting-point, as it is these which reported their consumption of goods and services. Information regarding consumption then will refer to the composition of production actually occurring within the establishments. In practice, this composition of production shows itself to be so mixed that it is impossible to carry out a classification into groups of commodities and establishments in which each commodity-group is produced within only one group of establishments and every group of establishments produces only one commodity-group. Section D of this chapter deals with the way in which this problem was solved. It must, however, be emphasised that none of the solutions available is entirely satisfactory. It is therefore desirable to limit the extent of the problem, and this can be done by choosing a classification into groups which makes the heterogeneity of production in the groups of establishments as small as possible. This was borne in mind in classifying the commodities into groups.

The third view as regards division into groups was of special and immediate importance for the engineering industry. It was decided at the start that special attention would be paid on behalf of the Industrial Institute for Economic and Social Research to this branch of industry. For this reason we have aimed at a more detailed division into groups for the engineering industry than for the other sectors of industry. In the industrial classification of the Board of Trade, main group 2 covers the metal-working and engineering industry, this main group being divided into 13 sub-groups. Using the principles followed for other sectors of industry, therefore, the metal-working and engineering industry should have been divided into at most 13 groups. Such a division was regarded as insufficiently detailed, especially in view of the wishes of the Industrial Institute for Economic and Social Research. Several of the sub-groups are divided in their turn into detail-groups, and there are some calculations made by the Board of Trade available for these. If we envisage using detail-groups as a basis instead of sub-groups, the industrial statistics admit of a subdivision into 33 groups. Such a number of groups would, it might be thought, give a sufficiently detailed division, but the number of groups is not the only factor which decides whether a certain kind of division can be regarded as satisfactory or not. Equally important are the size and composition of the separate groups, and in these respects the detail-groups show some undesirable properties. Several of them include a production which is relatively large and which has a heterogeneous composition as well, and, as previously mentioned, groups with such properties should if possible be avoided. In order to carry out a consistent division of commodities from the engineering industry it was necessary, because of these circumstances, to go beyond the

industrial classification used by the Board of Trade. This has in fact been done in the case of the engineering industry.

Special considerations of this kind were not necessary for other sectors of industry. The general rule was observed that it should be possible to link the groups to such classifications of industry as actually occur in current social and economic contexts. This applies both to various kinds of statistical publications and to organisational associations in trade and industry etc. It often happens that different observations of this kind tend to point in the same direction as regards division.

The division into commodity-groups actually used is thus the result of different types of considerations. A list of the commodity-groups is to be found on page 223. A detailed description of the relation between the commodity-groups and the commodities found in industrial and trade statistics is given in *Input-output-tabeller för Sverige år 1957*, Chapter I.

The number of produced commodity-groups is 127. Groups 1–5 refer to products from agriculture, market-gardening, forestry and fisheries. 111 groups follow with products from industry proper, corresponding to the main groups 1–11 in the industrial statistics. Groups 6–7 correspond to main group 1, and groups 64–116 to main groups 3–11. For these, division into groups—with a few exceptions—is based on the sub-groups of the industrial statistics. The exceptions are groups 73 and 74, which correspond to detail-groups of sub-group 4e, and 78 and 79 which are the result of a special division of sub-group 5c. Groups 8–63 correspond to main group 2. As has been mentioned, the classification used here is more independent in relation to the industrial statistics than the classification used for industrial production in general. The rest of the groups refers to commodities which do not occur in the statistical report of production. Groups 117–119 cover different kinds of building activity and 120–127 different kinds of communication and distribution.

These 127 commodity-groups are regarded as produced within the production system, which means that the model contains a process for each commodity-group. The majority of these commodity-groups, however, are not only produced within the country but are imported as well. The total supply of these commodities within the economic system is partly a result of the activity within the production system, and partly the result of supplies from abroad, and consumption is distributed between these two parts. In the terms of the model, only the produced part is considered as a produced commodity, while the imported part is regarded as a primary commodity. For this reason two numerical series have been employed. The numbers 0001–0127 denote those parts of the amounts of commodities which are produced, and the numbers 1001–1127 those parts which are

imported. A more detailed statement of the treatment of import is given in the next section of this chapter.

By definition, a primary commodity is a commodity within the economic system which is not produced within its production system. This means that there is no process within the production model corresponding to this commodity. In a study of a factual economic system, a primary commodity receives as its counterpart a commodity-group for which no numerical estimate of the corresponding process has been made. The reason for this may be that it is not theoretically or practically possible to make such an estimate, or that there may be particular reasons for regarding a special commodity-group as non-produced. There are examples of both cases among the primary commodity-groups dealt with in the investigation. This is evident in the following treatment of the primary commodities, and also—in greater detail—in the subsequent treatment of the final consumption.

The primary commodity-groups can be divided into various main types. The first consists of groups 201–203, referring to electric power, coke and lighting gas, petrol, paraffin, motor fuels and oil for heating purposes, i.e. commodities consumed for power-production. In all these cases, the commodities are produced within the country, and it would in fact have been possible to estimate numerical values for corresponding production processes and to allow these to represent processes in the production model. There are two reasons why this was not done. One is that a probable consequence of technical development is a substitution between the use of labour services and capital services, and that this in its turn results in a changed consumption of different types of power. It is easier to take account of such a substitution if the corresponding commodities are treated as primary commodities than it is if they are treated as produced ones. The other reason is that in the production of these commodities there is very little consumption of commodities produced within the production system. The indirect effects in the use of these three commodity-groups will therefore be insignificant, and it is a matter of no great importance if they are disregarded. Although these commodity-groups are regarded as primary from the point of view of the model, i.e. as not produced within the production system, they resemble produced commodity-groups in that they are objects for production within the country as well as for import. As this is a circumstance which is of interest from many points of view, a division similar to that for produced commodity-groups has been made. The numbers 0201–0203 thus refer to those parts of the amounts of commodities which refer to the produced part, and the numbers 1201–1203 to those parts which refer to the imported part.

The next type of primary commodity-groups consists of imported com-

modities. These can be divided into two parts. One consists of groups 301–309. There is no production within the country of the kinds of commodities which form these groups. The goods concerned are thus what are generally called non-competitive imports, and they chiefly comprise commodities which cannot be produced within the country for climatic or geographical reasons. The other type of imports consists of commodities which can be produced within the country but which are also imported. Theoretically, this can be true of all the commodity-groups existing within the economic system except 301–309. When a distinction has been made between the home-produced part and the imported part, four-figure numbers are used as shown above in which the first figure is “0” for the home-produced part and “1” for the imported part.

The groups numbered 401–403 refer to labour services. As far as industry is concerned, labour services are divided into three groups, corresponding to administrative staff, operatives and out-workers in accordance with the classification employed in industrial statistics. These three groups are recorded under numbers 401–403. It has not been possible to make such a classification for the remaining parts of the economic system, for which only the sum of the groups 401–403 is stated. Groups 404–406 comprise subsidies, indirect taxes, customs duties and import fees. Group 407 is called capital services, interest, profit etc. As a general rule it has not been possible to estimate the value of consumption of this group separately; it is included in a residue which, in addition to the said elements, comprises certain services for which no special estimates could be made.

Finally, a distinction has been made between two special primary commodity-groups. One comprises waste and scrap, and is numbered 198. The supply of this commodity-group is based on three sources. One is the engineering industry, another is imports and the third, finally, consists of material obtained from worn-out products. Even if the first mentioned part is a result of activity within the production system, it is not possible to localise manufacture in any particular production process. Scrap emanating from production in ironworks and steelworks is on the other hand not included in commodity-group 198, but appears in commodity-group 8. The other special primary commodity-group consists of the unspecified services mentioned in connection with commodity-group 407 above. This commodity-group is numbered 199 and is included in the figure of consumption together with group 407. In *Input-output-tabeller för Sverige år 1957*, Chapter V, is a specification of the branches of activity in the 1951 census of production, distribution and services which approximately correspond to these services.

An activity within the economic system can be regarded as corresponding

to a process within the meaning of the model, only if it results in production of a definite commodity-group and if there is a constant relation between the produced amount of the commodity-group concerned and the consumed amount of all commodity-groups used in this production. Activities for which at least one of these conditions is not fulfilled are regarded as final demand.

The most important types of final demand within the investigation can be divided into four groups: export, private consumption, investment and public activity.

Through exports, foreign currencies are earned, and the availability of these makes imports possible. It can therefore be said that exports result in the production of imports; imports could therefore be regarded as a produced commodity-group, and we could let the corresponding process be represented by consumption for export. If we take such a wide view, the first of the above-mentioned conditions should be fulfilled. On the other hand, it is highly improbable that the second condition will be met, for this would mean that the relative distribution of exports among different commodity-groups would be constant, and there are no technical or other factors to support this hypothesis. Experience shows also that no such constancy exists as a rule.

A relation between private consumption and labour services can be envisaged similar to that between export and import. Labour services would in this case be regarded as a commodity-group produced through private consumption, and consumption for this production would be a matter of household use. This of course is a point of view which is in line with the reasoning of the old schools of economics. But here too the fact of the matter is that there is no relation between the availability of labour services and private consumption of such simplicity that it can be expressed in the same way as processes within the model.

Investment has a special status among the four types of final demand mentioned, because the receivers of the deliveries concerned are in fact identical with the receivers of deliveries of commodities for current consumption. We can therefore say that the amounts of commodity-groups included in the category of investment consist in fact of consumption within the different sectors of the production system. The characteristic quality of this consumption is that it is for maintenance and extension of the production apparatus. Now every production demands a certain technical capacity in the various production processes, and capacity sets a limit to the extent to which a process can be utilised. Capacity can be extended by investment activity, and we can therefore say that investment results in the production of capacity. It is not inherently impossible to introduce capacity-restrictions

into the production model used, i.e. figures which state the greatest possible extent to which a process can be utilised, nor is it quite impossible to estimate numerical values for these figures. A more difficult problem is to determine firstly how large the total investment must be for a given extension of capacity and secondly to find out what consumption of different commodity-groups will be rendered necessary by different kinds of such investment. Information of this kind would have to be obtained before processes for production of capacity could be incorporated in the model. In view of these difficulties, investment has been treated as final demand. Its special position, however, referred to above, makes it practically difficult in some cases to draw a line between current consumption and consumption for investment. As both types of consumption occur within the same organisational units, no division can be made on a basis of receiver-categories, and another basis must be found. When a definition which is suitable from a theoretical point of view is to be applied in practice, the line of demarcation often becomes vague, and we must to some extent fall back on the practice and judgment of those who supply the information.¹ It is to be noted in this connection that services from repair workshops (groups 60–63) have not been regarded as investment but as consumption for current input.

Public activity comprises national and local-government administration, national defence, education, public health etc. These activities could perhaps be regarded as production of different services which are then consumed within the economic system. As a rule, however, consumption of this kind cannot be localised. Moreover, the extent of different types of public activity is determined by political factors, and it cannot be assumed that the total consumption will have a constant composition as to different commodity-groups.

Besides these four groups, consumption for inventory changes and consumption for production of a residue of commodities are included in the category of final consumption. Inventory changes comprise in principle both planned and unplanned changes. The residue group includes commodity-groups 199 and 201–203. The reason why consumption for production of these commodity-groups is regarded as final consumption is, as far as 199 is concerned, the fact that the actual consumption in production during 1957 could be estimated only with a very large margin of uncertainty; and, for groups 201–203, the fact that they have been treated as primary in the model.

The definition of the production system actually made will bring about great similarities between certain magnitudes occurring in this system

¹ Cf. *Input-output-tabeller för Sverige år 1957*, Chapter X, Section B.

and the concepts ‘national product’ and ‘national income’. In the production system, the result of activity during a period will consist of the final product, and the value of this is always equal to the cost of the primary commodity-groups consumed. The final product will thus in principle correspond to the national product, and the cost of the primary commodity-groups to the national income. In order, however, to arrive at figures for national product and national income from figures referring to activities within the production system, certain additions and corrections must be made. First of all, account must be taken of the fact that imports are included among the primary commodity-groups; secondly an addition must be made for direct final consumption of primary commodity-groups; and thirdly certain corrections must be made with regard to commodity-groups 199 and 201–203. A calculation of the national product and the national income for 1957 has been set out in Chapter V.

B. *Import*

In Chapter I the general model to be used for an analysis of the Swedish production system and its activity has been described. It was said that the activity within the system results in a final product which is available for consumption outside the system, and also that this activity implies consumption of primary commodities not produced within the system.

As mentioned in Section A, the sphere outside the Swedish production system includes foreign countries. Final consumption will therefore include exports, and imports will be included among the primary commodities. As regards imports, they will come into the model and the scheme for an input–output table set out in Chapter I in the following way. If a commodity k in the model is an imported commodity, b_{kj} indicates the amount of the commodity consumed in the production of one unit of commodity j . The total consumption in the production of x_j units of commodity j is therefore $b_{kj}x_j$. In the scheme for the input–output table, this latter amount is indicated by w_{kj} , while v_{kh} stands for the amount of the imported commodity which directly satisfies the final demand h .

As Section A of this chapter showed, when the model in Chapter I is given a numerical formulation, its commodities are represented by commodity-groups. The discussion in that section led to a set of commodity-groups, intended to correspond to the commodities. Most of the groups are produced within Sweden, and within the production system, but the majority of them can be imported as well. This doubles the number of commodity-groups, so that for each such group one part is composed of produced

amounts and another part of imported amounts. The question of this duplication will be dealt with below, in a brief commentary mainly concerned with some of its theoretical aspects. If the designations employed in Chapter I for commodities are now to be used for commodity-groups instead, most of these commodity-groups will, therefore, receive two numbers. When produced amounts of them are referred to, they have the serial numbers $1 \dots n$; when imported amounts are meant, they correspond to primary commodities and are therefore numbered in the series $1 \dots m$. There are also certain commodity-groups which are not produced within the country but are imported only, and they occur only in the series $1 \dots m$. If we now turn to the actual classification into commodity-groups, as it has been set out in Section A, we find that the commodity-groups which are the objects of production within the production system are numbered 1–127 if we disregard the question of whether they are in fact produced or imported. When they are produced they are given the numbers 0001–0127, and when they are imported the numbers 1001–1127. In accordance with the same principle, production being denoted by the figure 0 and import with the figure 1 in combination with the original three-figure commodity-group number, we obtain further groups numbered 0198–0203, 0401–0407 and 1198–1203, 1407.¹ The groups 1001–1127 and 1198–1203, 1407 are called *competitive imports*. The commodity-groups which are imported only (*non-competitive imports*) have in Chapter II been given the general numbers 301–309, but as they are always imported, they will for systematical reasons be numbered 1301–1309 instead.

Strictly speaking, commodities in the model described in Chapter I will thus correspond to all the commodity-groups obtained if the produced groups 0001 etc. and the imported groups 1001 etc. are each counted separately. It is of course practical, even if not in complete accordance with the principles of the model, to allow the term commodity-group to mean the sum of the produced and imported groups, in pairs. This has been done both in Section A of this chapter and above in this section; it will also be done as a rule elsewhere, without this leading to any uncertainty as to what is meant. This double meaning of the commodity-groups is mainly due to the fact that the model is incomplete in so far as it does not study foreign trade in a way comparable with that in which production is treated. This limitation of the model will therefore now be briefly dealt with.

In a more general model, referring to the economic systems of several countries (or more generally, regions) and to trade between them, commodities would be distinguished not only from the points of view discussed in Section A, but also with regard to the country in which they are to be

¹ Import of commodity-groups 401–406 is not possible.

found. Special processes would then, through consumption of a commodity in one country, lead to supply of another commodity in another country; apart from the location of the commodity, the consumed and the supplied commodity would be exactly similar, and consumption and supply would refer to one and the same amount of goods.¹ These processes would then consist of import and export and have the same status as production processes. The commodities (commodity-groups) would be precisely defined in the model. We can now also consider another, less general model, derived from the first and referring to only one country, but concentrated on a study of both its production and its foreign trade. In division into commodities (commodity-groups) no account would be taken of whether produced or imported amounts are meant. Foreign currency would be included among the commodities. Each commodity could now in principle be supplied by two different processes. One of them is the production process discussed in Chapter I, the other an import process which results in a supply of the commodity as a result of the consumption of foreign currency.² Commodities (commodity-groups) would be precisely defined in this model also. It is now a special problem to determine the extent to which the production and import processes are utilised for each commodity. In a production model such as that described in Chapter I, this is generally done either by regarding the imported amounts as given, or by assuming that the produced and imported amounts have a given mutual relationship. In the latter case two chief methods may be used, and both lead to duplication of the commodity-groups. The method of introducing imports into the model used in the investigation, and which has been introductorily mentioned in this section, is one of them. In principle, therefore, it is not the only one which is compatible with the model in Chapter I. We shall now briefly compare it with the two alternative methods, and mention the reasons which decided the choice between them.³

In accordance with the first of the two methods which are alternatives to the method used, all competitive import—as just indicated—is treated as negative final consumption (primarily as negative export); noncompetitive imports are treated in accordance with the method used in this investigation. When the model is used in the ways stated by the equations (14)–(15) in Chapter I, this means that the amounts of competitive imports—which

¹ There would also be inputs consisting of transport services in one or several countries, but this is of no essential importance.

² Foreign currency would be supplied as a result of export processes, implying consumption of other commodities (i.e. exports).

³ The question of the way in which imports should be dealt with in models of this kind will be more fully discussed in a forthcoming investigation conducted by Lars Werin.

are the major part of imports—are included among the given magnitudes. The competitive import is then no longer regarded as consisting of primary commodities, and the model gives no information regarding the consumption of such imports for different purposes. Such information regarding consumption of imports can as a matter of fact be obtained only by methods which involve an assumption as to the relation between import and other magnitudes. The question will then be whether the information obtained is worth the degree of approximation which can arise as a result of the further assumptions (and which will then affect all the different kinds of information obtained from the model). For the present investigation it has been decided that this is the case. The method mentioned, which can be called method III, has therefore been rejected so that there was a choice only between the two remaining methods.¹

According to the method used (here called method I) imports are included—this was shown in the statement at the beginning of this section—as inputs for production and as amounts intended for final demand. According to the second of the two alternative methods (method II) the competitive imports are treated as if they were delivered to the producers of corresponding commodity-groups and then distributed by these together with the produced amounts. This means that the entire import of each of the commodity-groups 1–127 is included as consumption in the utilisation of the process whereby the same commodity-group is produced. (Non-competitive imports and imports of commodity-groups 198–203, 407, on the other hand, are included in the way shown by method I.) The figures which refer to the extent to which a process is utilised, and which in Chapter I are denoted by x_j ($j=1\dots n$) do not refer in method II to the produced amount of the commodity (commodity-group) j , but instead to the produced amount plus the imported amount of the commodity (commodity-group). The inputs $a_{ij}x_j$ ($i, j=1\dots 127$) state the sums of produced and imported amounts, and not merely the produced amounts. The consumption of the import of commodity-groups 1–127 is now included among the primary commodities, as one particular input for each process; if the input is designated as $b_{kj}x_j$, it states the total import of the commodity (commodity-group) j , and k must therefore refer to the same commodity-group in the series 1...127 as j .

¹ A third source of supply besides production and import is inventory reduction. The same problems as those concerning import arise when inventories are reduced. In a more general model—in this case an intertemporal instead of an interregional one—commodities would thus be separated on a basis of periodicity. Inventory-change processes would transform a commodity in one period to an (otherwise similar) commodity in another period. Inventory reduction has been dealt with in accordance with a method which follows method III; cf. Section A.

If for example in the equation (15) in Chapter I a certain final consumption is given, it must according to method I be divided up into produced and imported amounts; with the input-output table's symbols, pairs of magnitudes z_{jh} and v_{kh} , where i and k are the same commodity-group, in the first case produced, and in the second imported. If method II is used, no such division occurs. The magnitude z_{ih} would then state the entire final consumption of the commodity-group i , while a corresponding item for primary commodities is not conceivable.

As regards the descriptive value of the model and the corresponding input-output table, or if it is a question of the amount of work involved in assembling and applying the model, each of the two methods I and II has its particular advantages and disadvantages. It became evident, for example, that method I necessitates a subdivision of most of the consumption items, and this (apart from the fact that it demands special data) is a laborious procedure; it also became evident that with method II the figures referring to the extent of utilisation of the processes are not production figures, and that among the inputs in the utilisation of a process there is one which does not refer to consumption in the same sense as the others (namely import of the produced group), which means that the model in its details does not reproduce a production system as exactly as in the former case. Considerations of this kind are, however, not decisive for the choice of a method. Of more importance is the question which method can be expected to lead to the most accurate statement of the relations between the final product and the total product, and between the final product and the consumption of primary commodities expressed in the equations (13)–(15) in Chapter I. That method should be chosen which allows a given final consumption to result in the most reliable statement possible of production levels, import amounts and the consumption of other primary commodities. Whether one method is better than another depends *inter alia* on the degree of fulfilment of the condition that its coefficients are stable when changes in output and in the amounts of final consumption take place, and on the question whether the input coefficients which it gives are of such a kind that they can be estimated on the basis of the available data in a more reliable manner than the coefficients of the other method. The relationship between the two methods in the first of these two respects will now be discussed in more detail; the relationships between them in the second respect will be discussed below. Two questions must be dealt with: that of the stability of the input coefficients in time, and whether the validity of the coefficients is independent of the localisation of consumption, i.e. of the purpose for which consumption occurs. The following symbols will be used (in agreement with the symbols in Chapter I):

x_j = total production of commodity-group j
 w_j = total import of commodity-group j
 x_{ij} = input of produced amount of commodity-group i for production of commodity-group j
 w_{ij} = input of imported amount of commodity-group i for production of commodity-group j

As produced and imported amounts are regarded as amounts of different commodities (commodity-groups) it follows from the proportionality assumption that imported and produced amounts are not interchangeable within a process. It follows also from this assumption that an input coefficient can be written as the quotient between the figures which state the consumption of a commodity-group in the utilisation of a process and the figure which states the extent of this utilisation. For method I, therefore, we obtain the following pairs of input coefficients for consumption of an arbitrary commodity-group i in the production of an arbitrary commodity-group j ; the first coefficient refers to the input of produced amount of commodity-group i , and the other to the input of imported amount of the commodity-group:

$$\frac{x_{ij}}{x_j} = a_{ij}(I) \quad (1)$$

$$\frac{w_{ij}}{x_j} = b_{ij}(I) \quad (2)$$

For method II, we obtain first of all a coefficient which refers to the input of the total amount of an arbitrary commodity-group i in the production of an arbitrary commodity-group j :

$$\frac{x_{ij} + w_{ij}}{x_j + w_j} = a_{ij}(II) \quad (3)$$

The size of the import is arrived at thereafter for each commodity-group by using coefficients of the following type (the coefficient for an arbitrary commodity-group j):

$$\frac{w_j}{x_j + w_j} = b_{ij}(II) \quad (4)$$

If we now take account of changes in time, the basic assumption (cf. Chapter I) that the consumption of a commodity (commodity-group) is proportional to the produced amount should be best fulfilled for the following coefficient:

$$\frac{x_{ij} + w_{ij}}{x_j} = a'_{ij} \quad (5)$$

If the coefficients (1) and (2) in accordance with method I are to be stable in respect of time, it must be assumed¹ not only that coefficient (5) is stable but also that all relations

$$\frac{x_{ij}}{w_{ij}} \quad (j = 1 \dots 127) \quad (6)$$

are stable for each commodity-group i ($i = 1 \dots 127$). For the coefficients (3) and (4) according to method II to be stable, it must be assumed not only that coefficient (5) is stable but also that the relation

$$\frac{x_j}{w_j} \quad (7)$$

is stable for each commodity-group j ($j = 1 \dots 127$).

Both assumptions concerning the relations (6) and (7) seem approximately to be equally reasonable.² As the relations (6) concern minor parts of the total sums included in relation (7), it is possible, however, for them to vary from one period to another somewhat more than relation (7). As far as stability is concerned, therefore, the two methods seem, roughly, to be equally plausible.

If we consider the independence of the input coefficients from the localisation of consumption the following is the case: If method II is used, a final consumption amount as well as an intermediate consumption amount will both directly result in production and import amounts which, for every commodity-group, will have a mutual relationship in accordance with the total average, i.e. the relation stated in (7). Each consumption of a (produceable) commodity-group must of course first result in the process concerned being utilised to the extent stated by the consumption, which by coefficient (4) then results in an import of the commodity-group to an extent of

$$\frac{w_j}{x_j + w_j}$$

times the consumption. The division as between production and import is made, therefore, regardless of whether the final consumption of a commodity-group itself consists of a produced amount (or an imported amount)

¹ This assumption, like the following one, is however not a necessary assumption. It is sufficient; alternative sufficient assumptions (for example of compensating variations) would probably be less reasonable from the economic aspect.

² It is obvious that they involve more or less considerable approximations.

which is large in proportion to the average for the commodity-group. No account is taken either of the question whether the produced part of this final consumption requires inputs which in the same way have large production or import contents, or whether every other consumption of a certain commodity-group has different import contents per unit of the amount used, depending on where consumption takes place. Final consumption in the form of export will therefore, to take a particularly important example, always result in the same amount of production and import as the final consumption of another type being of the same size and having the same subdivision among commodity-groups; this means a considerable error, as the export itself does not consist of imports.¹ No such errors occur if method I is used. Every consumed amount of a certain commodity-group will be divided up in its given way into produced and imported amounts respectively. As regards the question of independence of the input coefficient from the localisation of consumption, method I is therefore to be preferred to method II. The fact that the relations between production and import for separate consumed amounts of a commodity-group might be (but probably are not) more unstable in the long run than the corresponding total relation for the whole commodity group is another question, which has been mentioned above. The fact that a division of each separate consumption-item requires considerably more detailed information is another question which has been mentioned and which will now be further dealt with.

In the choice of method, account must also be taken of the actual possibilities of estimating the values of the alternative coefficients. As a rule the estimating procedure results immediately in a consumption figure which, as far as the intermediate consumption is concerned, consists of sums of the type $(x_{ij} + w_{ij})$, corresponding to the input coefficient stated by equation (5), and which as far as the final consumption is concerned, consists of sums of the type $(z_{ih} + v_{ih})$.² Such was the case, as is shown in Chapter III, in the present investigation. Data which directly give the partial magnitudes x_{ij} and w_{ij} (corresponding to the coefficients (1) and (2)) and z_{ih} and v_{ih} respectively occur, however, sporadically. They are found for consumption in the form of export (in which everything emanates from production), of consumption corresponding to production for further processing at the producing plant³ (ditto), and of deliveries for national defense, as well as in certain other cases. A more detailed statement on these points is given

¹ See *Input-output-tabeller för Sverige år 1957*, Chapter XIV.

² In the estimated magnitudes composed of value figures, distribution expenses and consumption taxes are generally included. The next section deals with the question of how these have been treated; in this context they may be disregarded.

³ Cf. *Input-output-tabeller för Sverige år 1957*, Chapter IV.

in *Input-output-tabeller för Sverige 1957*, Chapter XIV. The total value of these consumption items, in spite of the comparatively small number of items, amounts to no less than 38 % of the value of the total consumption of all the commodity-groups which are objects both of production and import.¹ The fact that method I was chosen is due precisely to these advantages with regard to dependence of localisation of consumption.

The practical procedure adopted for estimating the value of and dealing with the import figures is described in Chapter III of this book and in Chapters III and XIV in *Input-output-tabeller för Sverige 1957*.

C. Distribution Services, Customs Duties, Indirect Taxes, and Subsidies

When a commodity is consumed, this generally means that it has been bought and delivered to the consumer. Consumption of a commodity therefore generally involves a complementary consumption of distribution services, which are regarded as particular commodities. Purchase can also imply the payment of consumption taxes and the like. These too can be regarded as commodities, likewise subject to such complementary consumption. In the present investigation the principle has been followed that these complementary consumption items should be accounted for separately. This means that the consumption items (with certain exceptions) have been included in the following way in the model, and in the scheme for an input-output table set out in Chapter I. Assume that there are several different distribution services belonging to the set of produced commodities, comprising the commodities $g \dots n$, and that there are several different taxes, customs duties, fees and subsidies applicable to consumption,² belonging to the set of primary commodities and numbered $f \dots m$. For an arbitrary process j , therefore, $a_{gj}x_j \dots a_{nj}x_j$ and $b_{fj}x_j \dots b_{mj}x_j$ will refer to the total amounts of distribution services and taxes respectively accruing to all inputs for the production of the amount x_j . In the scheme for an input-output table, the same amounts are designated $x_{gj} \dots x_{nj}$ and $w_{fj} \dots w_{mj}$ respectively. The consumption of distribution services and the taxes payable in the same way in connection with the final demand h are designated $z_{gh} \dots z_{nh}$ and $v_{fh} \dots v_{mh}$ respectively.

¹ As far as other consumption figures are concerned, they must be divided in proportions given for each commodity-group; the proportion for each commodity-group obtained by the two figures for production and import which are made up of the given total magnitudes minus the specially treated items mentioned above.

² Hereafter in this section generally called "taxes".

The distribution services form groups 122–127 of the commodity-groups between which the investigation differentiates.¹ The taxes, customs duties, fees and subsidies involved in consumption comprise parts of the groups 404–406 (certain parts of them may refer to production and not to consumption).²

One departure has been made from the given principle, however. As a rule, the consumption of all distribution services in the utilisation of a process or for a type of final demand has been included as consumption of commodity-group 127, which refers to trade services and is the most extensive of the distribution groups. The value of the different transport services (commodity-groups 122–126) included in this consumption has consequently been recorded as inputs in the process by means of which commodity-group 127 is produced. The figure showing the total extent to which this process is utilised therefore states the output of 127-commodities plus the value of these special inputs of transport services. The method assumes that the consumption of 127-commodities always involves the consumption of trade services and different transport services in fixed proportions. As the proportions in practice can be assumed to vary according to the commodity-group which the distribution concerns, the procedure must lead to certain errors.³ It was used because the data available did not allow of any other method of procedure.

It has been mentioned in Chapter I that amounts of different commodity-groups are stated in values; this was presupposed in the previous paragraph. The method for dealing with distribution costs and taxes used in the investigation and set out above implies that consumption of the different commodity-groups is included at production and import prices, and that distribution costs and taxes have been recorded as paid by the consumer. This method of dealing with distribution costs and taxes is not the only one which is theoretically compatible with the model in Chapter I. According to another method, consumption of the various produced commodity-groups is included at market prices, i.e. prices which include distribution costs and taxes. These expenses and taxes are thus recorded

¹ Groups 120 and 121 can also be said to consist of distribution services, but (apart from an insignificant part of group 120) they are not involved in the distribution of amounts of the commodity-groups.

² *Input-output-tabeller för Sverige år 1957*, Chapter XII, shows which parts of the groups are concerned.

³ Consumption of certain commodity-groups such as ore, timber etc., in the distribution of which transport services play a dominant part and for which information is available regarding these services, has been recorded separately in strict accordance with the above stated principles (cf. *Input-output-tabeller för Sverige år 1957*, Chapter XIII).

as having been paid by the producer, i.e. all distribution costs and taxes involved in the delivery of an arbitrary commodity-group j are included as consumption in the utilisation of process j . The figures referring to the extent of utilisation of the processes, therefore, do not refer to the produced amount of the commodity-group but to this amount plus the amounts of distribution services and taxes applicable to all consumption of the commodity-group,¹ i.e. of the market value of the total amount of the commodity-group.²

The two methods of dealing with distribution services and taxes agree in principle with the two methods for dealing with imports, called in the previous section method I and method II respectively.³ When method I is used, the distribution services and taxes are thus recorded, like imports, partly as consumption in the utilisation of the processes for which they are actually required, and partly as direct final consumption. When method II is used, those distribution services and taxes which refer to a certain commodity-group, as was also the case with imports of the commodity-group, are included as consumption in the utilisation of the process by means of which the group is produced. The figure referring to the extent of the utilisation of the process then includes figures for distribution services and taxes tied to the commodity-group in question.⁴ The figures for consumption of the group give similar totals.

The discussion in the previous section of the advantages and disadvantages of the two methods is in principle entirely applicable in the present instance also and will not be repeated. The input coefficients to which the discussion referred must, however, now be interpreted differently. The coefficients consisted of quotients between figures for amounts of commodity-groups. The interpretation of them which we now have to adopt will therefore become evident if it is stated which amounts of commodity-groups the designations used now refer to. These designations and quantities of commodity-group are as follows:

¹ There are, however, neither distribution services nor taxes for certain commodity-groups.

² Many authors use the expression "buyer's price" instead of "market price", and "seller's price" instead of "production and import price".

³ Method III could be used also. Distribution services and taxes would then be given magnitudes and be included in the final consumption. The method has been rejected for the same reasons as those mentioned in connection with imports.

⁴ Just as method II, when referring to imports, could be applied only for imports of commodity-groups produced within the production system, it can be applied when referring to distribution services and taxes only in cases when these are associated with those commodity-groups.

- x_{ij} = consumption of commodity-group i (not distribution service or tax) in production or production + import (according to whether method I or method II is applied in dealing with import) of commodity-group j
- w_{ij} = consumption of distribution service or tax i associated with delivery of amount x_{ij} ¹
- x_j = produced or produced + imported (cf. above) amount of commodity-group i
- w_j = total consumption of a certain distribution service or tax for all deliveries of produced or produced + imported (cf. above) amounts of j -commodities¹

With regard to the possibilities provided by the two systems of estimating the value of the different coefficients, data were available both for distribution services and taxes, yielding—with varying degrees or reliability—for practically all consumption the division of consumption amounts which method I requires. As far as import was concerned, as the foregoing section showed, such a division on the basis of the available data could be made only for part of the consumption. As regards the question of dealing with distribution services and taxes, therefore, there were even stronger reasons for deciding on method I than when import was concerned.² With regard to estimating, however, it must be pointed out—this has already been mentioned above—that data as a rule permitted on the one hand a division of consumption amounts into distribution services and taxes and on the other hand a division into distribution services and taxes and into distribution services and taxes. This, as has been pointed out, meant that the consumption of the different distribution services always comprises the same given portions of the total amount of distribution services, regardless of which commodity-group is delivered and of the purpose for which delivery is made.

There is a more detailed account of the division of consumption amounts in *Input-output-tabeller för Sverige 1957*, Chapters XIII and XIV, where it is shown that division has generally been made so that consumption taxes, subsidies and charges other than customs duties have first been separated from the consumption figures. The remaining part has then been divided into “ab-sector value” (production + import + customs duties), and distribution costs.

¹ The symbols w_{ij} and w_j actually refer to amounts of *primary* commodities and commodity-groups. Distribution services, however, are produced, but this is a fact which is of no importance in the present context.

² The application of method I in dealing with import and of method II in dealing with distribution services and taxes would make the model highly unsatisfactory from a descriptive point of view; this hardly applies to the contrary combination of the two methods.

D. *Secondary Production*

Activity within the production system is carried on within different technical, legal or financial units. The industrial statistics of the Board of Trade treat every locally independent establishment as an industrial unit,¹ and this procedure has been followed when new material was obtained. The term "establishment" has also, analogously, been used for each existing production unit, including those outside industry.

Production within each establishment will comprise different quantities of the commodities produced within the production system, and thus also of the commodity-groups mentioned in Section A. Conversely, each commodity-group will make up a more or less large part of the production of an establishment during a given period. By combining establishments for which a particular commodity-group is the major part of their production, the establishments can be classified into groups corresponding to the commodity-groups. Corresponding to each commodity-group there will be a group of establishments with the commodity-group concerned as its main production, and conversely, corresponding to each group of establishments, there will be a commodity-group which is the main part of the production within this group of establishments. Such a grouping of establishments is the basis for the information in the industrial report of the Board of Trade on production, costs etc. within main groups, sub-groups and detail-groups.¹ This classification will be employed in so far as the investigation is directly based on the grouping used by the industrial statistics—in the main this applies to industry other than the engineering industry. As far as the engineering industry is concerned, the classification system of the industrial statistics has not been exactly followed, but a division into commodity-groups and groups of establishments corresponding to that described above has been made with the difference that the grouping of establishments merely refers to the sample for which the investigation obtained special information regarding consumption.² For the part of the production system not dealt with by the industrial statistics there was, generally speaking, no information available regarding the composition of production within the plants. It was assumed, then, that production within each group of establishments is identical with production of the corresponding commodity-group.

The classification described will thus refer to both commodities and establishments. Experience of such classification shows that production within the establishments has such a mixed character that as a rule it is

¹ Cf. *Industri 1957*, page 9.

² See also *Input-output-tabeller för Sverige år 1957*, Chapter IV.

not possible to make a division into groups in which each commodity-group is manufactured only in one group of establishments, and where conversely every group of establishments manufactures only one commodity-group. We can therefore speak of the *main production* of each group of establishments, by which is meant the production of the commodity-group corresponding to the group of establishments, and of its *secondary production*, meaning its production of other commodity-groups. It follows from the principles used for grouping that the main production of a group of establishments is always larger than its secondary production of each separate commodity-group.

The existence of secondary production gives rise to certain problems in the estimation of the numerical values for the processes which correspond to the different commodity-groups. The estimate is largely founded on information from establishments on the extent of total production and its apportionment between different commodity-groups on the one hand, and on the other on the total cost and the consumption of different commodity-groups.¹ No information, however, is available regarding the amount of cost and consumption which refers to the production of separate commodity-groups. In the assembling of establishments into groups, the same information in principle will be available for groups of establishments, i.e. on the one hand the extent and composition of production, and on the other hand the total cost and the consumption of different commodity-groups. The problem is to estimate the value of input coefficients for commodity-groups on the basis of this information.

Before this problem can be discussed further some new symbols must be introduced. They are explained below, but we shall first repeat the symbols in Chapter I which are applicable in this context. These are:

x_j = total produced amount of commodity (commodity-group) j

x_{ij} = consumption of produced commodity (commodity-group) i in utilisation of process j

w_{kj} = consumption of primary commodity (commodity-group) k in utilisation of process j

The following relations apply between these magnitudes according to the model:

$$x_{ij} = a_{ij}x_j \quad (8)$$

$$w_{kj} = b_{kj}x_j \quad (9)$$

¹ Data on extent and composition of production and on certain costs are supplied to the Board of Trade annually and are the basis of its industrial reports. Information on consumption of different commodity-groups has been collected. See also Chapter III regarding this.

The further symbols needed refer to production and consumption within groups of establishments, denoted in the following way:

x^j = total produced amount within group of establishments j

x_i^j = produced amount of commodity-group i within group of establishments j

x^{ij} = consumption of produced commodity-group i within group of establishments j

x^{kj} = consumption of primary commodity-group k within group of establishments j

As all production occurs within the groups of establishments, the following equations apply:

$$x_i = \sum_j x_i^j \quad (10)$$

$$x^j = \sum_i x_i^j \quad (11)$$

As previously mentioned, the available information refers to production and consumption within the establishments. By assembling into groups of establishments and summation, we obtain for each group of establishments the observed values of x^j, x_i^j, x^{ij} and w^{kj} and from these by summation according to (10) the value of x_i . On the other hand there are no available observed values for x_{ij} and w_{kj} , and it is this which causes difficulties.

In a case where there is no secondary production, $x_j = x^j$, $x_{ij} = x^{ij}$ and $w_{kj} = w^{kj}$ would obviously apply, so that the available observations could be directly used for an estimate of the value of the coefficients a_{ij} and b_{kj} . If, on the other hand, secondary production occurs, the above equations do not apply, the stated procedure cannot be used and some other method must be chosen. It is then desirable that the procedure selected shall require as few new restrictions as possible for the model, and if new restrictions are introduced, those should be selected which are most realistic.

It was shown in Chapter I that each activity within the production system can be expressed by the vectors which state the n processes together with suitable values for x_j for the quantities of products concerned.¹ If this is taken more especially to apply to each separate group of establishments, then activity within an arbitrary group of establishments s can be expressed by an equation which corresponds to equation (2) in Chapter I:

¹ See in particular page 15.

$$\begin{bmatrix} 1 - a_{11} \\ -a_{21} \\ \dots \\ -a_{s1} \\ \dots \\ -a_{n1} \\ -b_{11} \\ -b_{21} \\ \dots \\ -b_{m1} \end{bmatrix} x_1^s + \begin{bmatrix} -a_{12} \\ 1 - a_{22} \\ \dots \\ -a_{s2} \\ \dots \\ -a_{n2} \\ -b_{12} \\ -b_{22} \\ \dots \\ -b_{m2} \end{bmatrix} x_2^s + \dots + \begin{bmatrix} -a_{1s} \\ -a_{2s} \\ \dots \\ 1 - a_{ss} \\ \dots \\ -a_{ns} \\ -b_{1s} \\ -b_{2s} \\ \dots \\ -b_{ms} \end{bmatrix} x_s^s + \dots + \begin{bmatrix} -a_{1n} \\ -a_{2n} \\ \dots \\ -a_{sn} \\ \dots \\ 1 - a_{nn} \\ -b_{1n} \\ -b_{2n} \\ \dots \\ -b_{mn} \end{bmatrix} x_n^s = \begin{bmatrix} x_1^s - x^{1s} \\ x_2^s - x^{2s} \\ \dots \\ x_s^s - x^{ss} \\ \dots \\ x_n^s - x^{ns} \\ -w^{1s} \\ -w^{2s} \\ \dots \\ -w^{ms} \end{bmatrix} \quad (12)$$

The right-hand side contains those magnitudes for production and consumption within the group of establishments which are known by observations. The left-hand side contains n vectors which denote the processes of the model, and which in this context are unknown as far as their numerical values are concerned; and also the same n magnitudes for production within the group of establishments as are shown on the right-hand side. The expression can be regarded as a system of $m+n$ equations with $n(m+n)$ unknown quantities, namely the $n(m+n)$ input coefficients. If there is no secondary production the system degenerates into the special case in which all x_i^s except x_s^s are equal to zero, and numerical values of the coefficients a_{is} and b_{ks} can be obtained by dividing the right-hand side by x_s^s .

A similar expression can be formed for each group of establishments, so that n systems of the above type containing in all $n(m+n)$ equations are obtained. If the same row is selected from each of these systems and put together into a new system, the following is obtained for row s :

$$-a_{s1} \begin{bmatrix} x_1^1 \\ x_1^2 \\ \dots \\ x_1^s \\ \dots \\ x_1^n \end{bmatrix} - a_{s2} \begin{bmatrix} x_2^1 \\ x_2^2 \\ \dots \\ x_2^s \\ \dots \\ x_2^n \end{bmatrix} - \dots + (1 - a_{ss}) \begin{bmatrix} x_s^1 \\ x_s^2 \\ \dots \\ x_s^s \\ \dots \\ x_s^n \end{bmatrix} - \dots - a_{sn} \begin{bmatrix} x_n^1 \\ x_n^2 \\ \dots \\ x_n^s \\ \dots \\ x_n^n \end{bmatrix} = \begin{bmatrix} x_s^1 - x^{s1} \\ x_s^2 - x^{s2} \\ \dots \\ x_s^s - x^{ss} \\ \dots \\ x_s^n - x^{sn} \end{bmatrix} \quad (13)$$

It is still the case that x_i^j and x^{sj} are known quantities, while the n a_{sj} 's are unknown. The equation shows that it is possible to construct a system of n equations for each commodity-group, in which the n coefficients a_{sj} (or,

if primary commodities are concerned, b_{sj}) occur as unknowns. Provided that solutions exist, the numerical values of the coefficients can be calculated in this way. If there is no secondary production, all x_i^j 's except for $i=j$ are equal to zero, and the coefficient a_{s1} can be obtained by dividing the first element in the right-hand column by x_1^1 ; a_{s2} can be obtained by dividing the second element by x_2^2 , and so on.

Just as (12) can be used for each group of establishments, (13) can be used for each commodity-group. It is seen then that the matrix formed by the magnitudes x_i^j recurs in the same way for each commodity-group. With matrices, the whole can be summarised in the following way:

$$\begin{bmatrix} I - A \\ -B \end{bmatrix} [x_i^j] = \begin{bmatrix} [x_i^j - x^{ij}] \\ [-w^{kj}] \end{bmatrix} \quad (14)$$

From this is obtained

$$\begin{bmatrix} A \\ B \end{bmatrix} [x_i^j] = \begin{bmatrix} [x^{ij}] \\ [w^{kj}] \end{bmatrix} \quad (15)$$

Provided that the inverse exists we can obtain from this:

$$\begin{bmatrix} A \\ B \end{bmatrix} = \begin{bmatrix} [x^{ij}] \\ [w^{kj}] \end{bmatrix} [x_i^j]^{-1} \quad (16)$$

The right-hand side contains known quantities only. The matrices $[x^{ij}]$ and $[w^{kj}]$ state the consumption of the different commodity-groups within the groups of establishments, and the matrix $[x_i^j]$ states the production within the groups of establishments, divided into commodity-groups. This expression has been used for estimating the values of A and B, whose elements have been interpreted as input coefficients for produced and primary commodity-groups respectively. The expression also states how the estimate has been made when there is no secondary production. This will be a special case in which $[x_i^j]$ is a diagonal matrix.

So far, we have been able to form an estimating procedure without any assumptions regarding the production system other than those upon which the model is based and which are thus used when the model is to be employed for forecasting or explanation. In point of fact these assumptions permit of greater freedom in the formation of groups than the above remarks would suggest. If n processes are sufficient for any activity within the production system, it is immaterial how the establishments are grouped, provided that precisely n groups are formed. Every grouping of such a kind leads to the same result in estimating the coefficients.

There are, however, certain complications, and these are connected with the factors discussed in connection with the division into commodity-

groups in Section A. It was said there that in the forming of commodity-groups we should bring together those commodities which are either produced by the same process or produced in a constant relation to one another, but it was pointed out the same time that we cannot expect to find these conditions exactly fulfilled in practice. In consequence, there is an element of approximation both in the above-described procedures for estimating parameters and in any use of the model, although the elements of approximation are of different kinds in the two cases. With regard to the second condition, concerning production in a constant relationship, it is sufficient in using the model that it applies to the entire production of a commodity-group at different points of time, but this is not sufficient in the estimating procedure. It must then apply to the production of commodity-groups within different groups of establishment during the observation period, which is another matter. We may take as an illustration a group of commodities which are complementary in demand, and which we can therefore assume to be produced in unchanged proportions. If we can now form a group of establishments which produce only these commodities and all production of the commodity-groups occurs within this group of establishments,¹ an estimation of the process for the commodity-group can be made direct on the basis of the information on production and consumption within this group of establishments. The process estimated will be an average of more original processes, with production figures for the separate commodities as weights.² As the commodities in this case are produced in a constant relationship, these weights will not be changed, and the result will be a stable process. If production of the commodity-group is spread over several establishments, it will become more complicated. If composition with respect to commodities changes between the groups of establishments where production is being carried on, the result of the estimate will depend on the particular grouping of establishments selected. The estimate will generally, therefore, not lead to the above-mentioned weighted average of the processes for each commodity. This average is obtained if the composition is the same for all groups of establishments. To give a correctly estimated result, the condition as to identical composition of production must apply during the observation period for the groups of establishments where a commodity group is produced. This means that a further restriction must be imposed on the production system.

The method used for estimating the processes for the commodity-groups

¹ Or if they are produced within the group of establishments in the same relationship to one another as they are as a whole within the production system.

² Cf. Section A.

is thus not unobjectionable. To throw a little more light on the problem we shall mention two other possible methods. It will be easier to describe them if we give them special names. The method just described will therefore be called the *commodity-group method*, and the two following the *product-mix method* and the *transfer method*.

In the product-mix method, the groups of establishments are retained as the point of departure for production-activity, and we let the processes in the model refer to groups of establishments instead of, as in the former case, to commodity-groups. Because there is a mixture of products, we cannot make the assumption that all the commodities produced within a group of establishments require the same process. If the processes in the model are to refer to groups of establishments, it must therefore be taken for granted that production within them has a constant composition as far as all such groups of commodities which are manufactured by the utilisation of different processes are concerned.¹ Reverting to our previous remarks on this point, we can say that the previous assumptions concerning commodity-groups are relaxed so that they apply only to each group of establishments in itself; there will therefore be a separate process for each commodity-group and for each group of establishments where it is manufactured, i.e. up to $n \times n$ processes, and at the same time the additional assumption is made that the production within each group of establishments has a constant composition with respect to commodity-groups.

It follows from these new assumptions that there is a separate ("derived") process for each group of establishments, the numerical values of which can be directly estimated from figures on production and consumption within the group of establishments. If we indicate such a process by a vector p^j , the following equation will be obtained for the estimate:²

$$[p^j] = \begin{bmatrix} x_i^j - x^{ij} \\ -w^{kj} \end{bmatrix} [\hat{x}^j]^{-1} \quad (17)$$

As the composition of products within the groups of establishments is constant, the following matrix will also be constant:

$$[e_i^j] = [x_i^j] [\hat{x}^j]^{-1} \quad (18)$$

This procedure leads to a production-model differing from that described in Chapter I, in that more than one commodity can appear as an output when a process is utilised. If the processes as in equation (17) are expressed

¹ Cf. Section A, pages 26, 27, also note.

² Applied to equation (12) this means that p^s is obtained by dividing the right-hand column by x^s . \hat{x}^j indicates diagonal matrix.

by vectors, the typical element for a produced commodity-group in such a vector will be

$$\frac{x_i^j - x^{ij}}{x^j} \quad (19)$$

This quotient will obviously be constant for different levels of activity within the production system if the above-mentioned conditions regarding commodity-groups and product-mix within the groups of establishments are fulfilled. The model states primarily the relation between final product and production within the groups of establishments, but by means of relation (18) production within the groups of establishments can be easily converted to show the production of commodity-groups.¹

There is an interesting connection between this method for dealing with secondary production, and the commodity-group method previously mentioned. To show this we can start from the equations stated in Chapter I for final product and consumption of primary commodities:

$$Y = (I - A) X \quad (20)$$

$$W = BX \quad (21)$$

Using the commodity-group method, these equations can be written:²

$$Y = (I - [\bar{x}^{ij}] [\bar{x}_i^j]^{-1}) X \quad (22)$$

$$W = [\bar{w}^{kj}] [\bar{x}_i^j]^{-1} X \quad (23)$$

Using the product-mix method, the following equations are obtained for the relation between (a) final product and consumption of primary commodities and (b) production within groups of establishments:

$$\begin{bmatrix} Y \\ -W \end{bmatrix} = [p^j] [x^j] \quad (24)$$

Write instead:

$$\begin{bmatrix} Y \\ -W \end{bmatrix} = [p^j] [e_i^j]^{-1} [e_i^j] [x^j] \quad (25)$$

It follows immediately from (18):

$$[e_i^j] [x^j] = [x_i] = X \quad (26)$$

¹ Instead of the matrix (I-A) a matrix (C-D) is obtained, in which all elements in C and D are non-negative, C corresponds to I, all column-totals being equal to 1. D corresponds to A, for both the column-totals being less than 1. (C-D) can always be inverted, but the inverse may contain negative elements.

² Cf. (16). \bar{x}^{ij} etc. here and in (27) and (28) indicate observed values used in the estimation.

Furthermore, according to (17) and (18):

$$\begin{aligned} [p^j][e_i^j]^{-1} &= \begin{bmatrix} [\bar{x}_i^j - \bar{x}^{ij}] \\ [-\bar{w}^{kj}] \end{bmatrix} [\hat{x}^j]^{-1} ([\bar{x}_i^j] [\hat{x}^j]^{-1})^{-1} \\ &= \begin{bmatrix} [\bar{x}_i^j - \bar{x}^{ij}] \\ [-\bar{w}^{kj}] \end{bmatrix} [\hat{x}^j]^{-1} [\hat{x}^j] [\bar{x}_i^j]^{-1} = \begin{bmatrix} I - [\bar{x}^{ij}] [\bar{x}_i^j]^{-1} \\ -[\bar{w}^{kj}] [\bar{x}_i^j]^{-1} \end{bmatrix} \end{aligned} \quad (27)$$

From this is obtained as an equation for the relation between final product and consumption of primary commodities and production of different quantities of commodity-groups:

$$\begin{bmatrix} Y \\ -W \end{bmatrix} = \begin{bmatrix} I - [\bar{x}^{ij}] [\bar{x}_i^j]^{-1} \\ -[\bar{w}^{kj}] [\bar{x}_i^j]^{-1} \end{bmatrix} X \quad (28)$$

This is the same equation as (22) and (23), which are obtained by the commodity-group method.

Using the transfer method, the group of establishments is similarly retained as a unit for activity within the production system, but certain modifications and additions are made as regards both production and consumption.¹ All secondary production is envisaged as delivered from the group of establishments actually engaged in manufacture to the group of establishments where the commodity is the main product, and, from this group of establishments, to the consumer. Three kinds of additions or alterations are therefore made in the observed figures for the group of establishments:

- (a) all production within a group of establishments is recorded as main production;
- (b) production of the commodity-group corresponding to a group of establishments, which has occurred within other groups of establishments, is recorded as consumption of the commodity-groups of these groups of establishments;
- (c) the production is increased by the sum of the additions on the consumption side stated under (b)

This means that the coefficients for an arbitrarily chosen process j are estimated on the basis of the following vector:

¹ This method was used *inter alia* in the study for USA 1947.

$$\left[\begin{array}{c} -x^{1j} - x_j^1 \\ -x^{2j} - x_j^2 \\ \dots \\ \sum_i x_i^j + \sum_{i \neq j} x_j^i - x^{jj} \\ -x^{nj} - x_j^n \\ -w^{1j} \\ -w^{2j} \\ \dots \\ -w^{kj} \end{array} \right] \quad (29)$$

The typical input coefficient for produced commodity-groups will look like this:

$$\frac{x^{ij} + x_j^i}{\sum_i x_i^j + \sum_{i \neq j} x_j^i} \quad (30)$$

Both numerators and denominators are composed of two figures. The numerator comprises the sum of the consumption of commodity-group i within the group of establishments j , and production of the commodity-group j within the group of establishments i . The denominator, on the other hand, consists of the sum of total production within the group of establishments j and total secondary production within the system of commodity-group j . The figure which appears here as denominator states also the level at which the process is utilised. The model will therefore show the relation between this magnitude and final product.

In the use of this method the assumption is made that the quotient (30) is constant for different extents of activity carried on within the system. It seems difficult, however, to find any good reasons why this should be so.

Although the occurrence of secondary production is primarily a problem in the estimating procedure, the above shows that the conceivable methods will also affect the structure of the model itself. Among all the feasible methods, we should of course choose the one which can be expected to give the most reliable results when the model is in use. An indication of this is given by the content of the assumptions regarding the production system on which the different methods can be based. These assumptions have been stated in the preceding remarks.¹ As regards the three methods stated, the

¹ The assumptions stated are naturally not necessary ones. They are sufficient and they have been chosen because of their presumed realism.

transfer method has been rejected because it could not be based on any realistic assumptions. More specifically expressed, it has not been possible to imagine a reasonable economic system in which magnitudes according to equation (30) are constant in different extents of production activity.

Both the commodity-group method and the product-mix method are based on assumptions the realism of which is questionable. This applies in the former case to the assumption that the composition of a commodity-group is the same within each group of establishments where it is produced; in the latter to the assumption that production within each group of establishments has a constant composition. It is difficult to estimate the relative importance of these conditions, but actually it is not necessary to do so, as the method of procedure is compatible with both. If, nevertheless, the method of procedure used is tied to the commodity-group method, there are several reasons for this. In the first place, it has been thought that the assumptions on which this method is based are a little more realistic than those for the product-mix method. Secondly, this method appears to be more consistently in line with the general idea behind construction of the production model. Thirdly, the product-mix method, like the transfer method, presupposes knowledge of the total production and its composition for each group of establishments. There is no such knowledge available except for sub-groups within the industrial statistics, and this means that for both these methods it was necessary to base the classification of commodity-groups used in the investigation entirely on the industrial group-classification of the Board of Trade and it would not have been possible to carry out a special grouping for the engineering industry.¹

The method of procedure used is, as we have several times pointed out, not an irreproachable one. One of the results is that negative consumption appears in certain cases. As this has no reasonable economic meaning it has been deleted. As a result, however, the total consumption of a commodity-group will be larger than the figure which follows from the statistical information on consumption. The deletions have therefore generally been combined with a reduction of consumption elsewhere in the production system. As far as possible, we have borne in mind here the manner in which the negative consumption arose in the calculations.²

¹ See further remarks on this in *Input-output-tabeller för Sverige år 1957*, Chapter IV.

² Cf. *Input-output-tabeller för Sverige år 1957*, Chapter IV.

CHAPTER III

Estimation of the Constants of the Model

A. Introduction

An important requirement which affected the construction of the model was that it ought to be possible without too much expenditure of work to give the model a numerical formulation—i.e. to estimate its constants—on the basis of the available data, or of data which might be expected to be obtainable. This requirement influenced both the basic formulation of the model in Chapter I and the drawing-up of the division into commodity-groups which was fundamental for the model (including the problems with regard to division and recording which arose through the occurrence of imports and of such complementary commodities as distribution services) which have been dealt with in Sections A–C of Chapter II.

The estimation of the constants of the model, i.e. the input coefficients, was made on the basis of an input–output table for the year 1957. Such a table, as shown in Chapter I, states the consumption of commodities for different purposes, both within the production system and for the final demand. In accordance with the proportionality assumption, an input coefficient can be written as the quotient between the figures which refer to the consumption of a commodity-group in the utilisation of a process and the figure which states the level of this utilisation. The figures of the input–output table for consumption within the production system are composed precisely of the first mentioned figures, while the last mentioned ones are the total production figures for the various produced commodity-groups; this shows that the input coefficients can easily be calculated when the table and the total production figures are estimated.

The data available or which it is presumed can be obtained are however not immediately suitable for an input–output table of the type discussed in Chapters I and II. The data available lead first of all to a table which differs in several respects from such a table mentioned. Firstly, it shows consumption within groups of establishments, and, therefore, not consumption in the utilisation of processes. Secondly, it shows consumption without division into produced and imported amounts, and in market value (i.e. including distribution costs and consumption taxes).¹ Chapter II, Sections

¹ Moreover, it does not refer to the total activity during the period, as most of the consumption figures are found primarily only for those collections of establishments

B-D, shows in outline how on the basis of such data it is possible to arrive at the input-output table required for calculation of the coefficients; the operations described in these sections require, as was also shown, certain data in addition to those included in the input-output table.

Basing estimates of the input-output coefficients on an input-output table is not the only possible estimating method. It was, however, regarded as the only practicable one. The year 1957 was chosen for setting up the table because this year was the last one for which a good deal of the most important data were available when the estimate was to be made.

A schematic survey follows containing the most important of the collected data available and necessary for estimating the input-coefficients. Chapters I and II and the above discussion have already outlined the types of data required and the method by which estimates were made with such data as starting-points. It need merely be added that figures for final consumption and for the availability of primary commodity-groups (i.e. row-totals in the input-output table other than those composed of total-production figures) are utilised—even if only indirectly—in estimating the input-coefficients also, since they make it possible to check that the consumption and supply estimations are consistent, and also to test the reliability of the consumption figures. The collections of data are as follows:

1) Data on the consumption by collections of establishments of the various commodity-groups in market values without division into produced and imported amounts, distribution costs and other magnitudes (*figures for consumption within the production system*).

2) Data showing the manner in which the output of the collections of establishments is divided into commodity-groups (*product-mix figures*).

3) Data on the total output of commodity-groups (*total output figures*).

4) Data showing which parts of the consumption figures in market value consist of distribution costs and of consumption taxes and the like (*figures for distribution costs etc.*).

5) Data showing the way in which the consumption figures at production and import prices (excluding distribution costs and consumption taxes and the like) are divided into produced and imported amounts (*import*

which replied to a survey (it can therefore be called partial). The final input-output table—which also served as a basis for calculating the input coefficients—refers however to the total activity, because it consists of consumption figures multiplied up to the total level. In itself, of course, a partial table which satisfies the condition—it easily does so with the estimating methods used here—that the consumption figures in each separate column refer to the same output could be a basis for calculating the coefficients; such a table is however unsuitable chiefly because it renders it impossible for certain reliability checks to be made (these checks will be mentioned shortly).

quotients); calculation of such quotients is made, however, as a rule with the aid of data from collections 3 and 7.

6) Data on final consumption (*figures for final consumption*); in conjunction with relevant data belonging to collections 4 and 5 and with data-collection 7 used for the total reliability check referred to.

7) Data on total import of the different commodity-groups (*import figures*).

Information will now be given in Section B on those parts of the data-collections specified above which were found available in public statistics and other available sources (minor collections of data and scattered information will not be included either in Section B). An account will be given in Section C of survey material collected with a view to supplementing the available statistics as regards the particularly important information on consumption within the production system. A short summary will be given in Section D showing the practical aspects of the method by which the coefficients were estimated, starting from the data originally available and the survey material. *Input-output-tabeller för Sverige 1957* contains a complete and exhaustive account of this matter.

Information on final consumption (data collection 6) is, as has been mentioned, of indirect importance for estimating the constants of the model, as it is included in the total checking procedures. This information is also employed for certain applications of the model referring to conditions in 1957. For this reason, and because division and, therefore, collection of it and other material has been made precisely with a view to these applications, it can primarily be regarded as data collected for purposes other than that of their usefulness in estimating the constants of the model. It is therefore dealt with separately in Chapter IV (and in greater detail in *Input-output-tabeller för Sverige år 1957*).

B. Available Data

The major part of the data already available and which therefore did not have to be specially collected comes from three sources of central importance. The first is the industrial statistics, the second the trade statistics and the third a special national-accounting material, compiled for the investigation in conjunction with available accounts. A short statement on these three main sources will be given first.

The industrial statistics have been compiled by the Board of Trade, and an annual account of them has been included in the publication *Industri*.¹

¹ For composition etc. of the statistics, see for example *Industri 1957*, pages 1 ff.

They are based on information given by each separate, locally independent establishment (work point) of a certain minimum size. In most branches of industry the demarcation has been made on the basis that the number of employees must be at least five persons on an average per year if the establishment is to be included. The information embraces—as shown in more detail below—a report on the value and quantity of manufactures, certain production costs, personnel, consumption of fuel, electric power and sundry raw materials etc. The report on the manufactured articles is based on a division into a collection of (up to and including 1958)—in round figures—2,300 different commodities. These commodities as well as the establishments themselves have been divided into groups in accordance with certain principles; the division has meant that a certain group of establishments corresponds to each group of commodities (as already mentioned in Chapter II, Section A).

The trade statistics have also been compiled by the Board of Trade and are based on information collected by the customs authorities in conjunction with the import and export of commodities. There is a report on the statistics and on the principles according to which they are compiled in the annual publication *Handel*.¹ The information includes a report on the value and quantity of the imported and exported commodities, under the headings of the different countries concerned. The report covers (up to and including 1958), in round figures, 2,500 different commodities. The report also includes information on customs duties collected for the different commodities.

The third main source consists, as mentioned, of a special national-accounting material. The material covers the year 1957. It has been compiled according to the same principles as those employed for a series of national-accounting reports for the years 1930–1954, made by the Board of Trade and partially reported in *Kommersiella Meddelanden*.² The compilation was made by Mr. Östen Johansson of the University of Stockholm. The material includes figures for the availability of each of a large number of commodities and commodity-groups, and figures for the consumption of these. As far as supply is concerned, there is a separate treatment of production by smaller establishments, not reported in the industrial statistics (cf. above), for which (with certain exceptions) information is not available from other sources. In dealing with consumption, a distinction is made between the following different ranges of use: export, private and public consumption, investment, input in manufacturing industry, in building activity and in all other activities. Inventory-changes are also given. Both availability and consumption are shown at the market price

¹ See e.g. *Handel 1957*, pages 15 ff.

² Volume 46, 1959, Nos. 7–11.

and also at the price charged by producers or when imported (including customs duty). The commodities and commodity-groups shown include practically all the commodity-groups studied in this investigation; among the groups excluded for various reasons are to be noted labour and capital services etc.

We shall first specify the separate collections of statistical information included in the three main sources¹ and which were of such a kind that they could be used for this investigation (as a rule they have in fact been used). In the specification, it will be stated which special collections of statistical information refer to each of the data-collections mentioned in Section A; data-collection 5 (import quotients) is, however, based in most cases on figures from data-collections 3 and 7, so that it need not be included, and data-collection 6 (figures for final consumption) is treated, as mentioned, in Chapter IV.

1) *Figures for consumption within the production system*

a) Figures for wages and salaries to different categories of employees (= consumption of commodity-groups 401–403) in all establishments reported in the industrial statistics (totals for groups of industries in *Industri*, Table 4, and information as to separate establishments in primary material at the Board of Trade).

b) Figures for cost of electrical energy (= consumption of commodity-group 201) in all establishments reported in the industrial statistics (totals for groups of industries in *Industri*, Table 4, and information for separate establishments in primary material at the Board of Trade).

c) Information in quantity-figures on consumption of various fuels (after conversion to value figures with the aid of suitable price figures = consumption of commodity-groups 202, 203, 301, etc.) in all establishments reported in the industrial statistics (totals for groups of industries in *Industri*, Table 6, and information for separate individual establishments in primary material at the Board of Trade).

d) Information in quantity-figures on consumption of certain raw materials etc. in all establishments reported in the industrial statistics (totals for groups of industries in *Industri*, Table 5, and information for separate establishments in primary material at the Board of Trade); the information has, for reasons shown in Section C, not generally been used, but has been replaced by survey material.

e) Information in quantity-figures as to consumption of certain more

¹ In a single case, however, a collection has been included which does not appear in any of these three sources.

important raw materials etc. in a large selection of industrial establishments (unpublished material from the Board of Trade, included in the quarterly statistics and inventory-statistics); cf. d) above.

f) Figures for total cost of raw materials etc. (=sum of consumption of the majority of the commodity-groups 1-127 and 302-309; the exceptions are, generally speaking, known) within all establishments covered by the industrial statistics (totals for groups of industries in *Industri*, Table 4, and information for separate establishments in primary material at the Board of Trade); the information can be used and has been used only for checking purposes in combination with information regarding consumption of single commodity-groups.

g) Figures for total costs for fuel (=sum of consumption of commodity-groups 202, 203, 301 and minor parts of commodity-groups 64, 71, and 116) in all establishments covered by the industrial statistics (totals for groups of industries in *Industri*, Table 4, and information for single establishments in primary material at the Board of Trade); cf. f) above.

2) *Product-mix figures*

Information in value-figures¹ on the division of manufacture among the commodities covered by the industrial statistics in all plants and groups of industries covered by the industrial statistics (primary material at the Board of Trade).

3) *Total output figures*

a) Figures for total output value of the amounts of commodity-groups 6-116 manufactured in establishments covered in the industrial statistics (*Industri*, Table 2).

b) Figures for total output value of the amounts of commodity-groups 6-116 which are not manufactured in establishments covered by the industrial statistics, and as to the total output value of the majority of commodity-groups 1-5 and 117-127 (the special national-accounting material).

4) *Figures for distribution costs etc.*²

a) Information for each commodity-group as to the total proportion for trade costs and transport costs of the consumption figures in market value for different ranges of use (the special national-accounting material).

¹ Information in quantity figures is also included, but is of no interest as far as the present investigation is concerned.

² Figures for consumption taxes etc. (not customs duties) have been obtained in small batches from several different sources and are therefore not mentioned here.

b) Information as to the division of collected customs duties among different commodities in the trade statistics (*Handel*, Part I, Table 5).

7) *Import figures*

Figures for the import value for each of the different commodity-groups, excluding groups 199, 201, 401–407 (*Handel*, Part I, Table 2).

C. Supplementation of the Available Data with Special Survey Material

As shown above, several different types of data are necessary for estimating a model of the kind dealt with here. Especially important, however, are the consumption data, as these constitute the actual basis for calculating the constants of the model.

As regards the consumption figures available among the sources specified in Section B, those numbered 1a–1c supplied suitable information for the investigation regarding the consumption of commodity-groups 201–203,¹ 301 and 401–403, i.e. inputs of electric power, fuel and labour. For inputs of raw materials and semi-manufactured goods (i.e. the majority of the remaining commodity-groups) information was found in the available statistics only for a selection of commodities in quantity-figures (sources numbered 1d–1e).² To utilise this information it was necessary first of all to regroup it into the commodity-groups of the investigation (a procedure which involved certain difficulties as these groups are based on a classification of commodities differing from the one used in the industrial and trade statistics, in which the division into groups of the investigation was formulated) and thereafter convert them into value figures. The latter demands special information as to the price of each commodity (the unit-prices of the industrial and trade statistics can often or generally not be used on account of the different method used to classify commodities). Attempts were made experimentally for a number of groups of establishments to co-ordinate the classification of commodities, to combine suitable price-data and then calculate consumption figures for the different commodity-groups. The attempts were not very successful, as was evident for instance when the totals of expenditure obtained in these experiments were compared with the totals of expenditure included in source 1f. The method

¹ For commodity-groups 202–203 in combination with sundry price information and with the consumption figures numbered 1g.

² In addition there are single items of information scattered in other sources, not mentioned here.

was also very laborious. Therefore, and in view also of the fact that the information obtained by this method had in any case to be supplemented by information for the commodities not covered by the sources 1d and 1e,¹ it was replaced by a comprehensive survey material.²

The survey material consists of information for different establishments on the selling value of the total manufacture for sale, and on the consumption of the different commodity-groups³ corresponding to manufacture. A short account follows of the method used for collecting the material and for its extent and nature. *Input-output-tabeller för Sverige år 1957* contains a more detailed account.

As a preliminary a selection of establishments was made according to the main principle that adequate material should be available for estimating the total consumption figures in the utilisation of each of the various processes during the year 1957. However, no firmly-defined rule was applied regarding the representativity desired. The selection of establishments represent first of all groups of establishments, but some care can often or generally be taken to see that the selection made is a representative one for the processes also, and as far as these groups are concerned it is a fact that in the majority of cases a relatively small number of establishments is responsible for a very considerable part of the production, and therefore of the consumption too. The selection was therefore made, practically throughout, on the principle that the largest establishments in each group were selected. In the event of the relation between consumed and produced amounts being dependent upon the size of production in the establishment, such a selection will be biased. It follows however from the proportionality assumption on which the model is centred that the relation between consumed and produced amounts is independent of the scale of production and therefore that such a disproportion is assumed not to exist. As regards industrial manufacture, which accounts for the main part of the processes, as a rule all those establishments were chosen which had at least 50 employed workers in 1956. The selection was made from primary material for the industrial statistics, kept by the Board of Trade. It was based on conditions for the year 1956 because this was the last year for which primary material was available for utilisation. In the cases where inquiries were made for commodity-groups outside industry, selection was made on more elastic

¹ There are no usable sources at all for consumption outside industry apart from single items of information scattered in various publications etc.

² In certain cases where survey material was not available, estimation of the consumption figures was nevertheless made according to the unsatisfactory method discussed here.

³ For consumption in industry excluding commodity-groups 201–203, 301, 401–403, 407. For other consumption, excluding group 407.

principles, an account of which is given in *Input-output-tabeller för Sverige 1957*, Chapter IV. The number of establishments in different groups comprised in the selection and the sizes of the production value for the establishments selected are also shown by tables in that chapter.

All the establishments selected received, in addition to a letter with information regarding the investigation and its purpose, a questionnaire which they were requested to complete. The information to be given (rounded off to thousands of kronor, in general referring to the year 1958¹), was as follows:²

- 1) Sales value of the total manufacture for sale.
- 2) Total cost of the raw material, semi-manufactures and complete parts, lubricants and other material for application and consumption, and packing materials used for this manufacture and obtained by the establishment from other establishments, regardless of whether these belong to the same undertaking or not (excluding fuel and electric power and commodities used for extension and maintenance of the establishment).³
- 3) Consumption of different commodity-groups for the production mentioned under 1), (excluding fuel, electric power, labour etc.). A list of, on an average, fifty of the commodity-groups was enclosed.

For different branches of industry, different lists had been compiled, showing the commodity-groups which, it was assumed, were consumed in the branch concerned. In addition to the name of the commodity-group, examples were often or as a rule given of included commodities, and these examples were also adjusted to fit the branch. Selection of commodity-groups and of examples of commodities were made on the basis of the source material numbered 1 d and 1 e in Section B above, sundry catalogues, interviews with specialists in the branches concerned etc.⁴

¹ The year 1958 was chosen because information for this year was assumed to be most relevant when the inquiry was carried out, in most cases in the spring of 1959. As the input coefficients were assumed to be stable for a certain sequence of years approximately centred on 1957, it follows that the input-output relations observed for 1958 can be applied for 1957 also. For some surveys, however, 1957 was chosen, and establishments were throughout permitted to report on bookkeeping years if these differed from the calendar year; this was done in several cases.

² See *Input-output-tabeller för Sverige år 1957*, which contains an example of some of the questionnaires.

³ Only for establishments reported on in the industrial statistics; the information entirely agrees with a part of the information given for the industrial statistics, and was included for checking purposes.

⁴ It was also possible for the replying establishments to add commodities and commodity-groups to the list if they were not already mentioned in it.

All those establishments which had not sent in a reply to the questionnaire within a certain period of time received a reminder and further copies of the questionnaire. In a few cases a further reminder was made thereafter if necessary, as a rule by telephone.

There is a more detailed report on the number of replies etc. in *Input-output-tabeller för Sverige år 1957*, Chapter IV. The report for industry processes has been assembled in a special section, Section B, while the corresponding information for the remaining process appears in various places in Section C. It is shown there that in round figures replies were received from half of the industrial establishments to which the inquiry had been sent. The replies covered, however, considerably more than half of the production value for the selection. The reply percentage, which was generally speaking about the same in all sectors, may be regarded as a high one in view of the difficulties involved. No exact confirmation of the reliability of the replies has been made; for sundry observations regarding the reliability of the inquiry material reference can, however, be made to *Input-output-tabeller för Sverige år 1957*, various places in Chapter IV.

Consumption in agriculture was not estimated with the aid of a survey. Instead, special estimates were made for the investigation in the Agriculture Economics Research Institute.

D. Procedure in Estimating the Constants of the Model

The starting-point for determining the input coefficients was formed by the figures for consumption within the production system provided by the survey material (see Section C). These figures refer to consumption in establishments, and they have been grouped in collections of establishments, so constituted that they correspond to commodity-groups and thus to processes as a result of the fact that those establishments were combined which devote the major part of their production to a certain commodity-group (cf. in this connection Chapter II, Section D).

For all consumption which does not refer to the engineering industry, the consumption figures mentioned have thereafter, as a first step, been multiplied up to the total level for the different groups of plants. This multiplication was stratified as far as industry is concerned to the extent that a distinction was made between each sub- and detail-group¹ dealt

¹ Regarding sub-groups and detail-groups, see *Industri*, page 10, and specification in Table 1.

with by the industrial statistics.¹ This multiplication furnished total consumption figures for groups of establishments.

As regards the engineering industry, preliminary input-coefficients have been calculated direct from the original consumption figures according to the method described in Section D of Chapter II. Multiplication by the total output figures for the commodity-groups converted the preliminary coefficients into figures for total consumption in the utilisation of the processes in question.

The next step was to cross-check all the consumption figures thus received and to make any necessary amendments.

Thereafter, preliminary input-coefficients have been calculated from the total consumption figures referring to all branches of industry except the engineering industry, using the method just mentioned. These coefficients were then, through multiplication by the total output figures for commodity-groups—in the same way as for the engineering industry—converted into figures for total consumption in the utilisation of processes.

In this way, final figures² were obtained for consumption within the production system in the production of the various commodity-groups in 1957, calculated at market price. By means of the operations shown in Chapter II, Sections B and C, these consumption figures have been divided up into figures for produced and imported amounts, and figures for amounts of distribution services and taxes included in them; the latter have then been totalled for each distribution service and tax respectively. The input coefficients have then been obtained as quotients between these divided consumption figures and the total output figures for the commodity-groups; the fact that this is possible follows, as has been pointed out in Section A, from the assumption of proportionality.³

¹ For multiplication, total output figures for groups of establishments and for those parts of the groups of establishments corresponding to sub- and detail-groups were required. These total output figures have not been specially mentioned in the specification of sources in sections A and B above; they are included, however, in the available compilations of data reported in Section B.

² Individual checks and alterations were nevertheless made at this stage also.

³ The assumption of proportionality is the central assumption for the above-mentioned multiplications also.

CHAPTER IV

Estimation of Figures for Final Consumption

A. Introduction

In estimating the constants of the model, figures for final consumption during 1957 were made use of, as shown in the previous chapter. This was done by estimating the constants with the aid of an input-output table for that year; the table could be cross-checked and made consistent as it also includes figures for final consumption not directly necessary for estimating the constants. From the point of view of cross-checking figures for total final consumption of each of the commodity-groups are sufficient. Figures for final consumption can, however, be utilised also for the applications of the model stated by the equations (13)–(15) in Chapter I, and as it is of great interest in this connection to divide up final consumption in different ways, the figures for this consumption should—if possible—be estimated with these divisions.

The division of the final consumption made in estimating the figures for 1957 depends partly on desiderata regarding the wealth of detail in the results of the applications mentioned, partly on the possibility of making, without too much work, the estimate on a basis of the available or obtainable information. The considerations taken into account here were necessarily schematic ones, and will not therefore be discussed. They led to a division which is presented at the end of this volume.

The applications of the model can be made not only for the year 1957 but for each of the years of a series in which 1957 occupies approximately the central position, i.e. during the period of time for which it can be assumed that the input-output relations stated by the constants of the model are approximately unchanged. It would therefore have been desirable to have had figures for final consumption for years other than 1957 too. Too much time, however, would have been required to estimate these as a part of this investigation, the chief purpose of which was to map out the actual production system and state its properties. It is, however, possible to make such estimates subsequently.

The most important compilations of statistical information found available in public statistics or other existing sources, and which could form a base for estimating the figures for final consumption, will be specified in Section

B. Special investigations, partly by means of surveys, have been carried out with a view to supplementing the available statistics as regards information on public demand. A brief summary of these will be found in Section C.

The figures for final consumption which were estimated first were as a rule based on market price. They have been split up into their components in the same way as the figures for consumption within the production system (cf. Chapter III, Section D). Further, the cross-checking procedures which could be carried out in consequence of the fact that a complete input-output table had been set up resulted—as in the case of consumption within the production system—in adjustments of some of the figures for final consumption.

A detailed account of the estimation of figures for final consumption is included in *Input-output-tabeller för Sverige år 1957* (chiefly Chapters V–XI).

B. Available Data

The most important collections of information on final consumption found available for the investigation are mentioned in the following list:

1) Data on export of the majority of commodity-groups (*Handel*, Part I, Table 2).

2) Data on consumption, in the sense of non-investment, of the majority of commodity-groups (the special national-accounting material);¹ the data generally consist of the sums of private and certain public consumption, and could therefore be used only after adjustments and in several cases not at all.

3) Data on private consumption of different groups of commodities in the national-accounting figures of the National Institute of Economic Research (*Meddelanden från Konjunkturinstitutet*, Series B:30, Table 9 etc.); in several cases the groups of commodities are compatible with the commodity-groups of the investigation and the information could be used.

4) Information in quantity figures on inventory changes of various commodities (unpublished material of the Board of Trade, included in its quarterly and inventory statistics); the information could be used after conversion to value-figures with the aid of sundry price information and after assembling in commodity-groups with the aid of a specially made coordination of different commodity-lists.²

¹ Cf. Chapter III, Section B.

² The statistics concerned were rejected when it was a question of calculating figures for consumption within the production system, chiefly because of the difficulty of

5) Data on state expenditure per budget year divided among authorities, and to a certain extent with a rough division into commodity-groups (e.g. *Budgetredovisning för budgetåret 1957/58*, Stockholm 1958); the information has been chiefly used as background material for surveys (cf. Section C) and for cross-checks.

6) Data on state expenditure divided among authorities and separate commodities in primary material for 4), consisting of invoices, tables of charges, etc., filed at various places; the information has been used for calculating consumption for national defence (cf. Section C).

7) Data on local-government expenditure, divided among local-government authorities and into certain main groups of expenditure (*Kommunernas finanser år 1957*, Stockholm 1959); the information has been chiefly used as background material for surveys (cf. Section C) and for cross-checks.

8) Sundry information regarding total and partial sums for various types of final demand in the national-accounting figures of the National Institute of Economic Research (*Meddelanden från Konjunkturinstitutet*, Series B:30, Table 9 etc.); a good deal of the information has been used for cross-checking purposes, and single items for calculating special consumption items.

C. Supplementation of Available Consumption Figures by Surveys and Other Special Investigations

The information found available was not sufficient for estimating all final consumption. It was especially useful for calculating export and large parts of private consumption. In these and other special cases the available information could thus be used as a basis for estimating the final consumption of the particular items. Other such items were estimated in other ways. Several of them were calculated more or less arbitrarily on a basis of sundry cross-checking results. This concerns especially the final consumption composed of investments in industry, trade, etc., of inventory changes for several commodity-groups and of consumption in the production of commodity-group 199, which is not included in the production system.¹

carrying out these operations in a reliable way. They were used for calculating inventory changes because these are of comparatively minor importance and because no alternative sources were available.

¹ For consumption in the production of commodity-groups 201–203 (electric power and certain fuels), which are also not included in the production system, it was possible to use information from some of the sources mentioned in Chapter III, Section B.

Special investigations were made for certain parts of the final consumption. One of them was for investments in agriculture. The manner in which these are distributed among the various commodity-groups was analysed for the investigation by the Agriculture Economics Research Institute. Special calculations have further been made in the investigation for state and local-government consumption. A brief account follows of the manner in which these calculations were made.

For that part of state expenditure covering national defence, information regarding a number of separate consumption items was first obtained from primary compilations of different kinds, filed at various administrative offices of the defence forces. Estimates of other consumption items were made on the basis of invoices filed at these offices. First, a selection of invoices was made, and this was stratified with respect to their amounts in kronor. The expenditure corresponding to the selected invoices was then classified with respect to the stratum and the commodity-group (or the commodity-groups) to which the invoices referred, after which they were multiplied up to the given total amounts.¹

The composition of the state expenditure on working budget,² except that covering national defence, was ascertained by means of a survey and certain complementary calculations.³ The survey was addressed *inter alia* to the major part of the authorities responsible for this expenditure, and replies were received from most of them. The replies consisted of information regarding the cost of purchase of the various commodity-groups. These amounts were multiplied set by set up to given total amounts, each set consisting of a number of authorities with similar activities. On the basis of parts of the inquiry material and of *Budgetredovisningen* and other available publications, special calculations were made thereafter for a number of authorities which could not be considered as directly represented by the survey material.

Information regarding the main part of the capital investments (in the sense in which the term is employed in connection with the national budget) for civil state purposes was obtained from the few authorities responsible for the information in question.⁴

Consumption of the different commodity-groups within local-government activity was estimated with the aid of a survey,⁵ in which a distinction was made both between different kinds of local-government units and

¹ See *Input-output-tabeller för Sverige år 1957*, Chapter VIII, Section B.

² "Egentliga statsutgifter på driftbudgeten".

³ See *Input-output-tabeller för Sverige år 1957*, Chapter VIII, Section C.

⁴ See *Input-output-tabeller för Sverige år 1957*, Chapter VIII, Section D.

⁵ See *Input-output-tabeller för Sverige år 1957*, Chapter IX.

between the various main spheres of activity. A special questionnaire was composed for each set thus obtained, and a special multiplication up to the total level was made of the information received on consumption. The reply-density varied greatly for different kinds of local-government units. There were practically no replies from county councils (*landsting*), with the result that the consumption figures had to be estimated with the aid of survey material referring to other kinds of local-government units. For cities, urban districts (*köpingar*) and rural districts (*landskommuner*) a material was received which was considered satisfactory.

CHAPTER V

Input-Output Tables and Input Coefficients

It was shown in Chapters III and IV that the estimating procedures first of all produced input-output tables referring to the total economic activity in Sweden in the year 1957. The tables show the consumption of the different commodity-groups in utilisation of each of the processes and for each type of final demand in accordance with the principles stated in Chapter I. Even if their chief purpose was to provide a basis for estimating the constants of the model, they have in themselves a considerable descriptive value and therefore form an important part of the results of the investigation. They are included in the supplementary volume *Input-output-tabeller för Sverige 1957*, but will be given a brief commentary in this chapter.

The input-output table which was first produced by the estimation states the combined consumption of produced and imported amounts of the commodity-groups including the distribution costs involved in them, consumption taxes and the like.¹ Such consumption figures can be said to be stated in market-value. As is common in input-output tables, it is stated in each row how a certain commodity-group was consumed for different purposes, while each column shows the amounts of the different commodity-groups which were consumed for any such purpose. As produced and imported amounts are shown jointly, the commodity-groups do not appear divided into the two four-figure series 0001-0407 and 1001-1407 respectively in the manner stated in Section B of Chapter II. Instead the rows state the consumption of the combined commodity-groups 1-407 and therefore include the consumption of distribution services (commodity-groups 404, part of 405, 406) which originated through the deliveries in question.

The next step in the estimating procedure was to separate distribution services and consumption taxes etc. from the consumption figures in market value. The input-output table just dealt with was accordingly transformed into another input-output table which still states the combined consumptions of produced and imported quantities of the commodity-groups but which shows distribution costs and taxes in connection with this consump-

¹ Input-output table A in *Input-output-tabeller för Sverige år 1957*.

tion specially in the rows corresponding to the commodity-groups 122–127 and 404–406. The consumption figures which this new table contains are thus stated in what is called ab-sector value.¹

The next estimating stage was a division of the consumption figures in ab-sector value into produced and imported amounts. Consumption of the produced groups 0001 etc. and of the imported groups 1001 etc. is now calculated separately, and a special row in the table corresponds in principle to each of these divided groups.² The consumption amounts now shown are those to which the model refers. They were therefore the basis for the calculation of the input-coefficients; consumption-amounts of this kind were also obtained as results in various applications of the model.

Tables V:1 and V:2 in this chapter present a summary of the last-mentioned table, which is the most interesting of the three tables in connection with this investigation. Table V:1 shows the consumption of each of the commodity-groups 0001–0127 and table V:2 the consumption of the primary commodity-groups within the production system (i.e. in utilisation of all production processes), for export (type 501 of final consumption), for private consumption (502), for national defence (503–506), within civil state institutions (507–513), within local-government institutions (514–532), for investments (533–534) and for other purposes (inventory changes (535) and consumption in production of commodity-groups 199, 201–203). The number of primary commodity-groups is 154; they consist namely of the groups 0198, 0199, 0201–0203, 0401–0407, 1001–1127, 1198, 1199, 1201–1203, 1301–1309 and 1407. For reasons of simplification (chiefly to save space in the publication of various tables) combinations have been made of imported groups. In addition, shortage of data necessitated a combination of groups 0199, 1199, 0407 and 1407 on the one hand, and groups 0401–0403 on the other. The number of rows in Table V:2 is therefore 32; the table shows which of the commodity-groups are included in the 32 collections. Tables V:3 and V:4 show how consumption is distributed per cent. among the different purposes.

Some examples will now be given of the information obtained from the tables mentioned. It is evident that the portion of the production consumed within the production system varies greatly for different commodity-groups. For groups such as agricultural products (commodity-groups 1 and 2), timber (4), iron and steel (8), castings (19, 29), various stone, sand and clay products etc. (64–67, 70) and several chemicals (chiefly 109 and 112) this portion is especially high. The size of the proportion is mainly due to the character of the commodity-group, and

¹ Input-output table B in *Input-output-tabeller för Sverige år 1957*.

² Input-output table C in *Input-output-tabeller för Sverige år 1957*.

TABLE V:1. *Direct consumption of produced commodity-groups 1957 (mill. kronor).*

(1) = commodity-group, (2) = production, (3) = production system, (4) = exports, (5) = private consumption, (6) = national defense, (7) = civil state activities, (8) = local-government, (9) = investments, (10) = other

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0001	3820.7	3260.8	87.3	479.0	0.2	1.1	1.3	—	-9.9
0002	3111.4	2764.7	139.8	190.0	0.8	1.0	3.0	—	11.2
0003	357.5	35.3	7.6	309.9	0.4	0.4	2.8	—	1.1
0004	2847.7	2405.3	115.4	197.0	0.4	3.4	7.5	1.9	116.8
0005	158.9	31.0	26.6	97.8	0.9	0.4	2.2	—	—
0006	1162.7	288.4	872.6	—	—	—	—	—	1.7
0007	152.0	100.9	50.0	—	—	—	—	—	1.1
0008	5235.7	4700.3	426.1	—	3.3	7.9	15.3	—	82.8
0009	178.3	108.1	34.2	—	—	0.0	—	—	36.0
0010	277.1	183.6	94.8	—	0.9	0.2	—	—	-2.4
0011	531.8	388.7	124.8	—	1.1	6.1	5.7	—	5.4
0012	375.3	272.0	49.7	23.4	3.1	1.2	4.8	19.0	2.1
0013	681.6	494.9	153.2	—	0.6	—	0.2	—	32.7
0014	293.0	127.0	119.4	30.1	3.5	2.6	4.4	6.0	—
0015	191.8	152.7	31.6	0.5	1.7	3.2	2.1	—	—
0016	106.2	75.0	20.2	—	0.4	0.4	2.2	8.0	—
0017	79.8	16.9	1.9	4.6	1.6	0.1	7.6	47.1	—
0018	636.6	452.1	51.0	39.4	6.8	11.8	2.6	65.6	7.3
0019	170.2	166.8	—	2.5	0.0	0.9	—	—	—
0020	83.9	43.5	2.2	29.4	0.1	0.3	4.0	4.4	—
0021	44.5	—	30.5	2.7	0.0	—	0.1	11.2	—
0022	271.4	116.9	44.1	63.8	13.9	0.8	2.7	11.6	17.6
0023	100.8	19.8	3.5	70.7	0.0	—	0.0	—	6.8
0024	89.1	71.6	—	8.7	0.2	0.5	—	—	8.1
0025	1156.6	240.1	301.2	314.2	28.9	3.8	4.0	290.0	-25.6
0026	144.9	35.3	7.4	95.5	1.4	0.0	0.0	5.3	—
0027	91.5	0.9	23.1	—	1.3	3.5	1.7	61.0	—
0028	229.0	49.4	30.5	10.6	0.6	99.1	—	38.8	—
0029	745.4	719.9	15.7	5.8	0.2	3.6	0.2	—	—
0030	441.1	193.2	87.4	5.2	137.8	1.0	—	5.6	10.9
0031	106.8	6.5	31.5	—	9.7	—	—	59.1	—
0032	162.3	2.4	92.3	—	5.5	1.8	0.3	60.0	—
0033	213.6	2.4	63.5	—	—	1.8	0.6	145.3	—
0034	293.1	1.1	197.0	—	0.1	2.7	0.4	99.5	-7.7
0035	124.2	1.4	34.9	—	—	0.2	0.1	77.2	10.4
0036	145.5	13.4	58.1	—	—	0.1	—	73.9	—
0037	280.7	101.1	170.5	—	3.3	—	—	—	5.8
0038	269.1	95.2	17.3	—	6.8	2.2	2.0	145.6	—
0039	214.7	7.4	122.4	0.4	0.7	2.4	2.8	78.6	—
0040	154.4	18.7	39.3	29.1	0.1	0.2	1.3	65.7	—
0041	205.4	59.6	88.7	—	1.0	0.3	3.6	52.2	—
0042	89.1	27.9	19.3	—	1.5	0.0	1.3	39.1	—
0043	148.6	32.1	24.1	—	1.0	0.3	2.5	88.6	—
0044	603.9	26.5	77.6	2.1	448.8	0.3	0.1	1.0	47.5
0045	130.7	6.6	26.6	58.8	0.0	0.2	1.3	37.2	—
0046	225.3	88.4	4.4	—	1.3	0.7	6.6	123.9	—
0047	181.2	19.8	149.4	0.0	5.9	0.2	2.5	10.9	-7.5
0048	1569.0	182.2	855.5	18.9	85.4	7.2	4.5	324.8	90.5
0049	84.9	9.4	15.8	14.0	1.9	0.6	—	43.2	—
0050	347.5	53.8	137.4	—	14.9	97.7	2.8	23.6	17.3
0051	521.4	135.0	91.1	0.5	21.2	5.8	2.9	264.9	—
0052	177.5	28.1	20.4	77.4	47.9	1.8	0.2	1.7	—
0053	53.7	—	26.3	20.3	0.3	0.9	3.4	2.5	—
0054	102.2	6.2	15.4	43.7	0.3	0.3	1.9	34.4	—
0055	185.5	96.9	31.5	4.9	8.0	5.8	4.3	25.9	8.2
0056	46.4	18.7	2.8	21.7	0.8	0.0	0.5	—	1.9
0057	237.9	183.4	19.3	—	7.1	22.4	5.7	—	—
0058	208.8	29.0	55.4	52.9	33.9	1.9	6.4	28.9	0.4
0059	991.6	172.7	—	42.9	0.2	19.9	107.4	648.5	—
0060	843.9	550.7	—	270.0	0.8	3.4	9.0	—	10.0

Table V: 1 (continued)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0061	264.3	254.4	—	—	0.9	9.0	—	—	—
0062	487.5	357.7	—	—	68.9	0.7	0.1	—	60.1
0063	100.0	85.9	—	5.3	3.6	0.2	0.0	—	5.0
0064	279.6	197.7	15.3	33.8	0.1	8.7	20.3	—	3.7
0065	171.7	152.4	12.8	—	0.0	3.6	2.9	—	—
0066	353.3	333.6	1.6	—	—	4.0	14.1	—	—
0067	130.8	124.1	5.5	—	—	0.4	0.8	—	0.0
0068	122.1	48.5	19.0	49.1	0.2	0.5	1.8	—	3.0
0069	167.4	83.7	21.5	54.8	0.3	0.6	3.4	—	3.1
0070	106.0	88.5	11.6	—	0.3	0.5	0.5	—	4.6
0071	2045.9	840.8	1120.9	51.5	0.7	9.2	10.8	—	12.0
0072	367.4	42.5	16.5	243.5	2.0	4.3	32.1	26.5	—
0073	176.3	148.3	2.3	—	3.9	4.1	0.8	16.9	—
0074	552.7	453.4	26.5	53.0	0.5	4.7	12.5	1.2	0.9
0075	237.5	179.5	22.4	33.1	0.1	0.6	1.0	—	0.8
0076	348.8	193.8	154.5	—	—	—	—	—	0.5
0077	2242.5	681.7	1485.0	—	—	0.0	—	—	75.8
0078	307.0	116.0	186.0	—	—	—	—	—	5.0
0079	1294.9	506.0	710.9	44.4	0.2	0.2	0.0	—	33.2
0080	216.9	84.8	131.5	—	0.0	0.2	0.4	—	—
0081	412.5	356.1	24.2	17.2	2.5	0.4	0.2	—	11.9
0082	794.3	294.5	10.1	251.4	7.7	24.6	53.8	—	152.2
0083	517.2	291.3	1.1	214.3	0.3	1.6	2.4	—	6.2
0084	438.7	266.8	0.2	166.0	1.5	0.8	4.4	—	-1.0
0085	791.5	2.0	4.9	758.3	1.4	3.6	20.9	—	0.4
0086	503.2	256.9	1.5	209.8	1.1	0.9	5.1	—	27.9
0087	439.9	25.8	6.2	403.9	2.5	0.2	1.4	—	-0.1
0088	1590.6	175.0	194.9	1170.0	9.2	7.7	44.5	—	-10.7
0089	2367.3	517.0	69.1	1734.5	6.9	6.1	34.2	—	-0.5
0090	129.7	21.0	10.2	97.1	0.7	0.4	2.5	—	-2.2
0091	210.1	7.1	2.4	179.1	2.5	1.6	9.3	—	8.1
0092	308.9	66.7	0.4	232.9	1.3	1.1	6.5	—	—
0093	850.1	220.6	4.2	610.3	1.4	1.3	6.4	—	5.9
0094	154.5	48.3	0.5	90.1	0.0	0.0	0.0	—	15.6
0095	420.9	23.1	3.9	393.7	0.0	0.0	0.2	—	—
0096	781.9	0.5	0.1	788.0	1.1	—	—	—	-7.8
0097	472.0	356.9	28.4	64.1	7.9	0.4	1.8	10.3	2.2
0098	580.1	352.9	21.7	190.0	4.5	0.5	1.4	—	9.1
0099	105.0	76.6	3.8	17.9	1.0	0.2	1.1	—	4.4
0100	205.7	145.0	48.9	6.8	0.1	0.5	2.2	3.1	-0.9
0101	347.5	7.7	6.5	317.0	2.4	0.0	0.5	0.5	12.9
0102	1361.4	67.7	17.5	1213.0	11.8	5.8	6.1	—	39.5
0103	655.4	109.5	22.2	435.2	6.8	1.4	8.7	9.4	62.2
0104	153.9	132.7	20.6	0.2	0.2	—	—	—	0.2
0105	198.2	22.2	6.5	169.1	0.4	—	—	—	—
0106	382.0	1.1	0.7	375.3	2.4	—	—	—	2.5
0107	139.6	43.6	7.4	87.0	1.1	0.0	0.0	—	0.5
0108	466.1	153.6	41.8	127.4	6.8	0.2	1.0	134.2	1.1
0109	738.6	622.2	99.8	—	0.8	0.6	3.9	—	11.3
0110	167.0	2.8	25.7	95.5	2.8	6.7	32.3	—	1.2
0111	220.5	68.8	56.4	13.3	79.6	1.1	1.2	—	0.1
0112	550.3	492.0	38.7	15.4	0.1	—	—	—	4.0
0113	252.4	182.8	17.6	49.9	0.8	0.4	1.3	—	-0.4
0114	259.2	25.8	9.7	188.0	0.4	1.6	8.0	—	25.7
0115	311.7	128.4	33.5	128.1	2.2	0.3	0.5	—	18.7
0116	547.3	344.4	63.5	76.6	4.0	0.9	16.4	—	41.5
0117	450.2	240.4	—	11.4	0.2	4.6	23.6	170.0	—
0118	599.1	50.7	—	29.1	1.0	16.9	66.9	434.5	—
0119	7488.3	188.9	—	258.2	171.6	786.2	955.5	5127.9	—
0120	440.9	180.4	1.7	54.2	—	52.6	8.3	—	143.7

Table V: 1 (continued)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0121	882.9	278.4	18.0	405.0	8.1	19.3	19.8	—	134.3
0122	2524.9	77.3	2396.9	45.4	2.2	1.6	1.3	—	0.2
0123	1419.8	853.0	191.4	355.4	13.2	2.4	3.3	0.1	1.0
0124	1384.0	999.9	7.3	283.1	1.5	17.8	69.3	0.3	4.8
0125	624.8	31.4	—	571.1	0.0	0.2	20.6	—	1.5
0126	246.1	61.7	136.5	45.7	2.0	0.2	—	—	—
0127	11456.8	3299.6	652.5	6255.2	110.9	77.7	178.5	747.7	134.4
Total	89001.0	36636.4	13692.4	22407.8	1487.1	1436.2	1976.4	9814.3	1550.0

TABLE V: 2. Direct consumption of primary commodity-groups 1957 (mill. kronor).

(1) = commodity-groups, (2) = production system, (3) = exports, (4) = private consumption, (5) = national defense, (6) = civil state activities, (7) = local-government, (8) = investments, (9) = other, (10) = total

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0198	239.2	—	—	—	—	—	—	—	239.2
1001-1005	178.2	—	232.2	—	0.5	2.7	0.0	2.9	416.5
1006-1007	46.2	—	—	—	—	—	—	0.5	46.7
1008-1011, 1198	1027.7	—	—	1.7	6.0	9.1	—	50.6	1095.1
1012-1063	1342.2	—	705.0	147.2	105.3	61.4	1430.9	69.0	3861.0
1064-1070	175.3	—	43.0	—	1.7	4.7	—	6.3	231.0
1071-1075	79.8	—	15.2	—	0.8	1.7	0.6	0.9	99.0
1076-1083	68.1	—	15.6	—	0.9	1.9	—	8.8	95.3
1084-1096	242.7	—	234.6	—	1.0	5.6	—	2.1	486.0
1097-1103	525.2	—	455.1	1.1	1.9	7.9	13.2	20.9	1025.3
1104-1108	91.7	—	101.5	0.2	0.0	0.2	31.3	0.7	225.6
1109-1116	714.0	—	200.5	6.3	5.0	28.3	—	39.7	993.8
0201	909.0	34.3	313.1	10.8	7.7	57.9	—	585.9	1918.7
0202	45.6	2.1	151.0	0.6	0.8	3.0	—	8.8	211.9
0203	195.0	14.3	122.5	10.4	2.7	11.0	—	19.5	375.4
1201	5.5	—	1.9	0.1	0.0	0.3	—	0.1	7.9
1202	197.4	—	120.0	2.7	3.6	13.1	—	38.2	375.0
1203	745.7	—	499.6	39.8	10.2	42.0	—	74.5	1411.8
1301	95.5	—	31.2	5.0	3.1	7.0	—	179.1	320.9
1302	594.8	—	229.2	0.7	0.7	3.7	—	55.1	884.2
1303	86.0	—	—	—	—	—	—	2.1	88.1
1304	178.6	—	—	—	—	—	—	11.2	189.8
1305	52.4	—	—	—	—	—	—	5.2	57.6
1306	79.9	—	—	—	—	—	—	9.8	89.7
1307	128.1	—	5.4	—	—	—	—	3.8	137.3
1308	—	—	—	—	—	—	—	250.4	250.4
1309	213.1	—	—	—	1.4	—	—	-1.3	213.2
0401-0403	26266.2	—	..	687.8	1252.9	2915.0	—	..	..
0404	-382.8	-75.6	—	—	—	—	—	-0.1	-458.5
0405	1054.5	2.5	1691.2	33.8	9.1	35.7	47.8	41.4	3516.0
0406	351.4	—	333.6	17.8	6.4	9.2	131.1	8.1	857.6
0407, 1407	—	—	—	—	—	—	—	—	—
0199, 1199	16201.1	..	..	..	..	..	..	..	..
Total	52347.3	(-22.4)	(5501.4)	(966.0)	(1421.7)	(3221.4)	(1654.9)	(1494.2)	

it tends to be high if the group consists of commodities which require further processing before they reach their final state and are ready for final use. This further treatment can, however, be carried out abroad, i.e. in other production systems, and in such cases the production system share is reduced and replaced by an export share. The further processing can also occur in the production system during a future period. In such cases there is an inventory increase in 1957. The share of the production system is therefore depending upon whether there have been inventory changes; this is of importance for some commodity-groups. Iron ore (6) and sawn timber (71) are examples of commodity-groups which would mainly be used within the production system in case there was no export. A fact to be noted is that as use within the manufacturing establishment itself is also included in the consumption and production figures, the share of the production system becomes larger than would be the case if the production for sale only had been shown; this affects the figures for agricultural produce, iron and steel etc. The proportion used within the production system will be small where commodities ready for final consumption, and thus not in need of further processing, are concerned. To this category belong typical household consumption commodities and investment commodities. Examples of the former are bread (85), tobacco (96) and shoes (106); of the latter industrial machinery (32-34), tractors (35) and building and construction (119).

The fact that a commodity is ready for final use need not, however, exclude the possibility of its also being used within the production system. A check of Table V:3 shows that only a few commodity-groups were not used at all within the production system (in addition to these there are some with a very low share for the production system). It appears also that only a few groups were used exclusively within the production system, exported or put into stock. The number of commodity-groups consisting of pure "finished commodities" and "raw materials and semi-manufactured goods" respectively is therefore fairly small.

Since all activity in the production system is connected, directly or indirectly, with the supply of the final product, the consumption within the system can be distributed therefore among the different types of final consumption, but to make this distribution clear the model (not the table) must be utilised. The results obtained by application of the model are set out in Chapters VI and VII; as regards the distribution of production in 1957 among the types of final consumption for which it is finally intended, reference can be made to the discussion in connection with Tables VII:1 and VII:2 in Chapter VII.

The input-output tables can be regarded as national accounts for the

TABLE V:3. *Direct consumption of produced commodity-groups 1957 (per cent of total consumption).*

(1) = commodity-group, (2) = total, (3) = production system, (4) = exports, (5) = private consumption, (6) = national defense, (7) = civil state activities, (8) = local government, (9) = investments, (10) = other

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0001	100.0	85.3	2.3	12.6	0.0	0.0	0.0	—	-0.2
0002	100.0	88.9	4.5	6.1	0.0	0.0	0.1	—	0.4
0003	100.0	9.9	2.1	6.7	0.1	0.1	0.8	—	0.3
0004	100.0	84.5	4.0	6.9	0.0	0.1	0.3	0.1	4.1
0005	100.0	19.5	16.7	61.5	0.6	0.3	1.4	—	—
0006	100.0	24.8	75.1	—	—	—	—	—	0.1
0007	100.0	66.4	32.9	—	—	—	—	—	0.7
0008	100.0	89.7	8.1	—	0.1	0.2	0.3	—	1.6
0009	100.0	60.6	19.2	—	—	0.0	—	—	20.2
0010	100.0	66.3	34.2	—	0.3	0.1	—	—	-0.9
0011	100.0	73.1	23.5	—	0.2	1.1	1.1	—	1.0
0012	100.0	72.5	13.2	6.2	0.8	0.3	1.3	5.1	0.6
0013	100.0	72.6	22.5	—	0.1	—	0.0	—	4.8
0014	100.0	48.3	40.8	10.3	1.2	0.9	1.5	2.0	—
0015	100.0	79.5	16.5	0.3	0.9	1.7	1.1	—	—
0016	100.0	70.6	19.0	—	0.4	0.4	2.1	7.5	—
0017	100.0	21.2	2.4	5.8	2.0	0.1	9.5	59.0	—
0018	100.0	71.0	8.0	6.2	1.1	1.9	0.4	10.3	1.1
0019	100.0	98.0	—	1.5	0.0	0.5	—	—	—
0020	100.0	51.9	2.6	35.0	0.1	0.4	4.8	5.2	—
0021	100.0	—	68.5	6.1	0.0	—	0.2	25.2	—
0022	100.0	43.1	16.2	23.5	5.1	0.3	1.0	4.3	6.5
0023	100.0	19.6	3.5	70.2	0.0	—	0.0	—	6.7
0024	100.0	80.3	—	9.8	0.2	0.6	—	—	9.1
0025	100.0	20.8	26.0	27.2	2.5	0.3	0.3	25.1	-2.2
0026	100.0	24.4	5.1	65.9	1.0	0.0	0.0	3.6	—
0027	100.0	1.0	25.2	—	1.4	3.8	1.9	66.7	—
0028	100.0	21.6	13.3	4.6	0.3	43.3	—	16.9	—
0029	100.0	96.6	2.1	0.8	0.0	0.5	0.0	—	—
0030	100.0	43.8	19.8	1.2	31.2	0.2	—	1.3	2.5
0031	100.0	6.1	29.5	—	9.1	—	—	55.3	—
0032	100.0	1.5	56.9	—	3.4	1.1	0.2	36.9	—
0033	100.0	1.1	29.7	—	—	0.8	0.3	68.1	—
0034	100.0	0.4	67.3	—	0.0	0.9	0.1	33.9	-2.6
0035	100.0	1.1	28.1	—	—	0.2	0.1	62.1	8.4
0036	100.0	9.2	39.9	—	—	0.1	—	50.8	—
0037	100.0	36.0	60.7	—	1.2	—	—	—	2.1
0038	100.0	35.4	6.4	—	2.5	0.8	0.7	54.2	—
0039	100.0	3.4	57.1	0.2	0.3	1.1	1.3	36.6	—
0040	100.0	12.1	25.5	18.8	0.1	0.1	0.8	42.6	—
0041	100.0	29.0	43.2	—	0.5	0.1	1.8	25.4	—
0042	100.0	31.3	21.7	—	1.7	0.0	1.5	43.8	—
0043	100.0	21.6	16.2	—	0.7	0.2	1.7	59.6	—
0044	100.0	4.4	12.9	0.3	74.3	0.0	0.0	0.2	7.9
0045	100.0	5.0	20.4	45.0	0.0	0.2	1.0	28.4	—
0046	100.0	39.2	2.0	—	0.6	0.3	2.9	55.0	—
0047	100.0	10.9	82.4	0.0	3.3	0.1	1.4	6.0	-4.1
0048	100.0	11.6	54.5	1.2	5.4	0.5	0.3	20.7	5.8
0049	100.0	11.1	18.6	16.5	2.2	0.7	—	50.9	—
0050	100.0	15.5	39.5	—	4.3	28.1	0.8	6.8	5.0
0051	100.0	25.9	17.4	0.1	4.1	1.1	0.6	50.8	—
0052	100.0	15.8	11.5	43.6	27.0	1.0	0.1	1.0	—
0053	100.0	—	49.0	37.8	0.5	1.7	6.3	4.7	—
0054	100.0	6.1	15.1	42.7	0.3	0.3	1.9	33.6	—
0055	100.0	52.3	17.0	2.6	4.3	3.1	2.3	14.0	4.4

Table V: 3 (continued)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
0056	100.0	40.3	6.0	46.8	1.7	0.0	1.1	—	4.1
0057	100.0	77.1	8.1	—	3.0	9.4	2.4	—	—
0058	100.0	13.9	26.6	25.3	16.2	0.9	3.1	13.8	0.2
0059	100.0	17.4	—	4.3	0.0	2.0	10.8	65.4	—
0060	100.0	65.2	—	32.0	0.1	0.4	1.1	—	1.2
0061	100.0	96.3	—	—	0.3	3.4	—	—	—
0062	100.0	73.4	—	—	14.2	0.1	0.0	—	12.3
0063	100.0	85.9	—	5.3	3.6	0.2	0.0	—	5.0
0064	100.0	70.7	5.5	12.1	0.0	3.1	7.3	—	1.3
0065	100.0	88.8	7.5	—	0.0	2.1	1.7	—	—
0066	100.0	94.4	0.5	—	—	1.1	4.0	—	—
0067	100.0	94.9	4.2	—	—	0.3	0.6	—	0.0
0068	100.0	39.7	15.6	40.2	0.2	0.4	1.5	—	2.4
0069	100.0	50.0	12.8	32.7	0.2	0.4	2.0	—	1.9
0070	100.0	83.5	10.9	—	0.3	0.5	0.5	—	4.3
0071	100.0	41.1	54.8	2.5	0.1	0.4	0.5	—	0.6
0072	100.0	11.6	4.5	66.3	0.5	1.2	8.7	7.2	—
0073	100.0	84.1	1.3	—	2.2	2.3	0.5	9.6	—
0074	100.0	82.0	4.8	9.6	0.1	0.9	2.3	0.2	0.1
0075	100.0	75.6	9.4	13.9	0.1	0.3	0.4	—	0.3
0076	100.0	55.6	44.3	—	—	—	—	—	0.1
0077	100.0	30.4	66.2	—	—	0.0	—	—	3.4
0078	100.0	37.8	60.6	—	—	—	—	—	1.6
0079	100.0	39.1	54.9	3.4	0.0	0.0	0.0	—	2.6
0080	100.0	39.1	60.6	—	0.0	0.1	0.2	—	—
0081	100.0	86.3	5.9	4.2	0.6	0.1	0.0	—	2.9
0082	100.0	37.1	1.3	31.6	1.0	3.1	6.8	—	19.1
0083	100.0	56.3	0.2	41.4	0.1	0.3	0.5	—	1.2
0084	100.0	60.8	0.1	37.8	0.3	0.2	1.0	—	-0.2
0085	100.0	0.3	0.6	95.8	0.2	0.5	2.6	—	0.0
0086	100.0	51.1	0.3	41.7	0.2	0.2	1.0	—	5.5
0087	100.0	5.9	1.4	91.8	0.6	0.0	0.3	—	-0.0
0088	100.0	11.0	12.3	73.5	0.6	0.5	2.8	—	-0.7
0089	100.0	21.8	2.9	73.3	0.3	0.3	1.4	—	-0.0
0090	100.0	16.2	7.9	74.9	0.5	0.3	1.9	—	-1.7
0091	100.0	3.4	1.1	85.2	1.2	0.8	4.4	—	3.9
0092	100.0	21.6	0.1	75.4	0.4	0.4	2.1	—	—
0093	100.0	25.9	0.5	71.8	0.2	0.2	0.7	—	0.7
0094	100.0	31.3	0.3	58.3	0.0	0.0	0.0	—	10.1
0095	100.0	5.5	0.9	93.5	0.0	0.0	0.1	—	—
0096	100.0	0.1	0.0	100.8	0.1	—	—	—	-1.0
0097	100.0	75.6	6.0	13.5	1.7	0.1	0.4	2.2	0.5
0098	100.0	60.8	3.7	32.8	0.8	0.1	0.2	—	1.6
0099	100.0	73.0	3.6	17.0	1.0	0.2	1.0	—	4.2
0100	100.0	70.5	23.8	3.3	0.0	0.2	1.1	1.5	-0.4
0101	100.0	2.2	1.9	91.3	0.7	0.0	0.1	0.1	3.7
0102	100.0	5.0	1.3	89.1	0.9	0.4	0.4	—	2.9
0103	100.0	16.7	3.4	66.4	1.1	0.2	1.3	1.4	9.5
0104	100.0	86.3	13.4	0.1	0.1	—	—	—	0.1
0105	100.0	11.2	3.3	85.3	0.2	—	—	—	—
0106	100.0	0.3	0.2	98.2	0.6	—	—	—	0.7
0107	100.0	31.2	5.3	62.3	0.8	0.0	0.0	—	0.4
0108	100.0	33.0	9.0	27.3	1.5	0.0	0.2	28.8	0.2
0109	100.0	84.3	13.5	—	0.1	0.1	0.5	—	1.5
0110	100.0	1.7	15.4	57.2	1.7	4.0	19.3	—	0.7
0111	100.0	31.2	25.6	6.0	36.1	0.5	0.5	—	0.1
0112	100.0	89.4	7.1	2.8	0.0	0.0	—	—	0.7
0113	100.0	72.4	7.0	19.8	0.3	0.2	0.5	—	-0.2
0114	100.0	10.0	3.7	72.5	0.2	0.6	3.1	—	9.9
0115	100.0	41.2	10.7	41.1	0.7	0.1	0.2	—	6.0

year 1957, considerably more detailed than any other such accounts carried out in Sweden. Magnitudes of great importance in national accounting, and in certain other contexts, such as national income and national product can therefore be obtained by certain summations of figures in the input-output tables, although certain additions and adjustments must be made. There is thus no information regarding direct private and public consumption of labour and real-capital services and the like, or of sundry other services (commodity-group 199). Further, real capital services etc. (group 407) are stated throughout combined with these other services, and a distinction must be made between them also. Certain schematic calculations have been made which supplement the input-output table discussed above (and Tables V:1 and V:2) in the respects mentioned.¹ The revised table can be summarised in the following arrangement (millions of kronor):

	Final demand			Total
	0001-0127	0198-0203	(501-535)	
Production system (0001-0127)	36 654	720	51 627	89 001
Scrap & waste collected in Sweden (0198)	239	—	—	239
Domestic commodities and services, not specially mentioned (0199)	3 000	200	3 200	6 400
Domestic electric power and domestic fuels (0201-0203)	1 150	603	753	2 506
Labour, indirect taxes, customs duties, subsidies, real-capital services and the like; "value added" (0401-0407)	39 967	6 883	10 473	57 323
Import (1001-1407)	6 868	500	5 234	12 602
Shipping companies' expenses abroad	1 123	—	—	1 123
Total:	89 001	8 906	71 287	169 194

¹ As a figure for the direct use of labour for private consumption, expenditure for "labour aid in the home" has been taken according to the calculations of the National Institute of Economic Research (*Meddelanden från Konjunkturinstitutet*, Series B:30, Table 9). As a starting-point for estimating the figures for real-capital services and the like for private consumption, the outlay for "home" according to the same calculations has been taken, amounting to 2,909 mill. kronor. This figure can be assumed mainly to consist of capital services; in addition to which some further smaller items can be added, so that the total sum has been estimated at 3,000 mill. kronor. Real-capital services and the like for public activity have, as a rough estimate, been put down at 100 mill. kronor. The total supply of commodities belonging to group 0199 has been calculated as the sum of production values in the branches of activities affected (See *Input-output-tabeller för Sverige år 1957*, Chapter V) according to the 1951 census of undertakings (Table 1, column 9), with additions corresponding to the increase in the gross national product at market price between the years 1950 and 1957 (with

The gross national product at market price (including indirect taxes and subsidies) excluding costs for use of repair workshops etc.¹ is made up according to current definitions of the sum final demand, 71,287 mill. kronor, minus total imports, 12,602 mill. kronor, minus shipping companies' expenses abroad,² 1,123 mill. kronor, or 57,562 mill. kronor. The gross national income, defined in a corresponding way, is made up of the sum of "value added", 57,323 mill. kronor, and the value of domestic scrap and waste,³ 239 mill. kronor, or in all the same amount as the gross national product: 57,562 mill. kronor. According to the calculations of the National Institute of Economic Research⁴ the gross national product at market prices amounted to 57,160 mill. kronor. There is little difference between the two figures. The variation is partly due to the fact that a number of definitions have been made in different ways. It should be noted that the two calculations were made to a certain extent with the same data as a starting point and that certain sums in the calculations of the investigation have been reconciled with sums in the calculations of the National Institute of Economic Research. To a large extent, however, the calculations are independent of each other.

As a final step in the estimation procedure the input coefficients have been calculated as quotients between the consumption figures in the input-output table and the production figures for the commodity-groups. The coefficients form the matrices which in Chapter I were called A and B. These matrices are included among the matrix tables in the last part of this book. Just as in the input-output tables, each row corresponds to a commodity-group (for primary commodities, to collections of commodity-groups). The numbers in the row state consumption per unit of production of the various commodity-groups. A column shows the amounts of commodity-groups which are consumed in the production of a unit of a certain commodity-group.

starting-point from the figures in *Meddelanden från Konjunkturinstitutet*, Series B:30, Table 2) rounded off to the nearest hundred million kronor. It has been assumed from this that half, 3,200 mill. kronor, is the object of direct final demand, 3,000 mill. kronor are used as inputs in the production system and 200 mill. kronor as inputs for production of the commodity-groups 199 and 201-203. The production value for the commodity-groups 201-203 is shown in *Input-output-tabeller för Sverige år 1957*, Chapter II, Table II:1. Value added in the production of commodity-groups 199, 201-203 consists of total production value minus the value of other inputs.

¹ Cf. Chapter II, Section A.

² Part of imports in a wider sense; the figure from *Sjöfart 1957*.

³ If sale of other used articles had also been recorded in the investigation, they would have been added in the same way.

⁴ *Meddelande från Konjunkturinstitutet*, Series B:30, Table 2.

CHAPTER VI

Relations between Final Product, Total Product and Consumption of Primary Commodities

The model gives the relations between (*a*) final product, and (*b*) total product and consumption of primary commodity-groups. The relation between final product and total product has been shown in Chapter I (equation 14) in the following way:

$$X = (I - A)^{-1}Y \quad (1)$$

The relation between final product and consumption of primary commodity-groups is stated in the following expression (equation 15 in Chapter I):

$$W = B(I - A)^{-1}Y \quad (2)$$

In both equations, X , Y and W are variables, and most applications of the model involve given values for Y being inserted in these equations, after which the values of X and W are obtained.¹

The equations (1) and (2) are matrix equations in which X , Y and W are vectors, $(I - A)^{-1}$ and $B(I - A)^{-1}$ matrices, whose elements consist of certain coefficients. Each separate element in the vectors X and W is therefore obtained as a sum of magnitudes, each one composed of a coefficient multiplied by an element in the vector Y . Each element in the two coefficient matrices will therefore state the value which an element in the X - and W -vectors takes when unit value is given to a particular element of the Y -vector. In economic terms this means that the coefficients refer to the output of a commodity-group, (1), or consumption of a primary commodity-group, (2), per unit of the final product (final consumption) of a given commodity-group.

¹ As all magnitudes are expressed in value units, account must always be taken of price changes in relation to the base year. The assumption of constant input-coefficients concerns the technical relations. For them to be valid in a new situation, therefore, A and B must be converted in view of the new price relations. This is a troublesome procedure, especially as it necessitates a new inversion of a matrix $I - A$. A simpler method is to recalculate a given vector (Y) to the prices of the base year, after which the equations (1) and (2) give X and W in these prices, and they can then be converted into current prices.

The nature of the relation between final product, total product and consumption of primary commodity-groups, and therefore the special properties of the production system, are shown by the coefficients. This chapter contains an account of this. The next chapter shows the results obtained when special values referring to a certain period—the year 1957—have been inserted into the equations, or in other words the different relations and effects with a certain activity carried on within the production system.

The coefficient matrix $(I - A)^{-1}$, which is included in equation (1), is of the magnitude 127×127 , as there are 127 commodity-groups produced within the production system. The elements of the matrix $(I - A)$ which was inverted were given with 6 decimals. The inverse matrix obtained and used for further calculations had also 6 decimal elements. It is stated in Matrix Table C; in this table only 4 decimal elements are given, however. The element A_{ij} , i.e. the figure in row i and column j in the table, refers to the total production of commodity-group i required for a unit of final production (final consumption) of commodity-group j .

When stated with 6 decimals practically all coefficients included as elements in $(I - A)^{-1}$ diverge from zero. This means that, with a few exceptions, all commodity-groups are consumed, directly or indirectly, in production of any of the groups. Often, however, the coefficients do not differ to any extent worth mentioning from zero, and then this consumption is insignificant. In Table C, therefore, the number of zero elements is larger than in the original matrix. Most of the coefficients are between the values 0 and 1, which shows that when a unit of a certain commodity-group is produced for final consumption, the total production required for the various commodity-groups is less than one unit. The total production of the commodity-group itself must, however, necessarily amount to at least 1, for in each case one unit of the final product must be made. All coefficients A_{ii} which are included as one of the diagonals in matrix Table C, amount therefore to a value of at least 1; as a rule they exceed 1, and this shows that production for final consumption of one unit of a commodity-group usually requires further production of the same group for direct or indirect inputs. The largest coefficient of all is the one which refers to total production of commodity-group 8 (pig-iron, castings, hot-rolled iron and steel) for a unit of final production of the same commodity-group. It amounts to 2,807. In this just as in some other cases, the fact that production for further processing at the manufacturing establishment has been included in production and consumption figures has helped to make the coefficients considerably larger than they would have been if production for sale only had been recorded. In those cases where coefficients outside the diagonal have become larger than 1, such production for further processing is also of great importance.

TABLE VI:1. Total production per unit of final product.

Commodity-group (1)	Production (2)	Commodity-group (1)	Production (2)	Commodity-group (1)	Production (2)
0001	2.147	0046	1.912	0091	1.991
0002	1.485	0047	2.217	0092	2.346
0003	1.294	0048	2.009	0093	1.568
0004	1.152	0049	1.525	0094	1.961
0005	1.291	0050	1.383	0095	1.406
0006	1.189	0051	1.519	0096	1.036
0007	1.404	0052	1.545	0097	1.844
0008	3.210	0053	1.500	0098	1.686
0009	1.323	0054	1.677	0099	1.736
0010	1.560	0055	1.599	0100	1.534
0011	1.721	0056	1.609	0101	1.580
0012	1.879	0057	1.490	0102	1.638
0013	2.340	0058	1.412	0103	1.441
0014	1.622	0059	1.968	0104	1.408
0015	1.963	0060	1.720	0105	1.626
0016	1.844	0061	1.622	0106	1.637
0017	1.819	0062	1.528	0107	1.553
0018	2.133	0063	1.390	0108	1.321
0019	1.442	0064	1.219	0109	1.695
0020	1.662	0065	1.264	0110	1.392
0021	1.621	0066	1.531	0111	1.632
0022	1.552	0067	1.156	0112	1.958
0023	1.655	0068	1.254	0113	1.581
0024	2.153	0069	1.385	0114	1.690
0025	1.977	0070	1.467	0115	1.850
0026	1.827	0071	1.821	0116	1.711
0027	1.941	0072	1.630	0117	1.320
0028	1.756	0073	2.154	0118	1.682
0029	2.661	0074	1.777	0119	1.861
0030	2.035	0075	1.726	0120	1.263
0031	1.833	0076	1.660	0121	1.145
0032	1.626	0077	1.725	0122	1.178
0033	1.835	0078	2.016	0123	1.322
0034	1.563	0079	2.156	0124	1.156
0035	1.907	0080	1.767	0125	1.377
0036	1.902	0081	2.089	0126	1.405
0037	1.510	0082	1.680	0127	1.240
0038	2.008	0083	1.653		
0039	1.450	0084	1.945		
0040	1.692	0085	1.998		
0041	1.625	0086	2.191		
0042	1.793	0087	1.470		
0043	1.813	0088	3.068		
0044	1.576	0089	2.904		
0045	1.463	0090	1.905		

Table VI:1 gives the sums for the column vectors in the matrix $(I - A)^{-1}$. As the coefficients which make up the elements in a column vector refer to total production of the various commodity-groups per unit of final product of a certain commodity-group, the column total will state the total production in the production system which is required for this final product. The average column sum is 1.695; this means that a unit of final product on an average requires a total production which exceeds the final product itself by about 70%. The largest column total amounts to 3.210 and refers

to iron and steel (commodity-group 8); especially large column totals are also shown, for example, for the groups milk and butter (88), meat including cooked meat products (89) and cast-iron goods (29). The smallest column total is 1.036, referring to tobacco (96). A delivery for final consumption of tobacco thus requires a total production within the production system which exceeds by only 3.6 % the production of the finally delivered commodities themselves. The direct consumption in production of tobacco must therefore to an unusually large extent refer to primary commodities (import, labour etc.).

A comparison between the two matrices A and $(I - A)^{-1} - I$ (i.e. $(I - A)^{-1}$ with the magnitude 1 extracted from each element in the main diagonal) is of interest. An element in the former refers to direct consumption of a commodity-group in the production of a commodity-group. An element in the latter gives total consumption of a commodity-group in (final) production of a commodity-group. An element in $(I - A)^{-1}$ must consequently be at least as large as the corresponding element in A . With a few exceptions, it is larger. In fact several—far more than half—of the elements in A are 0, while the elements in $(I - A)^{-1} - I$ are 0 only in a few exceptional cases.

In the coefficient matrix $B(I - A)^{-1}$ there are, in principle, as many rows as there are primary commodity-groups, and as many columns as there are produced commodity-groups. As said in connection with Table V:1, certain combinations of primary commodity-groups have been made and the number of rows in the matrix $B(I - A)^{-1}$ —as in the input-output table which is the basis of the estimate—is therefore 32.¹ The matrix $B(I - A)^{-1}$ is given in Matrix Table D and the table shows which commodity-groups are included in the 32 collections.^{2,3} The element B_{ij} , i.e. the number which is found in row i and column j in the table, gives the total consumption of a certain collection of primary commodity-groups (that of the 30 collections covered by line i) which is required for a unit of final production (consumption) of commodity-group j . The table also includes several rows made up of the totals of rows in the matrix $B(I - A)^{-1}$, parallel statements of labour and fuel in quantity measurements etc.

Tables VI:2 and VI:3 are composed of summaries of matrix $B(I - A)^{-1}$.⁴

¹ The groups 0401–0403 can, however, be shown specially for all consumption within industry, and this has been done in the matrix tables.

² The two rows consisting of the groups 1117–1127 and 1308 respectively have all elements = 0 and have therefore been omitted.

³ Just as for the matrix $(I - A)^{-1}$, the computation was made with 6 decimals but the result is given with 4 decimals.

⁴ For practical reasons the tables are based on the transposed matrix $[B(I - A)^{-1}]'$.

TABLE VI: 2. *Total consumption of primary commodities per unit of final product. Alternative 1.*

(1)=commodity-group, (2)=imports, (3)=electric power and fuels, (4)=labour, (5)=other, (6)=total

(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
0001	0.098	0.049	0.746	0.107	1.000	0066	0.067	0.087	0.422	0.424	1.000
0002	0.085	0.037	0.576	0.302	1.000	0067	0.075	0.143	0.525	0.257	1.000
0003	0.059	0.162	0.377	0.402	1.000	0068	0.077	0.077	0.572	0.274	1.000
0004	0.006	0.010	0.582	0.402	1.000	0069	0.091	0.101	0.540	0.268	1.000
0005	0.049	0.063	0.446	0.442	1.000	0070	0.101	0.065	0.347	0.487	1.000
0006	0.035	0.038	0.224	0.703	1.000	0071	0.017	0.024	0.566	0.393	1.000
0007	0.103	0.062	0.355	0.480	1.000	0072	0.111	0.024	0.557	0.308	1.000
0008	0.138	0.149	0.314	0.399	1.000	0073	0.065	0.026	0.553	0.356	1.000
0009	0.329	0.150	0.233	0.288	1.000	0074	0.075	0.030	0.573	0.322	1.000
0010	0.236	0.068	0.318	0.378	1.000	0075	0.074	0.030	0.506	0.390	1.000
0011	0.418	0.040	0.245	0.297	1.000	0076	0.030	0.092	0.462	0.416	1.000
0012	0.211	0.037	0.454	0.298	1.000	0077	0.057	0.087	0.442	0.414	1.000
0013	0.126	0.085	0.435	0.354	1.000	0078	0.040	0.135	0.365	0.460	1.000
0014	0.108	0.048	0.599	0.245	1.000	0079	0.062	0.117	0.464	0.357	1.000
0015	0.188	0.054	0.428	0.330	1.000	0080	0.058	0.142	0.495	0.305	1.000
0016	0.186	0.049	0.461	0.304	1.000	0081	0.097	0.058	0.495	0.350	1.000
0017	0.151	0.044	0.518	0.287	1.000	0082	0.052	0.041	0.583	0.324	1.000
0018	0.206	0.077	0.420	0.297	1.000	0083	0.024	0.042	0.557	0.379	1.000
0019	0.249	0.065	0.482	0.204	1.000	0084	0.207	0.035	0.404	0.354	1.000
0020	0.186	0.037	0.503	0.274	1.000	0085	0.131	0.047	0.454	0.368	1.000
0021	0.194	0.033	0.461	0.312	1.000	0086	0.079	0.071	0.406	0.444	1.000
0022	0.229	0.028	0.498	0.245	1.000	0087	0.140	0.020	0.249	0.591	1.000
0023	0.257	0.024	0.447	0.272	1.000	0088	0.101	0.062	0.786	0.051	1.000
0024	0.262	0.079	0.396	0.263	1.000	0089	0.150	0.044	0.655	0.151	1.000
0025	0.272	0.037	0.388	0.303	1.000	0090	0.186	0.038	0.475	0.301	1.000
0026	0.192	0.032	0.454	0.322	1.000	0091	0.156	0.044	0.419	0.381	1.000
0027	0.229	0.039	0.416	0.316	1.000	0092	0.467	0.026	0.210	0.297	1.000
0028	0.149	0.048	0.505	0.298	1.000	0093	0.568	0.017	0.190	0.225	1.000
0029	0.157	0.094	0.421	0.328	1.000	0094	0.143	0.049	0.393	0.415	1.000
0030	0.205	0.047	0.430	0.318	1.000	0095	0.060	0.038	0.352	0.550	1.000
0031	0.099	0.046	0.489	0.366	1.000	0096	0.078	0.002	0.030	0.890	1.000
0032	0.124	0.039	0.550	0.287	1.000	0097	0.316	0.033	0.465	0.186	1.000
0033	0.169	0.040	0.450	0.341	1.000	0098	0.326	0.043	0.455	0.176	1.000
0034	0.112	0.035	0.500	0.353	1.000	0099	0.371	0.038	0.505	0.086	1.000
0035	0.207	0.047	0.509	0.237	1.000	0100	0.193	0.084	0.299	0.424	1.000
0036	0.182	0.035	0.422	0.361	1.000	0101	0.258	0.029	0.447	0.266	1.000
0037	0.099	0.038	0.467	0.396	1.000	0102	0.270	0.020	0.526	0.184	1.000
0038	0.211	0.057	0.462	0.270	1.000	0103	0.149	0.036	0.495	0.320	1.000
0039	0.100	0.020	0.484	0.396	1.000	0104	0.503	0.037	0.307	0.153	1.000
0040	0.171	0.035	0.375	0.419	1.000	0105	0.302	0.021	0.465	0.212	1.000
0041	0.130	0.031	0.551	0.288	1.000	0106	0.222	0.021	0.512	0.245	1.000
0042	0.137	0.036	0.410	0.417	1.000	0107	0.220	0.027	0.536	0.217	1.000
0043	0.180	0.040	0.521	0.259	1.000	0108	0.301	0.037	0.367	0.295	1.000
0044	0.211	0.031	0.429	0.329	1.000	0109	0.294	0.124	0.256	0.326	1.000
0045	0.094	0.016	0.485	0.405	1.000	0110	0.121	0.029	0.296	0.554	1.000
0046	0.221	0.046	0.495	0.238	1.000	0111	0.162	0.066	0.440	0.332	1.000
0047	0.150	0.090	0.448	0.312	1.000	0112	0.417	0.031	0.183	0.369	1.000
0048	0.222	0.043	0.478	0.257	1.000	0113	0.255	0.071	0.353	0.321	1.000
0049	0.200	0.038	0.373	0.389	1.000	0114	0.164	0.035	0.314	0.487	1.000
0050	0.087	0.016	0.545	0.352	1.000	0115	0.230	0.059	0.465	0.246	1.000
0051	0.115	0.039	0.539	0.307	1.000	0116	0.227	0.045	0.360	0.368	1.000
0052	0.194	0.020	0.505	0.281	1.000	0117	0.083	0.020	0.670	0.227	1.000
0053	0.146	0.031	0.436	0.387	1.000	0118	0.241	0.023	0.487	0.249	1.000
0054	0.137	0.032	0.502	0.329	1.000	0119	0.088	0.043	0.646	0.223	1.000
0055	0.155	0.030	0.437	0.378	1.000	0120	0.011	0.020	0.868	0.101	1.000
0056	0.163	0.049	0.536	0.252	1.000	0121	0.023	0.008	0.469	0.500	1.000
0057	0.343	0.034	0.286	0.337	1.000	0122	0.023	0.018	0.162	0.797	1.000
0058	0.124	0.019	0.496	0.361	1.000	0123	0.038	0.066	0.648	0.248	1.000
0059	0.161	0.033	0.538	0.268	1.000	0124	0.024	0.060	0.510	0.406	1.000
0060	0.214	0.030	0.547	0.209	1.000	0125	0.053	0.106	0.598	0.243	1.000
0061	0.164	0.037	0.642	0.157	1.000	0126	0.037	0.159	0.459	0.345	1.000
0062	0.131	0.030	0.608	0.231	1.000	0127	0.010	0.023	0.566	0.401	1.000
0063	0.129	0.018	0.624	0.229	1.000						
0064	0.029	0.090	0.491	0.390	1.000						
0065	0.045	0.362	0.228	0.365	1.000						

TABLE VI:3. *Total consumption of primary commodities per unit of final product. Alternative 2.*

(1) = commodity-group, (2) = imports, (3) = labour, (4) = indirect taxes etc., (5) = real-capital services etc., (7) = total

(1)	(2)	(3)	(4)	(5)	(6)	(7)
0001	0.120	0.746	0.020	0.087	0.027	1.000
0002	0.111	0.576	0.018	0.283	0.012	1.000
0003	0.185	0.377	0.086	0.316	0.036	1.000
0004	0.014	0.582	0.007	0.395	0.002	1.000
0005	0.105	0.446	0.058	0.383	0.008	1.000
0006	0.056	0.224	0.005	0.697	0.018	1.000
0007	0.120	0.355	0.007	0.473	0.045	1.000
0008	0.237	0.314	0.014	0.325	0.110	1.000
0009	0.384	0.233	0.009	0.266	0.108	1.000
0010	0.257	0.318	0.008	0.214	0.203	1.000
0011	0.431	0.245	0.005	0.203	0.116	1.000
0012	0.228	0.454	0.013	0.268	0.037	1.000
0013	0.172	0.435	0.012	0.319	0.062	1.000
0014	0.132	0.599	0.011	0.221	0.037	1.000
0015	0.216	0.428	0.014	0.302	0.040	1.000
0016	0.204	0.461	0.008	0.270	0.057	1.000
0017	0.176	0.518	0.011	0.266	0.029	1.000
0018	0.242	0.420	0.024	0.258	0.056	1.000
0019	0.273	0.482	0.019	0.144	0.081	1.000
0020	0.203	0.503	0.013	0.247	0.034	1.000
0021	0.205	0.461	0.008	0.265	0.061	1.000
0022	0.238	0.498	0.008	0.216	0.040	1.000
0023	0.268	0.447	0.008	0.251	0.026	1.000
0024	0.304	0.396	0.016	0.226	0.058	1.000
0025	0.292	0.388	0.026	0.268	0.026	1.000
0026	0.207	0.454	0.020	0.297	0.022	1.000
0027	0.251	0.416	0.019	0.277	0.037	1.000
0028	0.174	0.505	0.012	0.268	0.041	1.000
0029	0.221	0.421	0.012	0.211	0.135	1.000
0030	0.229	0.430	0.017	0.278	0.046	1.000
0031	0.129	0.489	0.008	0.343	0.031	1.000
0032	0.147	0.550	0.011	0.264	0.028	1.000
0033	0.192	0.450	0.013	0.311	0.034	1.000
0034	0.127	0.500	0.010	0.323	0.040	1.000
0035	0.224	0.509	0.018	0.214	0.035	1.000
0036	0.201	0.422	0.013	0.336	0.028	1.000
0037	0.118	0.467	0.006	0.380	0.029	1.000
0038	0.241	0.462	0.012	0.232	0.053	1.000
0039	0.108	0.484	0.008	0.382	0.018	1.000
0040	0.186	0.375	0.015	0.399	0.025	1.000
0041	0.144	0.551	0.012	0.267	0.026	1.000
0042	0.154	0.410	0.010	0.388	0.038	1.000
0043	0.201	0.521	0.015	0.230	0.033	1.000
0044	0.229	0.429	0.013	0.308	0.021	1.000
0045	0.103	0.485	0.008	0.391	0.013	1.000
0046	0.246	0.495	0.018	0.202	0.039	1.000
0047	0.213	0.448	0.026	0.262	0.051	1.000
0048	0.247	0.478	0.017	0.225	0.033	1.000
0049	0.216	0.373	0.009	0.335	0.067	1.000
0050	0.093	0.545	0.005	0.338	0.019	1.000
0051	0.134	0.539	0.007	0.290	0.030	1.000
0052	0.203	0.505	0.024	0.253	0.015	1.000
0053	0.160	0.436	0.009	0.372	0.023	1.000
0054	0.151	0.502	0.009	0.310	0.028	1.000
0055	0.169	0.437	0.012	0.349	0.033	1.000
0056	0.185	0.536	0.011	0.233	0.035	1.000
0057	0.357	0.286	0.006	0.313	0.038	1.000
0058	0.131	0.496	0.008	0.345	0.020	1.000
0059	0.178	0.538	0.013	0.238	0.033	1.000
0060	0.229	0.547	0.025	0.181	0.018	1.000

Table VI:3 (continued)

(1)	(2)	(3)	(4)	(5)	(6)	(7)
0061	0.185	0.642	0.016	0.135	0.022	1.000
0062	0.146	0.608	0.012	0.214	0.020	1.000
0063	0.135	0.624	0.013	0.203	0.025	1.000
0064	0.085	0.491	0.005	0.384	0.035	1.000
0065	0.321	0.228	0.010	0.355	0.086	1.000
0066	0.125	0.422	0.008	0.413	0.032	1.000
0067	0.173	0.525	0.007	0.250	0.045	1.000
0068	0.116	0.572	0.007	0.266	0.039	1.000
0069	0.147	0.540	0.009	0.258	0.046	1.000
0070	0.138	0.347	0.011	0.475	0.029	1.000
0071	0.028	0.566	0.008	0.385	0.013	1.000
0072	0.121	0.557	0.009	0.297	0.016	1.000
0073	0.077	0.553	0.008	0.347	0.015	1.000
0074	0.085	0.573	0.007	0.314	0.021	1.000
0075	0.088	0.506	0.006	0.383	0.017	1.000
0076	0.041	0.462	0.009	0.406	0.082	1.000
0077	0.110	0.442	0.010	0.403	0.035	1.000
0078	0.106	0.365	0.011	0.448	0.070	1.000
0079	0.127	0.464	0.012	0.344	0.053	1.000
0080	0.139	0.495	0.013	0.291	0.062	1.000
0081	0.129	0.495	0.011	0.338	0.027	1.000
0082	0.072	0.583	0.007	0.316	0.022	1.000
0083	0.042	0.557	0.004	0.373	0.024	1.000
0084	0.225	0.404	0.109	0.246	0.016	1.000
0085	0.154	0.454	0.045	0.323	0.024	1.000
0086	0.130	0.406	0.024	0.420	0.020	1.000
0087	0.150	0.249	0.355	0.236	0.010	1.000
0088	0.133	0.786	-0.071	0.121	0.031	1.000
0089	0.170	0.655	-0.046	0.105	0.024	1.000
0090	0.210	0.475	0.021	0.278	0.016	1.000
0091	0.183	0.419	0.029	0.351	0.018	1.000
0092	0.473	0.210	0.114	0.183	0.020	1.000
0093	0.577	0.190	0.072	0.153	0.008	1.000
0094	0.174	0.393	0.041	0.373	0.019	1.000
0095	0.085	0.352	0.357	0.192	0.014	1.000
0096	0.078	0.030	0.827	0.063	0.002	1.000
0097	0.335	0.465	0.019	0.167	0.014	1.000
0098	0.349	0.455	0.010	0.166	0.020	1.000
0099	0.390	0.505	-0.018	0.103	0.020	1.000
0100	0.249	0.299	0.021	0.403	0.028	1.000
0101	0.275	0.447	0.028	0.238	0.012	1.000
0102	0.281	0.526	0.025	0.159	0.009	1.000
0103	0.172	0.495	0.014	0.306	0.013	1.000
0104	0.525	0.307	0.009	0.144	0.015	1.000
0105	0.313	0.465	0.027	0.185	0.010	1.000
0106	0.233	0.512	0.013	0.232	0.010	1.000
0107	0.234	0.536	0.017	0.199	0.014	1.000
0108	0.321	0.367	0.012	0.282	0.018	1.000
0109	0.338	0.256	0.012	0.313	0.081	1.000
0110	0.133	0.296	0.009	0.545	0.017	1.000
0111	0.204	0.440	0.012	0.314	0.030	1.000
0112	0.434	0.183	0.214	0.155	0.014	1.000
0113	0.306	0.353	0.016	0.303	0.022	1.000
0114	0.183	0.314	0.125	0.361	0.017	1.000
0115	0.260	0.465	0.014	0.228	0.033	1.000
0116	0.251	0.360	-0.001	0.368	0.022	1.000
0117	0.097	0.670	0.010	0.217	0.006	1.000
0118	0.253	0.487	0.019	0.224	0.017	1.000
0119	0.111	0.646	0.012	0.208	0.023	1.000
0120	0.023	0.868	0.005	0.096	0.008	1.000
0121	0.025	0.469	0.002	0.497	0.007	1.000
0122	0.037	0.162	0.002	0.794	0.005	1.000
0123	0.070	0.648	0.004	0.242	0.036	1.000
0124	0.077	0.510	0.050	0.356	0.007	1.000
0125	0.107	0.598	0.007	0.235	0.053	1.000
0126	0.181	0.459	0.004	0.340	0.016	1.000
0127	0.020	0.566	0.005	0.396	0.013	1.000

In Table VI:3 the primary commodity-groups have been assembled into five large collections: import (all groups whose four-figure numbers begin with 1),¹ labour (0401–0403), subsidies, indirect taxes and customs duties (0404–0407), real-capital services, interest, profit etc. as well as sundry not specially recorded services etc. (0199, 1199, 0407, 1407) and domestic scrap, electric power and fuels (0198, 0201–0203). The table therefore shows the total consumption of these collections of primary commodity-groups per unit of final product of the produced commodity-groups 0001–0127. In Table VI:2 the primary commodity-groups have been combined in another way. This table shows total import excluding import of electric power and fuels (i.e. excluding the groups 1201–1203, 1301), electric power and fuels (0201–0203, 1201–1203, 1301), labour (0401–0403) and others (0198, 0199, 1199, 0407, 1407). Otherwise the table has the same appearance as Table VI:3; it thus chiefly serves as a special account of the consumption of electric power and fuel.

As shown in Chapter I, the amount of all consumed primary commodities in the production of a commodity-group is equal to the amount of final product if all amounts are measured in units of value. A given final product can, therefore, be divided into its primary inputs. In tables VI:2 and VI:3 the consumption of primary commodities per unit of final product is given, and the tables therefore show which parts of the final product the collections of primary commodities correspond to (this also applies to the relevant parts of Matrix Table D).

In Tables VI:4, VI:6, VI:8, VI:10 and VI:12, figures for direct and for total (direct and indirect) consumption of the various collections of primary commodities per unit of final product are combined. In Tables VI:5, VI:7, VI:9, VI:11 and VI:13 the 20 groups are shown, in order of rank, which have the largest and the 20 which have the smallest total consumption of the collections.

Tables VI:4 and VI:5 show import consumption. We find there for example that for final production of a unit of animal agricultural products (commodity-group 1) 0.014 units of import are consumed directly, but in all 0.120 units, i.e. 8.6 times as much. In other words, if animal agricultural products to the value of 1 mill. kronor are produced, agriculture itself directly consumes imported commodities to the value of 14,000 kronor, while in all 120,000 kronor's worth of imports are consumed. In this case the difference between direct and total import is unusually large. For about three-quarters of the commodity-groups, however, total import exceeds direct import by 50 % or more. The largest import consumption is for

¹ Except 1199 and 1407 which are not specially shown in any connection. Where total imports are mentioned below these groups therefore are disregarded.

TABLE VI:4. *Consumption of imports per unit of final product.*

(1)=commodity-group, (2)=direct consumption, (3)=total consumption, (4)=(3)/(2)

(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
0001	0.014	0.120	8.57	0066	0.057	0.125	2.19
0002	0.068	0.111	1.63	0067	0.152	0.173	1.14
0003	0.148	0.185	1.25	0068	0.092	0.116	1.26
0004	0.003	0.014	4.67	0069	0.115	0.147	1.28
0005	0.074	0.105	1.42	0070	0.093	0.138	1.48
0006	0.041	0.056	1.37	0071	0.013	0.028	2.15
0007	0.087	0.120	1.38	0072	0.066	0.121	1.83
0008	0.068	0.237	3.49	0073	0.040	0.077	1.93
0009	0.341	0.384	1.13	0074	0.044	0.085	1.93
0010	0.213	0.257	1.21	0075	0.059	0.088	1.49
0011	0.297	0.431	1.45	0076	0.023	0.041	1.78
0012	0.108	0.228	2.11	0077	0.075	0.110	1.47
0013	0.070	0.172	2.46	0078	0.060	0.106	1.77
0014	0.086	0.132	1.53	0079	0.053	0.127	2.40
0015	0.138	0.216	1.57	0080	0.097	0.139	1.43
0016	0.074	0.204	2.76	0081	0.055	0.129	2.35
0017	0.111	0.176	1.59	0082	0.030	0.072	2.40
0018	0.157	0.242	1.54	0083	0.010	0.042	4.20
0019	0.215	0.273	1.27	0084	0.155	0.225	1.45
0020	0.123	0.203	1.65	0085	0.039	0.154	3.95
0021	0.099	0.205	2.07	0086	0.049	0.130	2.65
0022	0.138	0.238	1.72	0087	0.108	0.150	1.39
0023	0.184	0.268	1.46	0088	0.013	0.133	10.23
0024	0.215	0.304	1.41	0089	0.060	0.170	2.83
0025	0.191	0.292	1.53	0090	0.125	0.210	1.68
0026	0.117	0.207	1.77	0091	0.099	0.183	1.85
0027	0.161	0.251	1.56	0092	0.218	0.473	2.17
0028	0.109	0.174	1.60	0093	0.521	0.577	1.11
0029	0.081	0.221	2.73	0094	0.096	0.174	1.81
0030	0.135	0.229	1.70	0095	0.046	0.085	1.85
0031	0.066	0.129	1.95	0096	0.076	0.078	1.03
0032	0.096	0.147	1.53	0097	0.200	0.335	1.68
0033	0.129	0.192	1.49	0098	0.235	0.349	1.49
0034	0.076	0.127	1.67	0099	0.275	0.390	1.42
0035	0.140	0.224	1.60	0100	0.181	0.249	1.38
0036	0.112	0.201	1.79	0101	0.195	0.275	1.41
0037	0.076	0.118	1.55	0102	0.187	0.281	1.50
0038	0.156	0.241	1.54	0103	0.114	0.172	1.51
0039	0.064	0.108	1.69	0104	0.473	0.525	1.11
0040	0.117	0.186	1.59	0105	0.166	0.313	1.89
0041	0.090	0.144	1.60	0106	0.093	0.233	2.51
0042	0.067	0.154	2.30	0107	0.168	0.234	1.39
0043	0.128	0.201	1.57	0108	0.278	0.321	1.15
0044	0.174	0.229	1.32	0109	0.224	0.338	1.51
0045	0.065	0.103	1.58	0110	0.079	0.133	1.68
0046	0.163	0.246	1.51	0111	0.120	0.204	1.70
0047	0.116	0.213	1.84	0112	0.259	0.434	1.68
0048	0.162	0.247	1.52	0113	0.223	0.306	1.37
0049	0.136	0.216	1.59	0114	0.104	0.183	1.76
0050	0.049	0.093	1.90	0115	0.104	0.260	2.50
0051	0.084	0.134	1.60	0116	0.163	0.251	1.54
0052	0.152	0.203	1.34	0117	0.053	0.097	1.83
0053	0.099	0.160	1.62	0118	0.151	0.253	1.68
0054	0.086	0.151	1.76	0119	0.047	0.111	2.36
0055	0.089	0.169	1.90	0120	0.005	0.023	4.60
0056	0.107	0.185	1.73	0121	0.013	0.025	1.92
0057	0.292	0.357	1.22	0122	0.015	0.037	2.47
0058	0.077	0.131	1.70	0123	0.039	0.070	1.79
0059	0.087	0.178	2.05	0124	0.050	0.077	1.54
0060	0.140	0.229	1.64	0125	0.055	0.107	1.95
0061	0.123	0.185	1.50	0126	0.117	0.181	1.55
0062	0.095	0.146	1.54	0127	0.005	0.020	4.00
0063	0.097	0.135	1.39				
0064	0.065	0.085	1.31				
0065	0.271	0.321	1.18				

TABLE VI:5. *Commodity-groups requiring especially high or especially low consumption of imports.*

Rank number (1)	Commodity-group (2)	Total consumption (3)	Rank number (1)	Commodity-group (2)	Total consumption (3)
1	0093	0.577	108	0117	0.097
2	0104	0.515	109	0050	0.093
3	0092	0.473	110	0075	0.088
4	0112	0.434	111	0064	0.085
5	0011	0.431	112	0095	0.085
6	0099	0.390	113	0074	0.085
7	0009	0.384	114	0096	0.078
8	0057	0.357	115	0124	0.077
9	0098	0.349	116	0073	0.077
10	0109	0.338	117	0082	0.072
11	0097	0.335	118	0123	0.070
12	0065	0.321	119	0006	0.056
13	0108	0.321	120	0083	0.042
14	0105	0.313	121	0076	0.041
15	0113	0.306	122	0122	0.037
16	0024	0.304	123	0071	0.028
17	0025	0.292	124	0121	0.025
18	0102	0.281	125	0120	0.023
19	0101	0.275	126	0127	0.020
20	0019	0.273	127	0004	0.014

production of commodity-group 93 (consisting of roasted coffee, starch, fodder mixtures etc.). Import consumption here makes up a good 58 % of the final product. The smallest import consumption is in forestry production (commodity-group 4). In forestry production home production factors are obviously used more intensively than in production of any other commodity-group. From the point of view of economic policy it may be of interest to note that building and construction (119) is not among those groups consuming least imports. Import per unit of production amounts to 0.111; the indirect import is of more importance than the direct, which amounts to 0.047 per unit of production. We must, however, bear in mind that final consumption of commodity-group 119, i.e. investments in buildings and installation, never *directly* consists of imports.¹

Labour consumption is shown in Tables VII:6 and VII:7. There is a particularly large total consumption of labour in the production of postal services (120) and railway transport (123), of dairy products and meat (88, 89), of agricultural products (1, 2) and of buildings, construction and painting and decorating services (119 and 117 respectively). As regards dairy products and meat the major part of labour consumption is not in production of the commodities themselves; the coefficients for direct

¹ Imports consumed in production of commodity-groups 0201–0203 are not included in the import figures mentioned above. A computation of the approximate amounts of these imports has been made and is stated in matrix table D.

TABLE VI: 6. *Consumption of labour per unit of final product.*

(1)=commodity-group, (2)=direct consumption, (3)=total consumption, (4)=(3)/(2)

(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
0001	0.341	0.746	2.19	0066	0.280	0.422	1.51
0002	0.418	0.576	1.38	0067	0.467	0.525	1.12
0003	0.276	0.377	1.37	0068	0.481	0.572	1.19
0004	0.517	0.582	1.13	0069	0.411	0.540	1.31
0005	0.364	0.446	1.23	0070	0.218	0.347	1.59
0006	0.176	0.224	1.27	0071	0.183	0.566	3.09
0007	0.267	0.355	1.33	0072	0.367	0.557	1.52
0008	0.072	0.314	4.36	0073	0.181	0.553	3.06
0009	0.130	0.233	1.79	0074	0.333	0.573	1.72
0010	0.152	0.318	2.09	0075	0.228	0.506	2.22
0011	0.093	0.245	2.63	0076	0.144	0.462	3.21
0012	0.272	0.454	1.67	0077	0.129	0.442	3.43
0013	0.268	0.435	1.62	0078	0.070	0.365	5.21
0014	0.478	0.599	1.25	0079	0.149	0.464	3.11
0015	0.252	0.428	1.70	0080	0.214	0.495	2.31
0016	0.257	0.461	1.79	0081	0.228	0.495	2.17
0017	0.363	0.518	1.43	0082	0.407	0.583	1.43
0018	0.221	0.420	1.90	0083	0.376	0.557	1.48
0019	0.357	0.482	1.35	0084	0.055	0.404	7.35
0020	0.327	0.503	1.54	0085	0.232	0.454	1.96
0021	0.329	0.461	1.40	0086	0.072	0.406	5.64
0022	0.378	0.498	1.32	0087	0.137	0.249	1.82
0023	0.265	0.447	1.69	0088	0.068	0.786	11.56
0024	0.231	0.396	1.71	0089	0.070	0.655	9.39
0025	0.162	0.388	2.40	0090	0.199	0.475	2.39
0026	0.240	0.454	1.89	0091	0.149	0.419	2.81
0027	0.222	0.416	1.87	0092	0.029	0.210	7.24
0028	0.331	0.505	1.53	0093	0.034	0.190	5.59
0029	0.147	0.421	2.86	0094	0.116	0.393	3.39
0030	0.209	0.430	2.06	0095	0.239	0.352	1.47
0031	0.363	0.489	1.35	0096	0.018	0.030	1.67
0032	0.400	0.550	1.38	0097	0.232	0.465	2.00
0033	0.301	0.450	1.50	0098	0.245	0.455	1.86
0034	0.378	0.500	1.32	0099	0.259	0.505	1.95
0035	0.321	0.509	1.59	0100	0.150	0.299	1.99
0036	0.208	0.422	2.03	0101	0.281	0.447	1.59
0037	0.373	0.467	1.25	0102	0.332	0.526	1.58
0038	0.285	0.462	1.62	0103	0.345	0.495	1.43
0039	0.358	0.484	1.35	0104	0.202	0.307	1.52
0040	0.199	0.375	1.88	0105	0.282	0.465	1.65
0041	0.402	0.551	1.37	0106	0.328	0.512	1.56
0042	0.207	0.410	1.98	0107	0.380	0.536	1.41
0043	0.342	0.521	1.52	0108	0.274	0.367	1.34
0044	0.302	0.429	1.42	0109	0.114	0.256	2.25
0045	0.339	0.485	1.43	0110	0.106	0.296	1.51
0046	0.327	0.495	1.51	0111	0.287	0.440	1.53
0047	0.257	0.448	1.74	0112	0.019	0.183	9.63
0048	0.267	0.478	1.79	0113	0.211	0.353	1.67
0049	0.254	0.373	1.47	0114	0.151	0.314	2.08
0050	0.435	0.545	1.25	0115	0.270	0.465	1.72
0051	0.430	0.539	1.25	0116	0.164	0.360	2.20
0052	0.389	0.505	1.30	0117	0.582	0.670	1.15
0053	0.310	0.436	1.41	0118	0.296	0.487	1.65
0054	0.339	0.502	1.48	0119	0.377	0.646	1.71
0055	0.263	0.437	1.66	0120	0.759	0.868	1.14
0056	0.375	0.536	1.43	0121	0.417	0.469	1.12
0057	0.166	0.286	1.72	0122	0.118	0.162	1.37
0058	0.387	0.496	1.28	0123	0.535	0.648	1.21
0059	0.307	0.538	1.75	0124	0.459	0.510	1.11
0060	0.358	0.547	1.53	0125	0.471	0.598	1.27
0061	0.466	0.642	1.38	0126	0.303	0.459	1.51
0062	0.491	0.608	1.24	0127	0.469	0.566	1.21
0063	0.521	0.624	1.20				
0064	0.414	0.491	1.19				
0065	0.146	0.228	1.56				

TABLE VI:7. *Commodity-groups requiring especially high or especially low consumption of labour.*

Rank number (1)	Commodity-group (2)	Total consumption (3)	Rank number (1)	Commodity-group (2)	Total consumption (3)
1	0120	0.868	108	0095	0.352
2	0088	0.786	109	0070	0.347
3	0001	0.746	110	0010	0.318
4	0117	0.670	111	0114	0.314
5	0089	0.655	112	0008	0.313
6	0123	0.648	113	0104	0.307
7	0119	0.646	114	0100	0.299
8	0061	0.642	115	0110	0.296
9	0063	0.624	116	0057	0.286
10	0062	0.608	117	0109	0.256
11	0014	0.599	118	0087	0.249
12	0125	0.598	119	0011	0.245
13	0082	0.583	120	0009	0.233
14	0004	0.582	121	0065	0.228
15	0002	0.576	122	0006	0.224
16	0074	0.573	123	0092	0.210
17	0068	0.572	124	0093	0.190
18	0071	0.566	125	0112	0.183
19	0127	0.566	126	0122	0.162
20	0083	0.557	127	0096	0.030

consumption here are unusually small, while the total coefficients are 9–12 times larger. An especially low labour consumption has been recorded for the production of tobacco (96), shipping (122), animal oils and fats (112) and margarine (92); in these cases large parts of the labour consumption take place outside Sweden.

Table VI:8, which shows the burden of indirect taxes and customs duties as well as subsidies, also shows that production of three commodity-groups, when indirect effects are included, is net-subsidised. This applies to dairy products (88), linen and jute yarn, linen and jute textiles (99) and the group consisting of chemical products, not included elsewhere (116). (We observe from Matrix Table D that if we take account merely of subsidies, both directly and indirectly, the production of all commodity-groups is subsidised.) Most heavily taxed is the production of tobacco (96). Production of malt drinks and mineral waters (95) and of flour (84) is also heavily taxed; as far as flour is concerned it should be pointed out that milling charges are included among the indirect taxes.¹

Tables VI:10 and VI:11 show the consumption of the remainder-group (0199, 1199, 0407 and 1407), i.e. of diverse not specially mentioned commodities and services and of real-capital services, interest, profit and the like. The latter can be assumed to constitute the dominant part; as regards the former it can be assumed that they, with certain exceptions, roughly

¹ Cf. *Input-output-tabeller för Sverige år 1957*, Chapter XII.

TABLE VI: 8. *Indirect taxes, customs duties etc. per unit of final product.*

(1)=commodity-group, (2)=directly levied taxes etc., (3)=totally levied taxes etc., (4)=(3)/(2)

(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
0001	0.004	0.020	5.0	0066	0.005	0.008	1.6
0002	0.013	0.018	1.4	0067	0.006	0.007	1.2
0003	0.081	0.086	1.1	0068	0.005	0.007	1.4
0004	0.002	0.007	3.5	0069	0.007	0.009	1.3
0005	0.057	0.058	1.0	0070	0.008	0.011	1.4
0006	0.004	0.005	1.3	0071	0.002	0.008	4.0
0007	0.004	0.007	1.8	0072	0.005	0.009	1.8
0008	0.004	0.014	3.5	0073	0.003	0.008	2.7
0009	0.007	0.009	1.3	0074	0.003	0.007	2.3
0010	0.005	0.008	1.6	0075	0.003	0.006	1.5
0011	0.002	0.005	2.5	0076	0.004	0.009	2.3
0012	0.008	0.013	1.6	0077	0.005	0.010	2.0
0013	0.006	0.012	2.0	0078	0.005	0.011	2.2
0014	0.008	0.011	1.4	0079	0.004	0.012	3.0
0015	0.009	0.014	1.6	0080	0.007	0.013	1.9
0016	0.003	0.008	2.7	0081	0.004	0.011	2.8
0017	0.006	0.011	1.8	0082	0.003	0.007	2.3
0018	0.018	0.024	1.3	0083	0.001	0.004	4.0
0019	0.008	0.010	1.3	0084	0.097	0.109	1.1
0020	0.010	0.013	1.3	0085	0.007	0.045	6.4
0021	0.006	0.008	1.3	0086	0.012	0.024	2.0
0022	0.006	0.008	1.3	0087	0.335	0.355	1.1
0023	0.004	0.008	2.0	0088	-0.093	-0.071	. .
0024	0.011	0.016	1.5	0089	0.024	0.046	1.9
0025	0.018	0.026	1.4	0090	0.004	0.021	5.3
0026	0.013	0.020	1.5	0091	0.012	0.029	2.4
0027	0.014	0.019	1.4	0092	0.013	0.114	8.8
0028	0.008	0.012	1.5	0093	0.058	0.072	1.2
0029	0.004	0.012	3.0	0094	0.027	0.041	1.5
0030	0.011	0.017	1.5	0095	0.335	0.357	1.1
0031	0.004	0.008	2.0	0096	0.827	0.827	1.0
0032	0.008	0.011	1.4	0097	0.011	0.019	1.7
0033	0.009	0.013	1.4	0098	0.006	0.010	1.7
0034	0.007	0.010	1.4	0099	-0.016	-0.018	. .
0035	0.012	0.018	1.5	0100	0.017	0.021	1.2
0036	0.008	0.013	1.6	0101	0.022	0.028	1.3
0037	0.004	0.006	1.5	0102	0.020	0.025	1.3
0038	0.008	0.012	1.5	0103	0.011	0.014	1.3
0039	0.005	0.008	1.6	0104	0.004	0.009	2.3
0040	0.010	0.015	1.5	0105	0.022	0.027	1.2
0041	0.009	0.012	1.3	0106	0.009	0.013	1.4
0042	0.006	0.010	1.7	0107	0.012	0.017	1.4
0043	0.011	0.015	1.4	0108	0.009	0.012	1.3
0044	0.010	0.013	1.3	0109	0.007	0.012	1.7
0045	0.006	0.008	1.3	0110	0.006	0.009	1.5
0046	0.013	0.018	1.4	0111	0.006	0.012	2.0
0047	0.020	0.026	1.3	0112	0.139	0.214	1.5
0048	0.011	0.017	1.5	0113	0.007	0.016	2.3
0049	0.006	0.009	1.5	0114	0.109	0.125	1.1
0050	0.003	0.005	1.7	0115	0.009	0.014	1.6
0051	0.004	0.007	1.8	0116	-0.017	-0.001	. .
0052	0.020	0.024	1.2	0117	0.007	0.010	1.4
0053	0.006	0.009	1.5	0118	0.015	0.019	1.3
0054	0.005	0.009	1.8	0119	0.006	0.012	2.0
0055	0.009	0.012	1.3	0120	0.002	0.005	2.5
0056	0.008	0.011	1.4	0121	0.001	0.002	2.0
0057	0.004	0.006	1.5	0122	0.000	0.002	. .
0058	0.006	0.008	1.3	0123	0.002	0.004	2.0
0059	0.007	0.013	1.9	0124	0.048	0.050	1.0
0060	0.017	0.025	1.5	0125	0.003	0.007	2.3
0061	0.012	0.016	1.3	0126	0.003	0.004	1.3
0062	0.009	0.012	1.3	0127	0.003	0.005	1.7
0063	0.011	0.013	1.2				
0064	0.003	0.005	1.7				
0065	0.009	0.010	1.1				

TABLE VI:9. *The highest and the lowest taxed commodity-groups.*

Rank number (1)	Commodity- group (2)	Total taxes etc. (3)	Rank number (1)	Commodity- group (2)	Total taxes etc. (3)
1	0096	0.827	108	0067	0.007
2	0095	0.357	109	0068	0.007
3	0087	0.355	110	0007	0.007
4	0112	0.214	111	0075	0.006
5	0114	0.125	112	0057	0.006
6	0092	0.114	113	0037	0.006
7	0084	0.109	114	0050	0.005
8	0003	0.086	115	0120	0.005
9	0093	0.072	116	0127	0.005
10	0005	0.058	117	0011	0.005
11	0124	0.050	118	0006	0.005
12	0089	0.046	119	0064	0.005
13	0085	0.045	120	0123	0.004
14	0094	0.041	121	0083	0.004
15	0091	0.029	122	0126	0.004
16	0101	0.028	123	0122	0.002
17	0105	0.027	124	0121	0.002
18	0047	0.026	125	0116	-0.001
19	0025	0.026	126	0099	-0.018
20	0102	0.025	127	0088	-0.071

make up a constant proportion of the various consumption items. The consumption of groups 0199, 1199, 0407, 1407 can therefore be said to give an approximate picture of the consumption of "capital". The largest total consumption has been recorded for commodity-group 122, sea transport. It must be noted here, however, that consumption of commodities and services in overseas voyages has been included in the remainder group,¹ for which reason the pure capital consumption is considerably smaller than that stated by the figure given—79.4 % of the final product; the capital consumption must however be of very great importance for this production. Other kinds of production demanding heavy capital investment are those of ores (6, 7), medicines (110), telephone and telegraph services (121), pulp, newsprint and wallboard (76–78, 80). Tobacco manufacture has the smallest capital content, only 6.3 % of the final product. In this case, the probably very considerable input of capital involved in the actual cultivation of tobacco is located abroad, this fact being reflected in the large import-consumption of this commodity-group. Production of animal agricultural products (1) also requires only a relatively small total input of capital; as to the direct input only, this production is at a loss (capital input is negative); this is connected with the fact that the labour of farmers themselves has been valued at labour-market wage costs, which in practice it is generally unlikely to yield.

¹ Cf. *Input-output-tabeller för Sverige år 1957*, Chapter IV, Section E, statement for group 122.

TABLE VI: 10. *Consumption of real-capital services, etc., per unit of final product.*
 (1)=commodity-group, (2)=direct consumption, (3)=total consumption, (4)=(3)/(2)

(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
0001	-0.116	0.087	. .	0066	0.283	0.413	1.46
0002	0.235	0.283	1.20	0067	0.209	0.250	1.20
0003	0.244	0.316	1.30	0068	0.204	0.266	1.30
0004	0.353	0.395	1.12	0069	0.175	0.258	1.47
0005	0.326	0.383	1.17	0070	0.373	0.475	1.27
0006	0.629	0.697	1.11	0071	0.125	0.385	3.08
0007	0.407	0.473	1.16	0072	0.174	0.297	1.71
0008	0.067	0.325	4.85	0073	0.100	0.347	3.47
0009	0.193	0.266	1.38	0074	0.153	0.314	2.05
0010	0.046	0.214	4.65	0075	0.190	0.383	2.02
0011	0.100	0.203	2.03	0076	0.198	0.406	2.05
0012	0.146	0.268	1.84	0077	0.190	0.403	2.12
0013	0.166	0.319	1.92	0078	0.205	0.448	2.19
0014	0.132	0.221	1.67	0079	0.080	0.344	4.30
0015	0.169	0.302	1.79	0080	0.109	0.291	2.67
0016	0.164	0.270	1.65	0081	0.149	0.338	2.27
0017	0.149	0.266	1.79	0082	0.195	0.316	1.62
0018	0.104	0.258	2.48	0083	0.238	0.373	1.57
0019	0.072	0.144	2.00	0084	0.066	0.246	3.73
0020	0.141	0.247	1.75	0085	0.185	0.323	1.75
0021	0.172	0.265	1.54	0086	0.188	0.420	2.23
0022	0.132	0.216	1.64	0087	0.167	0.236	1.41
0023	0.129	0.251	1.95	0088	0.016	0.121	7.56
0024	0.077	0.226	2.94	0089	0.023	0.105	4.57
0025	0.112	0.268	2.39	0090	0.083	0.278	3.35
0026	0.155	0.297	1.92	0091	0.178	0.351	1.97
0027	0.139	0.277	1.99	0092	0.052	0.183	3.52
0028	0.153	0.268	1.75	0093	0.066	0.153	2.32
0029	0.065	0.211	3.25	0094	0.180	0.373	2.07
0030	0.136	0.278	2.04	0095	0.115	0.192	1.67
0031	0.238	0.343	1.44	0096	0.056	0.063	1.13
0032	0.173	0.264	1.53	0097	0.055	0.167	3.04
0033	0.199	0.311	1.56	0098	0.063	0.166	2.63
0034	0.240	0.323	1.35	0099	0.010	0.103	10.30
0035	0.083	0.214	2.58	0100	0.286	0.403	1.41
0036	0.190	0.336	1.77	0101	0.123	0.238	1.93
0037	0.307	0.380	1.24	0102	0.061	0.159	2.61
0038	0.096	0.232	2.42	0103	0.234	0.306	1.31
0039	0.306	0.382	1.25	0104	0.095	0.144	1.52
0040	0.273	0.399	1.46	0105	0.089	0.185	2.08
0041	0.169	0.267	1.58	0106	0.124	0.232	1.87
0042	0.285	0.388	1.36	0107	0.115	0.199	1.73
0043	0.111	0.230	2.07	0108	0.218	0.282	1.29
0044	0.215	0.308	1.43	0109	0.168	0.313	1.86
0045	0.307	0.391	1.27	0110	0.471	0.545	1.16
0046	0.076	0.202	2.66	0111	0.194	0.314	1.62
0047	0.106	0.262	2.47	0112	0.038	0.155	4.08
0048	0.077	0.225	2.92	0113	0.191	0.303	1.59
0049	0.240	0.335	1.40	0114	0.237	0.361	1.52
0050	0.263	0.338	1.29	0115	0.075	0.228	3.04
0051	0.213	0.290	1.36	0116	0.246	0.368	1.50
0052	0.151	0.253	1.68	0117	0.150	0.217	1.45
0053	0.284	0.372	1.31	0118	0.077	0.224	2.91
0054	0.203	0.310	1.53	0119	0.038	0.208	5.47
0055	0.260	0.349	1.34	0120	0.037	0.096	2.59
0056	0.130	0.233	1.79	0121	0.467	0.497	1.06
0057	0.226	0.313	1.38	0122	0.772	0.794	1.03
0058	0.274	0.345	1.26	0123	0.196	0.242	1.23
0059	0.101	0.238	2.36	0124	0.333	0.356	1.07
0060	0.062	0.181	2.92	0125	0.184	0.235	1.28
0061	0.028	0.135	4.82	0126	0.291	0.340	1.17
0062	0.139	0.214	1.54	0127	0.343	0.396	1.15
0063	0.134	0.203	1.51				
0064	0.333	0.384	1.15				
0065	0.302	0.355	1.18				

TABLE VI:11. *Commodity-groups requiring especially high or especially low consumption of real-capital services, etc.*

Rank number (1)	Commodity-group (2)	Total consumption (3)	Rank number (1)	Commodity-group (2)	Total consumption (3)
1	0122	0.794	108	0046	0.202
2	0006	0.697	109	0107	0.199
3	0110	0.545	110	0195	0.192
4	0121	0.497	111	0105	0.185
5	0070	0.475	112	0092	0.183
6	0007	0.473	113	0060	0.181
7	0078	0.448	114	0097	0.167
8	0080	0.420	115	0098	0.166
9	0066	0.413	116	0102	0.159
10	0076	0.406	117	0112	0.155
11	0077	0.403	118	0093	0.153
12	0100	0.403	119	0019	0.144
13	0040	0.399	120	0104	0.144
14	0127	0.396	121	0061	0.135
15	0004	0.395	122	0088	0.121
16	0045	0.391	123	0089	0.105
17	0042	0.388	124	0099	0.103
18	0071	0.385	125	0120	0.096
19	0064	0.384	126	0001	0.087
20	0005	0.383	127	0096	0.063

By far the largest total consumption of fuel and electric power is in the production of cement (commodity-group 65) as shown by Table VI:13. Not less than 36.2 % of a unit of cement for final delivery consists of fuel and electric power. Table VI:12 shows that practically all this consumption takes place directly in the production of cement itself, namely 35.4 %. Market-gardening produce (3) also demands much fuel and electric power, as do also air transport (126), the production of iron, steel and ferro-alloys (8, 9), of bricks, tiles and other earthen-ware or stone products etc. (groups 67 etc.), of paper, pulp and wall-board (76–80), and of basic chemical products (109). For all these groups, the fuel and electricity content in the final product amounts to 8–10 % or more. Notable is the relation between total and direct fuel and electricity consumption in the production of plumbing and sanitary installations (59), the former being not less than 16.5 times larger than the latter. Generally, the figures in column 4 of Table VI:12—i.e., the figures showing the relation between total consumption and direct consumption per unit of final product—are considerably higher than the corresponding figures of Tables VI:4, VI:6, VI:8 and VI:10, which relate to imports, labour, indirect taxes etc., and real-capital services etc., respectively. If we take, for example, the number of figures in column 4 being 3.00 or more, this number is 37 for Table VI:12, and 8, 15, 10 and 16 for the other tables. For 80 of the commodity-groups the total fuel-content in a unit of final product is more than twice as large

TABLE VI:12. Consumption of electric power and fuels per unit of final product.

(1)=commodity-group, (2)=direct consumption, (3)=total consumption, (4)=(3)/(2)

(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
0001	0.021	0.049	2.33	0066	0.022	0.087	3.95
0002	0.023	0.037	1.61	0067	0.134	0.143	1.07
0003	0.148	0.162	1.09	0068	0.067	0.077	1.15
0004	0.004	0.010	2.50	0069	0.086	0.101	1.17
0005	0.056	0.063	1.13	0070	0.043	0.065	1.51
0006	0.032	0.038	1.19	0071	0.014	0.024	1.71
0007	0.047	0.062	1.32	0072	0.010	0.024	2.40
0008	0.047	0.149	3.17	0073	0.004	0.026	6.50
0009	0.132	0.150	1.14	0074	0.012	0.030	2.50
0010	0.047	0.068	1.45	0075	0.016	0.030	1.88
0011	0.017	0.040	2.35	0076	0.083	0.092	1.11
0012	0.009	0.037	4.11	0077	0.073	0.087	1.19
0013	0.026	0.085	3.27	0078	0.084	0.135	1.61
0014	0.025	0.048	1.92	0079	0.063	0.117	1.86
0015	0.018	0.054	3.00	0080	0.127	0.142	1.12
0016	0.017	0.049	2.88	0081	0.009	0.058	6.44
0017	0.013	0.044	3.38	0082	0.010	0.041	4.10
0018	0.033	0.077	2.33	0083	0.008	0.042	5.25
0019	0.049	0.065	1.33	0084	0.011	0.035	3.18
0020	0.017	0.037	2.18	0085	0.028	0.047	1.68
0021	0.017	0.033	1.94	0086	0.036	0.071	1.97
0022	0.013	0.028	2.15	0087	0.009	0.020	2.22
0023	0.008	0.024	3.00	0088	0.014	0.062	4.43
0024	0.029	0.079	2.72	0089	0.006	0.044	7.33
0025	0.008	0.037	4.63	0090	0.013	0.038	2.92
0026	0.012	0.032	2.67	0091	0.011	0.044	4.00
0027	0.008	0.039	4.88	0092	0.004	0.026	6.50
0028	0.023	0.048	2.09	0093	0.006	0.017	2.83
0029	0.035	0.094	2.69	0094	0.023	0.049	2.13
0030	0.013	0.047	3.62	0095	0.026	0.038	1.46
0031	0.012	0.046	3.83	0096	0.001	0.002	2.00
0032	0.019	0.039	2.05	0097	0.015	0.033	2.20
0033	0.008	0.040	5.00	0098	0.026	0.043	1.65
0034	0.015	0.035	2.33	0099	0.021	0.038	1.81
0035	0.016	0.047	2.94	0100	0.063	0.084	1.33
0036	0.010	0.035	3.50	0101	0.011	0.029	2.64
0037	0.019	0.038	2.00	0102	0.006	0.020	3.33
0038	0.017	0.057	3.35	0103	0.025	0.036	1.44
0039	0.007	0.020	2.86	0104	0.028	0.037	1.32
0040	0.016	0.035	2.19	0105	0.007	0.021	3.00
0041	0.011	0.031	2.82	0106	0.006	0.021	3.50
0042	0.008	0.036	4.50	0107	0.013	0.027	2.08
0043	0.011	0.040	3.64	0108	0.027	0.037	1.37
0044	0.012	0.031	2.58	0109	0.083	0.124	1.49
0045	0.004	0.016	4.00	0110	0.012	0.029	2.42
0046	0.012	0.046	3.83	0111	0.042	0.066	1.57
0047	0.039	0.090	2.31	0112	0.010	0.031	3.10
0048	0.008	0.043	5.38	0113	0.049	0.071	1.45
0049	0.021	0.038	1.81	0114	0.010	0.035	3.50
0050	0.007	0.016	2.29	0115	0.020	0.059	2.95
0051	0.020	0.039	1.95	0116	0.027	0.045	1.67
0052	0.006	0.020	3.33	0117	0.008	0.020	2.50
0053	0.015	0.031	2.07	0118	0.008	0.023	2.88
0054	0.010	0.032	3.20	0119	0.013	0.043	3.31
0055	0.009	0.030	3.33	0120	0.007	0.020	2.86
0056	0.029	0.049	1.69	0121	0.005	0.008	1.60
0057	0.014	0.034	2.43	0122	0.014	0.018	1.29
0058	0.008	0.019	2.38	0123	0.057	0.066	1.16
0059	0.002	0.033	16.50	0124	0.057	0.060	1.05
0060	0.015	0.030	2.00	0125	0.098	0.106	1.08
0061	0.021	0.037	1.76	0126	0.145	0.159	1.10
0062	0.014	0.030	2.14	0127	0.014	0.023	1.64
0063	0.007	0.018	2.57				
0064	0.083	0.090	1.08				
0065	0.354	0.362	1.02				

TABLE VI:13. *Commodity-groups requiring especially high or especially low consumption of electric power and fuels.*

Rank number (1)	Commodity- group (2)	Total consumption (3)	Rank number (1)	Commodity- group (2)	Total consumption (3)
1	0065	0.362	108	0023	0.024
2	0003	0.162	109	0118	0.023
3	0126	0.159	110	0127	0.023
4	0009	0.150	111	0106	0.021
5	0008	0.149	112	0105	0.021
6	0067	0.143	113	0039	0.020
7	0080	0.142	114	0102	0.020
8	0078	0.135	115	0117	0.020
9	0109	0.124	116	0052	0.020
10	0079	0.117	117	0087	0.020
11	0125	0.106	118	0120	0.020
12	0069	0.101	119	0058	0.019
13	0029	0.094	120	0063	0.018
14	0076	0.092	121	0122	0.018
15	0047	0.090	122	0093	0.017
16	0064	0.090	123	0045	0.016
17	0066	0.087	124	0050	0.016
18	0077	0.087	125	0004	0.010
19	0100	0.084	126	0121	0.008
20	0013	0.085	127	0096	0.002

as the direct content; the corresponding number for the other tables lie in the range 25-50. Indirect consumption of fuel and electric power is therefore even more important for most production than indirect consumption of the other types of primary commodities, and to consider direct consumption only can obviously be very misleading.

CHAPTER VII

Total Production and Consumption of Primary Commodities 1957

A. Problems

The central statements furnished by the model are formed by the equations which give the relationships between final product, total product and consumption of primary commodities. Four equations of particular importance were described in Chapter I. The equation

$$Y = (I - A)X, \quad (1)$$

where A thus stands for the matrix stated in Matrix Table A shows which final product (Y) is obtained if the total product (X) is given. The equation

$$X = (I - A)^{-1}Y \quad (2)$$

states which total product corresponds to a certain given final product. The equation

$$W = BX \quad (3)$$

where B stands for the matrix stated in Matrix Table B, shows the consumption of primary commodity-groups for a given total product, and the equation

$$W = B(I - A)^{-1}Y \quad (4)$$

the consumption of primary commodity-groups for a given final product.

In the model used, X , Y and A are of the order of 127, meaning that the equations (1) and (2) above represent systems of 127 equations containing 254 variables. Of these variables, the 127 which are elements in the vector X refer to total production, and the 127 which are elements in the vector Y refer to final product. The systems are such that they supply, for given values of 127 of these variables, no matter which, the values of the remaining 127. Through (3) and (4), W can then easily be connected to X and Y . In the foregoing chapter, different constant properties in the model were shown, i.e. properties expressed in the matrices A and B which are independent of special values of the vectors X and Y .

A given activity within the production system implies that the variables X , Y and W assume special values. A question which often arises in connection with such activity is what effect a given final product or a given change in the actual final production will have on the total production of the produced commodity-groups and on the total consumption of the primary commodity-groups. The answer to these questions is obtained by inserting suitable values for Y in the equations (2) and (4) by means of which the values for X and W corresponding to them are obtained. These values state respectively the total production of the produced commodity-groups, and the total consumption of the primary commodity-groups required and realised when the given final product is produced within the production system.¹ As the model can be assumed to represent the production system in a satisfactory way only during a certain limited period, such a use of the model must refer to some part of this period. We are primarily concerned here with a series of years around the year 1957. The extent of this period cannot be precisely given. It depends on the nature of the problems and given the problem any decision in this matter must be based on experience gained from the use of the model, on knowledge of technical developments etc. In other respects, also, apart from the time factor, there may be restrictions as to what final products can reasonably be used as a starting-point.

Regarding the use of the final product for different purposes, a series of estimates has been made of different types of final consumption, all referring to 1957. One of the purposes of making these estimates, as mentioned in Chapter III, was to obtain knowledge of consumption outside the production system, to use as a check in estimating the input coefficients. The figures thereby obtained for different types of final consumption are, however, interesting from other points of view too, firstly because they give information on direct consumption for different purposes, but also because they, together with the model, can give information on the importance which each type of final consumption in 1957 had for production of produced commodity-groups and consumption of primary commodity-groups during the same period.² Information of this kind is obtained by replacing the vector Y in equations (2) and (4) by vectors for final consumption of each special type in 1957. These vectors form a matrix Z . As a part of the investigation the model was applied for various calculations of this kind. This chapter contains an account of the results of these applications. As the year concerned is 1957, the results are not dependent on the assumption that the constants of the model (input coefficients) are stable over time, as the constants with the estimating method employed represent actual average

¹ Account must be taken here of price changes. Cf. note 1, page 86.

² Cf. Chapter I, pages 20 ff.

values for precisely that year. As the true input coefficients can be expected to undergo changes over time, it is clear that the applications referring to the year 1957 give more reliable results than the corresponding applications referring to other years.

The vectors for final consumption, making up the matrix Z , which in the way just shown have replaced Y in the above two equations (2) and (4), and which have thus been the starting point for the applications refers to final consumption of each of the various types, which have received the numbers 501–535 (also groups 0199, 0201–0203), and different aggregations of such types. Calculations have been made for 64 such vectors in all, 36 of them corresponding to types of final consumption and the rest being sums of those. For each such vector inserted into equation (2), we obtain a vector X stating the total production of each commodity-group which in 1957 corresponded to the type of final consumption concerned, and in a similar way we obtain by equation (4) a vector W which states the quantity of the primary commodity-groups consumed for the same purposes. Each such operation gives a special solution of the equations (2) and (4).¹

B. Total Production

The uses of the model made on the basis of the equation

$$X = (I - A)^{-1}Y,$$

corresponding to equation (2) in the foregoing section, resulted—as the section showed—in an X -matrix of the magnitude 127×64 . It is given as Matrix Table E, and the table heading shows which different types of final consumption are concerned. The figure in row i and column h in the table shows the total production of commodity-group i required for the type of final consumption shown in column h .^{2,3}

Table VII:1 is a summary of Matrix Table E. The table thus shows the total production of the commodity-groups for export (type 501 of final consumption), for private consumption (502), for defence (503–506), for civil state institutions (507–513), for local-government units (*kommuner*)

¹ Besides the calculations discussed here, the matrices BZ , $(I - A)^{-1}\hat{y}$ and $B\hat{y}$ have also been calculated; \hat{y} denotes the diagonal matrix of final products.

² Expression $\sum_j A_{ij}z_{jh}$ in Chapter I, page 22.

³ Here, as in similar contexts below, inventory reduction has been disregarded. If inventory reduction has taken place—which is the case for single commodity-groups, generally to an insignificant extent—the tables do not show the total production for different purposes but the total production and inventory reduction made for different purposes.

TABLE VII: 1. *Total production of commodity-groups for different types of final demand 1957 (mill. kronor).*

(1) = commodity-group, (2) = production, (3) = exports, (4) = private consumption, (5) = national defense, (6) = civil state activities, (7) = local-government, (8) = investments, (9) = other

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
0001	3820.7	385.1	3342.1	16.3	14.8	79.0	0.5	-17.1
0002	3111.4	383.5	2619.7	13.1	12.0	62.1	2.7	18.3
0003	357.5	8.4	342.6	0.6	0.5	3.6	0.0	1.8
0004	2847.7	1824.9	425.6	20.6	52.9	70.4	266.5	186.8
0005	158.9	29.4	125.3	1.1	0.5	2.9	0.0	-0.3
0006	1162.7	1045.6	17.6	11.9	6.5	7.6	56.6	16.9
0007	152.0	108.5	16.2	3.8	2.4	2.8	14.4	3.9
0008	5235.7	2556.9	408.8	276.6	150.8	175.8	1316.8	350.0
0009	178.3	85.6	9.1	5.3	3.1	3.5	27.2	44.5
0010	277.1	159.9	32.7	13.3	8.4	8.2	50.7	3.9
0011	531.8	253.3	78.5	30.1	19.4	21.4	111.8	17.3
0012	375.3	90.9	98.5	11.7	14.9	23.7	130.5	5.1
0013	681.6	288.7	109.0	17.3	20.3	21.5	185.6	39.2
0014	293.0	161.9	58.7	11.5	6.4	9.2	42.2	3.1
0015	191.8	56.2	30.0	11.0	13.0	13.5	65.5	2.6
0016	106.2	34.8	4.4	1.8	2.6	8.8	52.9	0.9
0017	79.8	1.9	5.2	2.0	1.9	9.8	59.0	—
0018	636.6	128.9	166.4	20.7	31.1	31.9	244.7	12.9
0019	170.2	57.2	19.2	12.7	5.5	6.7	65.1	3.8
0020	83.9	5.5	33.0	0.5	3.1	8.3	33.3	0.2
0021	44.4	30.5	2.7	0.0	—	0.1	11.1	—
0022	271.4	75.6	107.4	26.2	3.0	5.8	30.9	22.5
0023	100.8	4.9	87.0	0.2	0.0	0.1	0.3	8.3
0024	89.1	22.0	19.6	3.7	3.3	4.1	26.9	9.5
0025	1156.6	342.6	447.1	33.8	8.3	11.6	336.7	-23.5
0026	144.9	10.2	123.1	2.0	0.4	0.6	8.2	0.4
0027	91.5	23.3	—	1.4	3.6	1.7	61.5	—
0028	229.0	41.0	27.6	2.2	109.3	0.9	46.6	1.4
0029	745.4	228.8	74.8	45.8	26.5	36.5	320.3	12.7
0030	441.1	147.0	65.1	159.8	4.9	2.8	45.6	15.9
0031	106.8	35.0	0.6	10.1	0.1	0.1	60.6	0.3
0032	162.3	93.1	0.4	5.9	1.8	0.4	60.5	0.2
0033	213.6	64.0	0.6	0.4	1.9	0.2	145.7	0.8
0034	293.1	197.2	0.2	0.2	2.8	0.5	99.7	-7.5
0035	124.2	35.2	0.3	0.2	0.2	0.1	77.5	10.7
0036	145.5	64.0	—	—	0.1	—	81.4	—
0037	280.7	199.4	33.2	9.1	1.7	2.5	27.3	7.5
0038	269.1	37.9	5.3	9.8	8.3	9.8	196.3	1.7
0039	214.7	126.8	0.4	0.7	2.5	2.9	81.4	—
0040	154.4	43.5	31.7	0.4	0.8	2.3	75.6	0.1
0041	205.4	108.4	10.6	2.7	2.2	5.9	74.5	1.1
0042	89.1	29.4	1.8	4.7	0.3	2.3	49.6	1.0
0043	148.0	34.4	2.0	2.2	2.0	4.5	102.7	0.8
0044	603.9	81.4	2.8	468.1	0.3	0.1	1.3	49.9
0045	130.7	26.6	59.0	0.2	0.9	2.1	41.9	—
0046	225.3	6.9	5.3	1.7	3.6	17.6	190.0	0.2
0047	181.2	157.3	4.0	6.9	0.6	2.9	16.6	-7.1
0048	1569.0	1028.4	25.8	85.8	7.4	4.8	326.0	90.8
0049	84.9	18.1	17.8	2.3	1.0	0.2	45.4	0.1
0050	347.5	151.9	15.9	16.8	106.1	4.3	29.7	22.8
0051	521.4	137.1	25.1	32.6	8.6	6.3	309.0	2.7
0052	177.5	28.9	85.5	54.8	2.1	0.5	4.6	1.1
0053	53.7	26.3	20.3	0.3	0.9	3.4	2.5	—
0054	102.2	17.0	44.8	0.9	0.5	2.2	36.6	0.2
0055	185.5	50.3	18.2	11.5	10.0	11.2	73.9	10.4
0056	46.4	5.2	25.6	1.2	0.6	1.9	9.9	2.0
0057	237.9	40.5	24.9	11.0	31.3	21.7	104.9	3.6
0058	208.8	65.7	56.9	40.3	2.3	6.9	35.1	1.6
0059	991.6	27.4	59.0	4.9	33.5	123.9	740.3	2.6
0060	843.9	71.9	578.2	8.8	20.7	38.8	105.9	19.6

Table VII:1 (continued)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
0061	264.3	66.5	155.7	5.1	12.1	4.9	15.6	4.4
0062	487.5	98.1	115.1	75.9	15.6	19.9	93.9	69.0
0063	100.0	22.0	33.2	5.2	3.7	4.9	23.2	7.8
0064	279.6	51.7	71.3	4.7	21.8	37.6	84.5	8.0
0065	171.7	13.7	5.9	3.5	20.1	24.4	104.0	0.1
0066	353.3	1.8	12.1	7.8	39.5	57.7	234.3	0.1
0067	130.8	18.0	5.8	3.5	11.8	14.6	75.7	1.4
0068	122.1	22.9	55.1	1.2	2.7	6.5	30.4	3.3
0069	167.4	31.1	91.5	2.3	4.0	9.1	24.4	5.0
0070	106.0	22.4	10.6	3.4	7.3	8.9	47.8	5.8
0071	2045.9	1357.0	168.7	19.3	64.3	76.5	337.7	22.4
0072	367.4	21.9	268.0	6.4	4.9	34.6	30.9	0.7
0073	176.3	2.3	5.4	7.4	20.2	19.6	121.4	0.0
0074	552.7	35.2	83.4	11.8	51.1	68.5	301.1	1.7
0075	237.5	28.8	71.9	4.0	15.3	20.5	95.0	2.0
0076	348.8	277.3	50.3	1.3	1.5	2.5	7.5	8.3
0077	2242.5	1907.3	158.2	8.4	7.5	12.8	29.1	118.8
0078	307.0	195.5	87.5	1.6	1.6	2.7	9.4	8.7
0079	1294.9	813.3	288.6	12.0	14.9	25.1	54.6	86.4
0080	216.9	135.0	6.5	2.1	8.7	10.7	53.7	0.2
0081	412.5	71.5	231.8	10.1	8.0	14.5	53.8	22.8
0082	794.3	50.2	407.5	16.2	33.4	66.8	50.4	169.8
0083	517.2	42.3	390.5	7.1	6.9	12.3	42.0	16.1
0084	438.7	6.6	417.9	2.2	1.9	11.1	0.0	-1.0
0085	791.5	6.4	758.7	1.4	3.6	20.9	0.0	0.5
0086	503.2	7.9	440.6	2.3	1.9	10.6	0.1	39.8
0087	439.9	6.7	428.8	2.6	0.3	1.6	0.0	-0.1
0088	1590.6	209.6	1325.9	9.9	8.3	47.7	0.0	-10.8
0089	2367.3	93.4	2213.3	9.0	7.8	43.9	0.1	-0.2
0090	129.7	11.8	116.0	0.8	0.5	2.9	0.0	-2.3
0091	210.1	3.3	184.9	2.5	1.7	9.6	0.0	8.1
0092	308.9	1.9	295.9	1.6	1.4	8.1	0.0	-0.0
0093	850.1	23.9	803.6	2.8	2.3	11.3	0.5	5.7
0094	154.5	4.4	126.0	0.3	0.3	0.7	1.7	21.1
0095	420.9	4.2	416.3	0.0	0.0	0.3	0.0	0.1
0096	781.9	0.5	788.0	1.1	0.0	0.0	0.0	-7.7
0097	472.0	60.7	354.9	14.7	2.2	5.5	19.6	14.4
0098	580.1	48.5	476.3	10.1	2.4	5.0	14.6	23.2
0099	105.0	15.7	60.5	2.7	1.7	4.4	9.4	10.6
0100	205.7	60.6	122.1	2.1	1.3	3.5	11.9	4.2
0101	347.5	6.8	324.3	2.4	0.1	0.5	0.5	12.9
0102	1361.4	19.2	1274.6	12.4	6.3	6.6	0.7	41.6
0103	655.4	38.0	512.9	9.1	2.1	10.8	15.7	66.8
0104	153.9	23.7	130.0	1.0	0.0	0.1	0.2	-1.1
0105	198.2	7.4	197.8	0.7	0.0	0.1	0.2	-8.0
0106	382.0	0.7	376.4	2.4	—	—	—	2.5
0107	139.6	13.8	116.7	2.8	0.4	0.7	3.1	2.3
0108	466.1	72.6	197.9	11.3	3.8	6.4	171.3	2.8
0109	738.6	309.2	281.6	18.3	11.1	24.9	55.8	37.7
0110	167.0	26.1	97.4	2.8	6.8	32.4	0.4	1.1
0111	220.5	80.3	18.0	85.1	4.2	5.2	20.0	7.7
0112	550.3	88.1	408.7	4.7	4.2	13.8	16.9	13.9
0113	252.4	48.8	105.1	5.1	7.6	13.0	67.8	5.0
0114	259.2	14.6	201.8	1.3	2.1	8.9	3.8	26.7
0115	311.7	56.4	186.4	5.6	4.8	6.3	28.1	24.1
0116	547.3	116.5	186.3	14.0	19.1	40.5	121.9	49.0
0117	450.2	35.6	27.6	8.1	25.8	46.5	303.3	3.3
0118	599.1	4.1	30.7	2.4	21.8	72.7	467.0	0.4
0119	7488.3	—	264.9	176.0	806.6	980.2	5260.6	—
0120	440.9	27.4	162.7	3.6	56.3	14.2	24.8	151.9

Table VII:1 (continued)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
0121	882.9	73.9	544.9	15.1	25.8	30.0	51.6	141.6
0122	2524.9	2406.9	93.8	3.7	3.2	3.6	11.2	2.5
0123	1419.8	311.5	872.0	30.3	21.8	29.2	123.0	32.0
0124	1384.0	330.3	640.9	14.0	51.6	114.3	197.5	35.4
0125	624.8	3.6	592.6	0.7	0.8	21.6	4.9	0.6
0126	246.1	146.9	80.6	3.0	2.3	1.7	7.4	4.2
0127	11456.8	1254.7	7482.1	228.9	205.0	352.8	1716.9	216.4
Total	89000.0	22971.2	37566.2	2502.7	2492.6	3494.9	17473.4	2499.9

TABLE VII:2. Total production of commodity-groups for different types of final demand 1957 (per cent of total production).

(1) = commodity-group, (2) = total, (3) = exports, (4) = private consumption, (5) = national defense, (6) = civil state activities, (7) = local-government, (8) = investments, (9) = other

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
0001	100.0	10.1	87.6	0.4	0.3	2.0	0.0	-0.4
0002	100.0	12.3	84.2	0.4	0.4	2.0	0.1	0.6
0003	100.0	2.3	95.9	0.2	0.1	1.0	0.0	0.5
0004	100.0	64.0	14.9	0.7	1.9	2.5	9.4	6.6
0005	100.0	18.5	78.9	0.7	0.3	1.8	0.0	-0.2
0006	100.0	89.8	1.5	1.0	0.6	0.7	4.9	1.5
0007	100.0	71.3	10.7	2.5	1.6	1.8	9.5	2.6
0008	100.0	48.7	7.8	5.3	2.9	3.4	25.2	6.7
0009	100.0	47.9	5.1	3.0	1.7	2.0	15.3	25.0
0010	100.0	57.7	11.8	4.8	3.0	3.0	18.3	1.4
0011	100.0	47.6	14.8	5.7	3.6	4.0	21.0	3.3
0012	100.0	24.2	26.2	3.1	4.0	6.3	34.8	1.4
0013	100.0	42.3	16.0	2.5	3.0	3.2	27.2	5.8
0014	100.0	55.3	20.0	3.9	2.2	3.1	14.4	1.1
0015	100.0	29.3	15.6	5.7	6.8	7.0	34.2	1.4
0016	100.0	32.8	4.1	1.7	2.4	8.3	49.9	0.8
0017	100.0	2.4	6.5	2.5	2.4	12.3	73.9	—
0018	100.0	20.2	26.1	3.3	4.9	5.0	38.5	2.0
0019	100.0	33.6	11.3	7.5	3.2	3.9	38.3	2.2
0020	100.0	6.6	39.3	0.6	3.7	9.9	39.7	0.2
0021	100.0	68.7	6.1	0.0	—	0.2	25.0	—
0022	100.0	27.9	39.5	9.7	1.1	2.1	11.4	8.3
0023	100.0	4.9	86.3	0.2	0.0	0.1	0.3	8.2
0024	100.0	24.7	22.0	4.2	3.7	4.6	30.1	10.7
0025	100.0	29.6	38.7	2.9	0.7	1.0	29.1	-2.0
0026	100.0	7.0	84.9	1.4	0.3	0.4	5.7	0.3
0027	100.0	25.5	—	1.5	3.9	1.9	67.2	—
0028	100.0	17.9	12.1	1.0	47.7	0.4	20.3	0.6
0029	100.0	30.7	10.0	6.1	3.6	4.9	43.0	1.7
0030	100.0	33.3	14.8	36.3	1.1	0.6	10.3	3.6
0031	100.0	32.8	0.6	9.5	0.1	0.1	56.6	0.3
0032	100.0	57.5	0.2	3.6	1.1	0.2	37.3	0.1
0033	100.0	30.0	0.3	0.2	0.9	0.1	68.1	0.4
0034	100.0	67.2	0.1	0.1	1.0	0.2	34.0	-2.6
0035	100.0	28.3	0.2	0.2	0.2	0.1	62.4	8.6
0036	100.0	44.0	—	—	0.1	—	55.9	—
0037	100.0	71.1	11.8	3.2	0.6	0.9	9.7	2.7
0038	100.0	14.1	2.0	3.6	3.1	3.6	73.0	0.6
0039	100.0	59.0	0.2	0.3	1.2	1.4	37.9	—
0040	100.0	28.2	20.5	0.3	0.5	1.5	48.9	0.1
0041	100.0	52.7	5.2	1.3	1.1	2.9	36.3	0.5
0042	100.0	33.0	2.0	5.3	0.3	2.6	55.7	1.1
0043	100.0	23.1	1.3	1.5	1.3	3.0	69.3	0.5
0044	100.0	13.5	0.5	77.5	0.0	0.0	0.2	8.3
0045	100.0	20.4	45.0	0.2	0.7	1.6	32.1	—

Table VII:2 (continued)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
0046	100.0	3.0	2.4	0.8	1.6	7.8	84.3	0.1
0047	100.0	86.8	2.2	3.8	0.3	1.6	9.2	-3.9
0048	100.0	65.5	1.6	5.5	0.5	0.3	20.8	5.8
0049	100.0	21.3	21.0	2.7	1.2	0.2	53.5	0.1
0050	100.0	43.8	4.6	4.8	30.5	1.2	8.5	6.1
0051	100.0	26.3	4.8	6.3	1.6	1.2	59.3	0.5
0052	100.0	16.3	48.1	30.9	1.2	0.3	2.6	0.6
0053	100.0	49.0	37.7	0.6	1.7	6.3	4.7	—
0054	100.0	16.6	43.8	0.9	0.5	2.2	35.8	0.2
0055	100.0	27.1	9.8	6.2	5.4	6.0	39.9	5.6
0056	100.0	11.2	55.2	2.6	1.3	4.1	21.3	4.3
0057	100.0	17.0	10.5	4.6	13.2	9.1	44.1	1.5
0058	100.0	31.4	27.3	19.3	1.1	3.3	16.5	0.8
0059	100.0	2.8	6.0	0.5	3.4	12.5	74.5	0.3
0060	100.0	8.5	68.6	1.0	2.5	4.6	12.5	2.3
0061	100.0	25.2	58.8	1.9	4.6	1.9	5.9	1.7
0062	100.0	20.1	23.5	15.6	3.2	4.1	19.3	14.2
0063	100.0	22.0	33.2	5.2	3.7	4.9	23.2	7.8
0064	100.0	18.5	25.5	1.7	7.8	13.4	30.2	2.9
0065	100.0	8.0	3.4	2.0	11.7	14.2	60.6	0.1
0066	100.0	0.5	3.4	2.2	11.2	16.3	66.4	0.0
0067	100.0	13.8	4.4	2.7	9.0	11.2	57.8	1.0
0068	100.0	18.8	45.1	1.0	2.2	5.3	24.9	2.7
0069	100.0	18.6	54.6	1.4	2.4	5.4	14.6	3.0
0070	100.0	21.1	10.0	3.2	6.9	8.4	44.9	5.5
0071	100.0	66.5	8.2	0.9	3.1	3.7	16.5	1.1
0072	100.0	6.0	73.0	1.7	1.3	9.4	8.4	0.2
0073	100.0	1.3	3.1	4.2	11.5	11.1	68.8	0.0
0074	100.0	6.4	15.1	2.1	9.2	12.4	54.5	0.3
0075	100.0	12.1	30.3	1.7	6.4	8.6	40.1	0.8
0076	100.0	79.5	14.4	0.4	0.4	0.7	2.2	2.4
0077	100.0	85.0	7.1	0.4	0.3	0.6	1.3	5.3
0078	100.0	63.7	28.5	0.5	0.5	0.9	3.1	2.8
0079	100.0	62.8	22.3	0.9	1.2	1.9	4.2	6.7
0080	100.0	62.2	3.0	1.0	4.0	4.9	24.8	0.1
0081	100.0	17.3	56.3	2.4	1.9	3.5	13.1	5.5
0082	100.0	6.3	51.4	2.0	4.2	8.4	6.3	21.4
0083	100.0	8.2	75.5	1.4	1.3	2.4	8.1	3.1
0084	100.0	1.5	95.3	0.5	0.4	2.5	0.0	-0.2
0085	100.0	0.8	95.8	0.2	0.5	2.6	0.0	0.1
0086	100.0	1.6	87.5	0.5	0.4	2.1	0.0	7.9
0087	100.0	1.5	97.4	0.6	0.1	0.4	0.0	-0.0
0088	100.0	13.2	83.4	0.6	0.5	3.0	0.0	-0.7
0089	100.0	3.9	93.5	0.4	0.3	1.9	0.0	-0.0
0090	100.0	9.1	89.4	0.6	0.4	2.2	0.0	-1.7
0091	100.0	1.6	88.0	1.2	0.8	4.6	0.0	3.8
0092	100.0	0.6	95.8	0.5	0.5	2.6	0.0	-0.0
0093	100.0	2.8	94.5	0.3	0.3	1.3	0.1	0.7
0094	100.0	2.8	81.5	0.2	0.2	0.5	1.1	13.7
0095	100.0	1.0	98.9	0.0	0.0	0.1	0.0	0.0
0096	100.0	0.1	100.8	0.1	0.0	0.0	0.0	-1.0
0097	100.0	12.9	75.1	3.1	0.5	1.2	4.2	3.0
0098	100.0	8.4	82.1	1.7	0.4	0.9	2.5	4.0
0099	100.0	14.9	57.6	2.6	1.6	4.2	9.0	10.1
0100	100.0	29.5	59.4	1.0	0.6	1.7	5.8	2.0
0101	100.0	2.0	93.4	0.7	0.0	0.1	0.1	3.7
0102	100.0	1.4	93.6	0.9	0.5	0.5	0.1	3.0
0103	100.0	5.8	78.3	1.4	0.3	1.6	2.4	10.2
0104	100.0	15.4	84.5	0.6	0.0	0.1	0.1	-0.7
0105	100.0	3.7	99.7	0.4	0.0	0.1	0.1	-4.0

Table VII:2 (continued)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
0106	100.0	0.2	98.5	0.6	—	—	—	0.7
0107	100.0	9.9	83.5	2.0	0.3	0.5	2.2	1.6
0108	100.0	15.6	42.5	2.4	0.8	1.4	36.7	0.6
0109	100.0	41.9	38.1	2.5	1.5	3.4	7.5	5.1
0110	100.0	15.6	58.3	1.7	4.1	19.4	0.2	0.7
0111	100.0	36.4	8.2	38.6	1.9	2.3	9.1	3.5
0112	100.0	16.0	74.3	0.9	0.8	2.5	3.0	2.5
0113	100.0	19.3	41.6	2.0	3.0	5.2	26.9	2.0
0114	100.0	5.6	77.9	0.5	0.8	3.4	1.5	10.3
0115	100.0	18.1	59.9	1.8	1.5	2.0	9.0	7.7
0116	100.0	21.3	34.0	2.6	3.5	7.4	22.3	8.9
0117	100.0	7.9	6.1	1.8	5.7	10.4	67.4	0.7
0118	100.0	0.7	5.1	0.4	3.6	12.1	78.0	0.1
0119	100.0	—	3.5	2.3	10.8	13.1	70.3	—
0120	100.0	6.2	36.9	0.8	12.8	3.2	5.6	34.5
0121	100.0	8.4	61.7	1.7	2.9	3.4	5.8	16.1
0122	100.0	95.3	3.7	0.2	0.1	0.2	0.4	0.1
0123	100.0	21.9	61.4	2.1	1.5	2.1	8.7	2.3
0124	100.0	23.9	46.3	1.0	3.7	8.3	14.3	2.5
0125	100.0	0.6	94.8	0.1	0.1	3.5	0.8	0.1
0126	100.0	59.7	32.8	1.2	0.9	0.7	3.0	1.7
0127	100.0	10.9	65.3	2.0	1.8	3.1	15.0	1.9
Total	100.0	25.8	42.2	2.8	2.8	3.9	19.7	2.8

(514–532), for investments (533–534) and for other purposes (inventory changes (535) and consumption in the production of commodity-groups 199, 201–203). Table VII:2 shows how the total production is distributed by percentages among the various purposes.

The figures in Matrix Table E can be compared with those in the input-output table¹ and the figures in the Tables VII:1 and VII:2 with the figures in the Tables V:1 and V:3. The figures shown in the input-output table and in Tables V:1 and V:3 refer to direct consumption of the various commodity-groups for different purposes and can thus be said to refer to direct deliveries from the producers. An important part of the deliveries is made direct to the production system itself, i.e. to the producers. The figures in Tables E, VII:1 and VII:2 state the distribution of production among types of final consumption; those deliveries which, viewed directly, went to the production system, have been referred to the final products for whose manufacture they were consumed, and in which they may therefore be said to be included. Tables like the former are often said to refer to “direct markets” for the producers, tables like the latter to “final markets”.

There are often very considerable differences between direct and final markets. Directly viewed, 4 % of the production of timber (commodity-group 4), to mention a striking example, was delivered for export and 6.9 %

¹ Cf. Chapter V and *Input-output-tabeller för Sverige år 1957*.

for private consumption; the greater part, or 84.5 %, went to the production system. If we look at the final distribution, not less than 64 % of the production was exported and 14.9 % delivered to private consumers. In the category of repairs to machines etc. (61–63) there were, for obvious reasons, no exports; nevertheless 20–25 % of the production was finally exported. Basic chemical products (109) were not objects of direct private consumption; as much as 38.1 % of the production, however, finally found its way to private consumers.

Of the production of all commodity-groups, 25.2 % went direct to private consumers; directly and indirectly 42.2 % of production was included in private consumption. The corresponding figures for export were 15.4 % and 25.8 % respectively, and for investments 11.0 % and 19.7 % respectively.

C. Consumption of Primary Commodities

As shown in Section A, the equation

$$W = B(I - A)^{-1}Z$$

which states the consumption of primary commodity-groups for a given final product, is one of the two equations which are of special interest for applications of the model. The applications for 1957 which were made on the basis of this equation resulted, as mentioned in Section A, in a W -matrix with 64 column vectors.

The number of row vectors is in principle equal to the number of primary commodity-groups. As mentioned in Chapter VI, the primary commodity-groups were assembled throughout into 32 collections. In addition, different totals were made of these collections and a parallel statement in quantity-figures was also made for certain commodities, as a result of which the matrix $B(I - A)^{-1}$ and therefore also the W -matrix obtained extra rows. The number of such extra rows is 25; as all elements in the matrix $B(I - A)^{-1}$ for two of the 32 original collections of primary commodity-groups are equal to 0, the two rows concerned were discarded and calculations were therefore made for 56 collections of primary commodities. The W -matrix obtained is thus of the magnitude 56×64 . It is given in Matrix Table F, and the table shows which primary commodity-groups or single primary commodities the various rows refer to. The figure in row k and column h in the table shows the total consumption of a primary commodity-group or aggregation of primary commodity-groups (or a primary commodity

TABLE VII:3. *Consumption of primary commodity-groups within the production system for different types of final demand 1957 (mill. kronor).*

(1) = commodity-group, (2) = exports, (3) = private consumption, (4) = national defense, (5) = civil state activities, (6) = local-government, (7) = investments, (8) = other, (9) = total

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
0198	111.2	23.7	13.0	8.5	8.1	64.5	10.2	239.2
1001-1005	32.1	133.2	1.0	1.3	3.9	4.5	2.2	178.2
1006-1007	26.8	7.2	1.8	1.1	1.3	6.7	1.3	46.2
1008-1011, 1198	366.3	137.8	74.8	39.6	41.1	331.5	36.6	1027.7
1012-1063	360.0	312.4	111.7	40.2	52.5	434.9	30.5	1342.2
1064-1070	20.0	30.8	4.9	12.2	16.4	88.5	2.5	175.3
1071-1075	10.4	14.1	1.9	6.1	7.7	38.8	0.8	79.8
1076-1083	12.0	35.9	1.6	1.8	3.0	9.2	4.6	68.1
1084-1096	18.4	216.4	1.3	0.7	3.3	0.6	2.0	242.7
1097-1103	42.5	424.1	7.4	3.3	6.2	21.9	19.8	525.2
1104-1108	9.7	67.3	1.8	1.0	1.5	9.3	1.1	91.7
1109-1116	146.5	364.6	16.3	18.2	30.8	117.4	20.2	714.0
0201	283.0	355.0	22.9	24.1	33.8	161.6	28.6	909.0
0202	19.7	8.2	2.1	1.3	1.5	10.3	2.5	45.6
0203	64.1	79.5	3.7	4.9	7.7	29.9	5.2	195.0
1201	1.7	2.1	0.1	0.1	0.2	1.0	0.3	5.5
1202	85.3	35.5	9.2	5.5	6.7	44.4	10.8	197.4
1203	245.2	304.1	14.1	18.9	29.5	114.2	19.7	745.7
1301	34.4	32.5	3.1	2.8	3.8	15.6	3.3	95.5
1302	26.6	543.3	2.8	2.3	8.6	6.5	4.7	594.8
1303	13.4	36.5	2.1	0.7	1.2	31.6	0.5	86.0
1304	18.4	136.7	3.9	1.1	2.7	7.0	8.8	178.6
1305	25.1	3.0	1.6	1.0	1.1	8.6	12.0	52.4
1306	33.2	8.0	4.2	3.9	3.4	23.0	4.2	79.9
1307	37.4	60.6	2.5	2.7	5.2	15.7	4.0	128.1
1309	50.0	114.6	4.1	3.7	7.5	26.5	6.7	213.1
0401-0403	5570.4	11495.4	729.9	856.2	1150.7	5663.8	799.8	26266.2
0404	-51.1	-311.4	-2.7	-2.4	-12.1	-3.5	0.4	-382.8
0405	121.5	1407.0	10.8	12.7	28.1	69.0	5.4	1654.5
0406	56.5	203.0	12.9	6.1	9.9	55.3	7.7	351.4
0407, 1407, 0199, 1199	5901.3	6114.1	422.2	355.9	509.9	2404.9	492.8	16201.1
Total	13692.0	22395.2	1487.0	1435.5	1975.2	9813.2	1549.2	52347.3

measured in quantity)—which is shown in row k —for the type of final consumption shown in column h .¹

Table VII:3 is a summary of that part of Table F which refers to the 30 original collections of primary commodities stated, and has been edited in the same way as Table VII:1. It thus shows total consumption of these collections of primary commodities for different purposes. Table VII:4 shows how the total consumption of these is distributed in percentages among the various purposes. The three Tables F, VII:3 and VII:4 state final markets for primary commodities and the figures in them can be compared with the figures in corresponding tables for direct markets, the input-output table and Tables V:3 and V:4. In the same way as above, several very important differences can now be observed between the two markets. We thus find that in commodity-groups like 305 and 306, covering

¹ Expression $\sum_j B_{kj} z_{jh}$ in Chapter I, p. 22.

TABLE VII:4. *Consumption of primary commodity-groups within the production system for different types of final demand 1957 (per cent of total consumption). Alternative 1.*

1) = commodity-group, (2) = total, (3) = exports, (4) = private consumption, (5) = national defense, (6) = civil state activities, (7) = local-government, (8) = investments, (9) = other

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
0198		100.0	46.5	9.9	5.4	3.5	3.4	27.0	4.3
1001-1005		100.0	18.0	74.8	0.6	0.7	2.2	2.5	1.2
1006-1007		100.0	58.0	15.6	3.9	2.4	2.8	14.5	2.8
1008-1011,									
1198		100.0	35.6	13.4	7.3	3.9	4.0	32.3	3.5
1012-1063		100.0	26.8	23.3	8.3	3.0	3.9	32.4	2.3
1064-1070		100.0	11.4	17.6	2.8	7.0	9.3	50.5	1.4
1071-1075		100.0	13.0	17.7	2.4	7.6	9.7	48.6	1.0
1076-1083		100.0	17.6	52.8	2.3	2.6	4.4	13.5	6.8
1084-1096		100.0	7.6	89.2	0.5	0.3	1.4	0.2	0.8
1097-1103		100.0	8.1	80.7	1.4	0.6	1.2	4.2	3.8
1104-1108		100.0	10.6	73.4	2.0	1.1	1.6	10.1	1.2
1109-1116		100.0	20.5	51.1	2.3	2.5	4.3	16.5	2.8
0201		100.0	31.1	39.1	2.5	2.7	3.7	17.8	3.1
0202		100.0	43.2	18.0	4.6	2.8	3.3	22.6	5.5
0203		100.0	32.9	40.8	1.9	2.5	3.9	15.3	2.7
1201		100.0	30.9	38.2	1.8	1.8	3.6	18.2	5.5
1202		100.0	43.2	18.0	4.7	2.8	3.4	22.5	5.4
1203		100.0	32.9	40.8	1.9	2.5	4.0	15.3	2.6
1301		100.0	36.0	34.0	3.2	2.9	4.0	16.4	3.5
1302		100.0	4.5	91.3	0.5	0.4	1.4	1.1	0.8
1303		100.0	15.6	42.5	2.4	0.8	1.4	36.7	0.6
1304		100.0	10.3	76.6	2.2	0.6	1.5	3.9	4.9
1305		100.0	47.9	5.7	3.1	1.9	2.1	16.4	22.9
1306		100.0	41.5	10.0	5.3	4.0	4.3	28.8	5.2
1307		100.0	29.1	47.3	2.0	3.2	4.1	11.2	3.1
1309		100.0	23.5	53.8	1.9	1.7	3.5	12.4	3.0
0401-0403		100.0	21.2	43.7	2.8	3.3	4.4	21.6	3.0
0404		100.0	13.3	81.3	0.7	0.6	3.1	0.9	0.1
0405		100.0	7.3	85.0	0.7	0.8	1.7	4.2	0.3
0406		100.0	16.1	57.8	3.7	1.7	2.8	15.7	2.2
0407-1407,									
0199, 1199		100.0	36.4	37.7	2.6	2.2	3.1	14.9	3.1
Total		100.0	26.2	42.8	2.8	2.7	3.8	18.7	3.0

foreign ores and metals which are not found or manufactured in Sweden but are imported only, obviously (as re-export has not been recorded), no direct export has occurred. On a final view however 47.9% and 41.5% respectively of import of these two commodity-groups were included in exports. Of electric power (commodity-group 201) the portion of production exported direct was insignificant; but as much as 39.1% was indirectly included in exports. The difference between direct and final markets as far as exports were concerned is generally speaking very important for the great majority of the primary commodity-groups. A special observation of some interest is that not less than 16.1% of incoming customs duties (406) referred to exports despite the fact that no customs duties, of course, are directly charged on export deliveries. In the sphere of private consumption we find that no direct deliveries of commodities such as natural rubber

TABLE VII:5. *Consumption of primary commodity-groups within the production system for different types of final demand 1957 (per cent of total consumption). Alternative 2.*

(1) = commodity-group, (2) = exports, (3) = private consumption, (4) = national defense, (5) = civil state activities, (6) = local-government, (7) = investments, (8) = other, (9) = total

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
0198	0.8	0.1	0.9	0.6	0.4	0.7	0.7	0.5
1001-1005	0.2	0.6	0.1	0.1	0.2	0.0	0.1	0.3
1006-1009	0.2	0.0	0.1	0.1	0.1	0.1	0.1	0.1
1008-1011, 1198	2.7	0.6	5.0	2.8	2.1	3.4	2.4	2.0
1012-1063	2.6	1.4	7.5	2.8	2.6	4.4	2.0	2.6
1064-1070	0.1	0.1	0.3	0.8	0.8	0.9	0.2	0.3
1071-1075	0.1	0.1	0.1	0.4	0.4	0.4	0.1	0.2
1076-1083	0.1	0.2	0.1	0.1	0.2	0.1	0.3	0.1
1084-1096	0.1	1.0	0.1	0.0	0.2	0.0	0.1	0.5
1097-1103	0.3	1.9	0.5	0.2	0.3	0.2	1.3	1.0
1104-1108	0.1	0.3	0.1	0.1	0.1	0.1	0.1	0.2
1109-1116	1.1	1.6	1.1	1.3	1.6	1.2	1.3	1.4
0201	2.1	1.6	1.5	1.7	1.7	1.6	1.8	1.7
0202	0.1	0.0	0.1	0.1	0.1	0.1	0.2	0.1
0203	0.5	0.4	0.2	0.3	0.4	0.3	0.3	0.4
1201	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1202	0.6	0.2	0.6	0.4	0.3	0.5	0.7	0.4
1203	1.8	1.4	0.9	1.3	1.5	1.2	1.3	1.4
1301	0.3	0.1	0.2	0.2	0.2	0.2	0.2	0.2
1302	0.2	2.4	0.2	0.2	0.4	0.1	0.3	1.1
1303	0.1	0.2	0.1	0.0	0.1	0.3	0.0	0.2
1304	0.1	0.6	0.3	0.1	0.1	0.1	0.6	0.3
1305	0.2	0.0	0.1	0.1	0.1	0.1	0.8	0.1
1306	0.2	0.0	0.3	0.3	0.2	0.2	0.3	0.2
1307	0.3	0.3	0.2	0.2	0.3	0.2	0.3	0.2
1309	0.4	0.5	0.3	0.3	0.4	0.3	0.4	0.4
0401-0403	40.7	51.3	49.2	59.6	58.2	57.6	51.6	50.1
0404	-0.4	-1.4	-0.2	-0.2	-0.6	-0.0	0.0	-0.7
0405	0.9	6.3	0.7	0.9	1.4	0.7	0.3	3.2
0406	0.4	0.9	0.9	0.4	0.5	0.6	0.5	0.7
0407, 1407, 0199, 1199	43.1	27.3	28.5	24.8	25.7	24.4	31.7	30.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(303) and wool (304) went in that direction; private consumption had however 42.5 % and 76.6 % respectively of the whole market for these two commodities. Private consumption was heavily subsidised as well as highly taxed and burdened with import-duties (404-406). Between 80 and 90 % of subsidies and indirect taxes referred, directly or indirectly, to private consumption, and 58 % of customs duty revenue. Investments, like exports, consume primary commodities directly to a small extent. Seen as a whole, however, the investment proportion in the consumption of primary commodities, as the tables show, is often a significant one.

Table VII:3 in its turn was subjected to further summations and in this way the summaries were obtained which are shown in Tables VII:6 and VII:7. On the consumer side the same ranges are shown as in Table VII:3; the summations concern collections of primary commodity-groups

which now occur in the form of large total categories. Table VII:6 thus shows the total import excluding import of electric power and fuel (i.e. excluding groups 1201–1203, 1301), electric power and fuels (0201–0203, 1201–1203, 1301), labour (0401–0403) and others (0198, 0199, 1199, 0407, 1407). Table VII:7 shows total import (all specially shown groups whose four-figure numbers begin with 1), labour (0401–0403), subsidies, indirect taxes and customs duties (0404–0406), real-capital services, interest, profit etc. and sundry not specially recorded services etc. (0189, 1199, 0407, 1407).

As shown in Chapter I, the amount of all consumed primary commodities for a certain final product is equal to the amount of final product if all quantities are measured in units of value. If, therefore, the consumed amounts of primary commodities for a certain type of final consumption are added together, the total will be equal to the sum of the finally consumed amounts. The sum of the finally consumed quantities of produced commodity-groups for the same ranges of use as those shown in Tables VII:3, VII:6 and VII:7 in this chapter is shown in Table V:1. They are column totals in this table and, as shown, they agree with the corresponding column totals in the three Tables VII:3, VII:6 and VII:7.¹

The amount of produced commodities which went for export, private consumption etc. can thus be divided up according to their primary inputs. In Tables VII:5, VII:8 and VII:9, the division has been stated in percentages for the collections of primary commodity-groups shown in Tables VII:3, VII:6 and VII:7 respectively. Table VII:9, for example, shows that the produced export quantity was made up to the extent of 40.7 % of labour, while 43.1 % referred to real-capital services etc. For private consumption the corresponding figures are 51.4 % and 27.3 % respectively, and for investment 57.7 % and 24.5 % respectively. Production for export obviously makes comparatively heavy demands on capital, while labour consumption is relatively small.² The import share is, among the ranges of use shown, largest for defence, 18.5 % against 12–14 % for the remainder. The share of electric power and fuel, which is shown in Table VII:8, is largest for export, which is probably due to the fact that export demands capital, i.e. large contributions of machine-hours etc.

We have hitherto been discussing the consumption of primary commodities intended for various types of demand. Primary commodities,

¹ Certain insignificant differences have arisen as a result of figures being rounded off.

² Real-capital services etc. are shown throughout, together with sundry other services etc. These latter can however be assumed to occupy a relatively small share of the magnitudes stated; the share can also be assumed to be fairly evenly distributed over a large part of the consumption.

TABLE VII:10. *Total final consumption of primary commodity-groups (mill. kronor).*

(1) = commodity-group, (2) = exports, (3) = private consumption, (4) = national defense, (5) = civil state activities, (6) = local-government, (7) = investments, (8) = other, (9) = total

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
0198		111.2	23.7	13.0	8.5	8.1	64.5	10.2	239.2
1001-1005		32.1	365.4	1.0	1.8	6.6	4.5	5.1	416.5
1006-1007		26.8	7.2	1.8	1.1	1.3	6.7	1.8	46.7
1008-1011, 1198		366.3	137.8	76.5	45.6	50.2	331.5	87.2	1095.1
1012-1063		360.0	1017.4	258.9	145.5	113.9	1865.8	99.5	3861.0
1064-1070		20.0	73.8	4.9	13.9	21.1	88.5	8.8	231.0
1071-1075		10.4	29.3	1.9	6.9	9.4	39.4	1.7	99.0
1076-1083		12.0	51.5	1.6	2.7	4.9	9.2	13.4	95.3
1084-1096		18.4	451.0	1.3	1.7	8.9	0.6	4.1	486.0
1097-1103		42.5	879.2	8.5	5.2	14.1	35.1	40.7	1025.3
1104-1108		9.7	168.8	2.0	1.0	1.7	40.6	1.8	225.6
1109-1116		146.5	565.1	22.6	23.2	59.1	117.4	59.9	993.8
0201		317.3	668.1	33.7	31.8	91.7	161.6	614.5	1918.7
0202		21.8	159.2	2.7	2.1	4.5	10.3	11.3	211.9
0203		78.4	202.0	14.1	7.6	18.7	29.9	24.7	375.4
1201		1.7	4.0	0.2	0.1	0.5	1.0	0.4	7.9
1202		85.3	155.5	11.9	9.1	19.8	44.4	49.0	375.0
1203		245.2	803.7	53.9	29.1	71.5	114.2	94.2	1411.8
1301		34.4	63.7	8.1	5.9	10.8	15.6	182.4	320.9
1302		26.6	772.5	3.5	3.0	12.3	6.5	59.8	884.2
1303		13.4	36.5	2.1	0.7	1.2	31.6	2.6	88.1
1304		18.4	136.7	3.9	1.1	2.7	7.0	20.0	189.8
1305		25.1	3.0	1.6	1.0	1.1	8.6	17.2	57.6
1306		33.2	8.0	4.2	3.9	3.4	23.0	14.0	89.7
1307		37.4	66.0	2.5	2.7	5.2	15.7	7.8	137.3
1308		—	—	—	—	—	—	250.4	250.4
1309		50.0	114.6	4.1	5.1	7.5	26.5	5.4	213.2
0401-0403		5570.4	11495.4 ¹	1417.7	2109.1	4065.7	5663.8	799.8 ¹	31121.9
0404		-126.7	-311.4	-2.7	-2.4	-12.1	-3.5	0.3	-458.5
0405		124.0	3098.2	44.6	21.8	63.8	116.8	46.8	3516.0
0406		56.5	536.0	30.7	12.5	19.1	186.4	15.8	857.0
0407-1407, 0199, 1199		5901.3 ¹	6114.1 ¹	422.2 ¹	355.9 ¹	509.9 ¹	2404.9 ¹	492.8 ¹	16201.1
Total		13669.6	27896.0	2453.0	2857.2	5196.6	11468.1	3043.4	66583.9

¹ Consumption within the production system only.

however, are also the objects of direct final consumption, in which case they do not pass through the production system. This direct consumption is given in the input-output table and in the Table V:2. It is of interest to study the total consumption of primary commodities for different final purposes by making a total of consumption via the production system which is shown in Tables F, VII:3, VII:6 and VII:7 discussed above, and direct consumption. The total final consumption is shown in different summaries—made in the same way as earlier summaries—in Tables VII:10, VII:11 and VII:12.

As mentioned, a parallel statement in quantity figures has been made for certain primary commodities. It refers to consumption of labour, electric power and fuels in industry (i.e. in the utilisation of processes 6-116). For industry there is likewise a division of labour-consumption in

TABLE VII: 11. *Total final consumption of primary commodities (mill. kronor). Alternative 1.*

(1) = exports, (2) = private consumption, (3) = national defense, (4) = civil state activities, (5) = local-government, (6) = investments, (7) = other, (8) = total

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Imports	1248.8	4883.9	402.9	266.1	324.6	2658.0	701.2	10485.8
Electric power and fuels	784.2	2056.1	124.7	85.8	217.4	376.9	976.7	4621.7
Labour	5570.4	11495.4 ¹	1417.7	2109.1	4065.7	5663.8	799.8 ¹	31121.9
Other ²	6066.3	9461.2	507.7	396.2	588.9	2769.1	565.7	20355.1
Total	13669.6	27896.6	2453.0	2857.2	5196.6	11468.1	3043.4	66584.5

¹ Consumption within the production system only.² For real-capital services etc. consumption within the production system only.TABLE VII: 12. *Total final consumption of primary commodities (mill. kronor). Alternative 2.*

(1) = exports, (2) = private consumption, (3) = national defense, (4) = civil state activities, (5) = local-government, (6) = investments, (7) = other, (8) = total

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Imports	1668.5	5967.5	480.6	314.3	433.1	2858.8	1027.8	12750.6
Labour	5570.4	11495.4 ¹	1417.7	2109.1	4065.7	5663.8	799.8 ¹	31121.9
Indirect taxes, etc.	53.8	3323.4	72.6	31.9	70.8	299.7	62.9	3915.1
Real-capital services, etc.	5901.3 ¹	6114.1 ¹	422.2 ¹	355.9 ¹	509.9 ¹	2404.9 ¹	492.8 ¹	16201.1 ¹
Other	475.6	996.2	59.9	46.0	117.1	240.9	660.7	2596.4
Total	13669.6	27896.6	2453.0	2857.2	5196.6	11468.1	3044.0	66585.1

¹ Consumption within the production system only.TABLE VII: 13. *Consumption of certain primary commodities within manufacturing industry for different types of final demand 1957.*

(1) = exports, (2) = private consumption, (3) = national defense, (4) = civil state activities, (5) = local-government, (6) = investments, (7) = other, (8) = total

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Electric power, 1000 kWh	8333.3	3405.3	511.8	337.4	448.6	2341.4	769.6	16147.4
Coke, 1000 tons	590.9	103.6	55.4	35.5	39.0	278.9	76.4	1179.7
Petrol, motor-fuels, paraffin, 1000 m ³	46.7	65.9	4.5	4.9	7.2	35.2	3.5	167.9
Heating oils, 1000 m ³	1279.0	851.5	78.2	89.3	117.9	564.0	119.9	3099.8
Coal, 1000 tons	243.7	175.3	24.9	30.2	40.8	174.7	25.7	715.3
Technical personnel, foremen, thousands	24.0	25.1	6.0	2.6	2.7	19.1	3.2	82.7
Office personnel, thousands	19.4	32.8	3.7	2.2	2.7	16.7	3.0	80.5
Other administrative personnel, thousands	17.1	57.8	1.8	2.2	3.7	12.9	3.9	99.4
Male workers, thousands	177.4	195.2	23.8	17.8	23.5	131.0	19.8	588.5
Female workers, thousands	17.4	86.1	3.6	1.9	2.7	9.7	4.9	126.3
Working hours, thousands	407.9	590.2	58.7	41.3	55.3	300.0	52.8	1506.2
Wages, administrative personnel, mill. cr.	801.3	1074.4	172.6	87.5	95.4	632.1	110.9	2974.2
Wages, operative personnel, mill. cr.	2211.2	2766.8	322.5	218.8	277.7	1585.9	276.7	7650.6

value terms of work carried out by administrative personnel, operatives and outworkers (commodity-groups 401–403). In introducing Matrix Table F, above, it was mentioned how these consumption figures are included in this table. Table VII:13 is a summary of the relevant part of Table F. The summary has been made on the same principles as the summary of another part of Table F shown in Table VII:3. A row in the table thus shows the quantity of a certain primary commodity consumed in 1957 for export, private consumption etc.

D. Production and Consumption for Export

This section contains a more detailed investigation of the connection between exports in 1957 and activity within the different parts of the production system. It will be shown how exports, from different points of view, can be referred to commodity-groups or to the different activities which were carried on for the manufacture of the commodity-groups.

As a starting point we shall take the most immediate case, namely export of the individual commodity-groups in producer's price shown in the input-output table. As export is denoted as final demand of type 2, these amounts can be written as

$$z_{i2} \quad i=1,2,\dots,127 \tag{5}$$

The value of these magnitudes for 1957 are shown in Table VII:14 (Column 2). They state how a total export of 13,692 mill. kronor was divided among the 127 commodity-groups of the production system, and thus, for each group, the amount of the production which was directly consumed for export.

Each separate export amount z_{i2} requires, firstly, production of the same amount of commodity-group i . In view of the manner in which the production system functions, however, a given amount of final product of a commodity will involve the intermediate consumption of produced commodities within the system. In order that the given export amount can be delivered from the system, both the amount z_{i2} and the amounts of all commodities corresponding to the intermediate consumption must, therefore, be produced. In Chapter VI it was stated how much total production is required by a final-product unit of each commodity-group.¹ The total production required for a given amount of export is easily obtained by a

¹ Cf. Table VI:1.

TABLE VII: 14. *Exports of commodity-groups 1957 (mill. kronor).*

(1) = commodity-group, (2) = exports, (3) = production, (4) = imports, (5) = net exports, (6) = labour, (7) = other.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
0001	87.3	187.3	10.5	76.8	65.1	11.7
0002	139.8	207.7	15.5	124.3	80.5	43.8
0003	7.6	9.8	1.4	6.2	2.9	3.3
0004	115.4	132.8	1.6	113.8	67.1	46.7
0005	26.6	34.3	2.8	23.8	11.8	12.0
0006	872.6	1037.6	49.0	823.6	195.4	628.2
0007	50.0	70.2	6.0	44.0	17.8	26.2
0008	426.1	1367.6	101.1	325.0	133.8	191.2
0009	34.2	45.3	13.1	21.1	8.0	13.1
0010	94.8	148.0	24.4	70.4	30.2	40.2
0011	124.8	214.7	53.8	71.0	30.5	40.5
0012	49.7	93.3	11.3	38.4	22.6	15.8
0013	153.2	358.3	26.3	126.9	66.7	60.2
0014	119.4	193.6	15.8	103.6	71.5	32.1
0015	31.6	62.0	6.8	24.8	13.5	11.3
0016	20.2	37.3	4.1	16.1	9.3	6.8
0017	1.9	3.4	0.3	1.6	1.0	0.6
0018	51.0	108.9	12.4	38.6	21.4	17.2
0019	—	—	—	—	—	—
0020	2.2	3.7	0.5	1.7	1.1	0.6
0021	30.5	49.5	6.2	24.3	14.1	10.2
0022	44.1	68.5	10.5	33.6	22.0	11.6
0023	3.5	5.8	0.9	2.6	1.6	1.0
0024	—	—	—	—	—	—
0025	301.2	595.4	87.9	213.3	116.9	96.4
0026	7.4	13.5	1.6	5.8	3.3	2.5
0027	23.1	44.9	5.8	17.3	9.6	7.7
0028	30.5	53.5	5.3	25.2	15.4	9.8
0029	15.7	41.9	3.5	12.2	6.6	5.6
0030	87.4	177.7	20.0	67.4	37.6	29.8
0031	31.5	57.8	4.1	27.4	15.4	12.0
0032	92.3	150.0	13.6	78.7	50.7	28.0
0033	63.5	116.5	12.2	51.3	28.6	22.7
0034	197.0	307.8	25.1	171.9	98.4	73.5
0035	34.9	66.6	7.8	27.1	17.8	9.3
0036	58.1	110.4	11.7	46.4	24.5	21.9
0037	170.5	257.5	20.2	150.3	79.6	70.7
0038	17.3	34.7	4.2	13.1	8.0	5.1
0039	122.4	177.5	13.3	109.1	59.2	49.9
0040	39.3	66.5	7.3	32.0	14.7	17.3
0041	88.7	144.1	12.8	75.9	48.9	27.0
0042	19.3	34.6	3.0	16.3	7.9	8.4
0043	24.1	43.7	4.8	19.3	12.6	6.7
0044	77.6	122.4	17.8	59.8	33.3	26.5
0045	26.6	38.9	2.8	23.8	12.9	10.9
0046	4.4	8.5	1.1	3.3	2.2	1.1
0047	149.4	331.2	31.8	117.6	66.9	50.7
0048	855.5	1718.9	211.1	644.4	409.1	235.3
0049	15.8	24.1	3.4	12.4	5.9	6.5
0050	137.4	190.0	12.7	124.7	74.9	49.8
0051	91.1	138.4	12.2	78.9	49.1	29.8
0052	20.4	31.6	4.2	16.2	10.3	5.9
0053	26.3	39.5	4.2	22.1	11.5	10.6
0054	15.4	25.9	2.3	13.1	7.7	5.4
0055	31.5	50.3	5.3	26.2	13.7	12.5
0056	2.8	4.5	0.5	2.3	1.5	0.8
0057	19.2	28.7	6.9	12.3	5.5	6.8
0058	55.4	78.2	7.3	48.1	27.5	20.6
0059	—	—	—	—	—	—
0060	—	—	—	—	—	—

Table VII:14 (continued)

(1)	(2)	(3)	(4)	(5)	(6)	(7)
0061	—	—	—	—	—	—
0062	—	—	—	—	—	—
0063	—	—	—	—	—	—
0064	15.3	18.7	1.3	14.0	7.5	6.5
0065	12.8	16.2	4.1	8.7	2.9	5.8
0066	1.6	2.5	0.2	1.4	0.7	0.7
0067	5.5	6.4	1.0	4.5	2.9	1.6
0068	19.0	23.8	2.2	16.8	10.9	5.9
0069	21.5	29.7	3.1	18.4	11.6	6.8
0070	11.6	17.0	1.6	10.0	4.0	6.0
0071	1120.9	2040.9	31.2	1089.7	684.5	455.2
0072	16.5	26.9	2.0	14.5	9.2	5.3
0073	2.3	4.9	0.2	2.1	1.3	0.8
0074	26.5	47.2	2.2	24.3	15.2	9.1
0075	22.4	38.6	2.0	20.4	11.3	9.1
0076	154.5	256.4	6.4	148.1	71.3	76.8
0077	1485.0	2562.3	163.3	1321.7	656.5	665.2
0078	186.0	375.1	19.8	166.2	67.8	98.4
0079	710.9	1532.6	90.5	620.4	329.7	290.7
0080	131.5	232.4	18.2	113.3	65.1	48.2
0081	24.2	50.5	3.1	21.1	12.0	9.1
0082	10.1	17.0	0.7	9.4	5.9	3.5
0083	1.1	1.8	0.0	1.1	0.6	0.5
0084	0.2	0.4	0.0	0.2	0.1	0.1
0085	4.9	9.7	0.7	4.2	2.2	2.0
0086	1.5	3.3	0.2	1.3	0.6	0.7
0087	6.2	9.1	0.9	5.3	1.5	3.8
0088	194.9	597.9	25.9	169.0	153.2	15.8
0089	69.1	200.6	11.8	57.3	45.2	12.1
0090	10.2	19.5	2.1	8.1	4.9	3.2
0091	2.4	4.8	0.4	2.0	1.0	1.0
0092	0.4	0.9	0.2	0.2	0.1	0.1
0093	4.2	6.6	2.4	1.8	0.8	1.0
0094	0.5	1.0	0.1	0.4	0.2	0.2
0095	3.9	5.5	0.3	3.6	1.4	2.2
0096	0.1	0.1	0.0	0.1	0.0	0.1
0097	28.4	52.4	9.5	18.9	13.2	5.7
0098	21.7	36.5	7.6	14.1	9.9	4.2
0099	3.8	6.5	1.5	2.3	1.9	0.4
0100	48.6	74.5	12.1	36.5	14.5	22.0
0101	6.5	10.3	1.8	4.7	2.9	1.8
0102	17.5	28.7	4.9	12.6	9.2	3.4
0103	22.2	32.0	3.8	18.4	11.0	7.4
0104	20.6	29.0	10.8	9.8	6.3	3.5
0105	6.5	10.6	2.0	4.5	3.0	1.5
0106	0.7	1.1	0.2	0.5	0.3	0.2
0107	7.4	11.5	1.7	5.7	4.0	1.7
0108	41.8	55.3	13.4	28.4	15.4	13.0
0109	99.8	169.2	33.8	66.0	25.5	40.5
0110	25.7	35.8	3.4	22.3	7.6	14.7
0111	56.4	92.1	11.5	44.9	24.8	20.1
0112	38.7	75.7	16.8	21.9	7.1	14.8
0113	17.6	27.9	5.4	12.2	6.2	6.0
0114	9.7	16.3	1.8	7.9	3.0	4.9
0115	33.5	62.0	8.7	24.8	15.6	9.2
0116	63.5	108.6	16.0	47.5	22.9	24.6
0117	—	—	—	—	—	—
0118	—	—	—	—	—	—
0119	—	—	—	—	—	—
0120	1.7	2.1	0.0	1.7	1.5	0.2

Table VII:14 (*continued*)

(1)	(2)	(3)	(4)	(5)	(6)	(7)
0121	18.0	20.6	0.4	17.6	8.5	9.1
0122	2396.9	2824.6	89.5	2307.4	389.1	1918.3
0123	191.4	253.1	13.5	177.9	124.1	53.8
0124	7.3	8.5	0.6	6.7	3.7	3.0
0125	—	—	—	—	—	—
0126	136.5	191.7	24.7	111.8	62.6	49.2
0127	652.5	809.1	12.9	639.6	369.0	270.6
Total	13692.1	22971.3	1668.5	12023.6	5570.5	6453.1

combination of the constant magnitudes shown there and the actual values for export. We then obtain the following expression:

$$\sum_j A_{ji} z_{i2} \quad i = 1, 2, \dots, 127 \quad (6)$$

The value of this expression has been calculated for each commodity-group. They thus state the production within the whole system involved in export of each commodity-group in 1957. The result is given in Table VII:14 (Column 3). It can be seen that the previously mentioned total export of 13,692 mill. kronor required a total production of 22,971 mill. kronor.¹

In the production thus carried on for export of each of the commodity-groups, as in other types of production, primary commodity-groups have been consumed in different amounts.² A part of these primary commodity-groups is imported, and it is of interest to investigate the amount of imports for export of each commodity-group. If the input coefficients referring to total use of import is denoted as $b_{\text{imp},j}$, the total import consumed for manufacture of the exported amounts of each of the commodity-groups will consist of

$$\sum_j b_{\text{imp},j} A_{ji} z_{i2} \quad i = 1, 2, \dots, 127 \quad (7)$$

The values of this expression calculated for export in 1957 are reproduced in Table VII:14 (Column 4). The calculations show as a result that for the total export of 13,692 mill. kronor a total import of 1,669 mill. kronor³ was consumed.

In addition to imported commodities, production consumed domestic primary commodity-groups also, of which labour services and real-capital services and the like make up the largest part. For each commodity-group the total amount of primary commodity-groups consumed for production

¹ Cf. also Table VII:1.

² Cf. Table VI:2,3 and Table VII:7.

³ Cf. Table VII:7.

of one unit is equal to 1.¹ If input coefficients referring to the total contribution of home primary commodity-groups are denoted $b_{\text{dom},j}$, the following applies

$$\sum_j b_{\text{imp},j} A_{ji} + \sum_j b_{\text{dom},j} A_{ji} = 1 \quad (8)$$

or

$$\sum_j b_{\text{dom},j} A_{ji} = 1 - \sum_j b_{\text{imp},j} A_{ji} \quad (9)$$

For the given export amounts of the commodity-groups this gives

$$\sum_j b_{\text{dom},j} A_{ji} z_{i2} = (1 - \sum_j b_{\text{imp},j} A_{ji}) z_{i2} \quad i = 1, 2, \dots 127 \quad (10)$$

This expression emphasizes two aspects of the export figures for the separate commodity-groups. Foreign currency is earned by exports. The net acquisition, however, is not equal to the export of the commodity-group but consists of the difference between this export and the total amount of imports which the manufacture of the exported quantities has involved. This difference in its turn is equal to the total consumption of domestic primary commodity-groups in the same production. If the difference mentioned is called net export, it follows that the net export of each commodity-group is equal to (the value of) the total amount of domestic (primary) production factors which are utilised in the manufacture of the exported quantities. A calculation of the net export of each commodity-group in 1957 has been made and the result is shown in Table VII:14 (Column 5). For the total export, the net export amounted to 12,023 mill. kronor or the difference between the total export, 13,692 mill. kronor and the import of 1,669 mill. kronor necessitated by it.

The figures shown in the tables for net export thus correspond to the total amount of home production factors utilised in the manufacture of the commodity-groups in question. This quantity can be made up in different ways. A point of particular interest in this connection is the size of the part referring to labour services, as this gives a picture of the way in which export is connected with employment. A division of the total amount of utilised domestic production factors has therefore been made, referring on the one hand to labour services and, on the other hand, to other services, of which real-capital services make up the largest part. This division will be found together with other figures in Table VII:14 (Columns 6 and 7).

In the discussion so far, the starting point has been export of the separate commodity-groups, and the questions illustrated have concerned the total utilisation within the whole production system of produced commodity-groups or different kinds of primary commodity-groups. A similar discussion

¹ Cf. Chapter I.

can be conducted with its starting point in the separate activities corresponding to the commodity-groups. The idea behind this discussion is that if an activity produces a commodity which, as a raw material or semi-manufactured article, enters into the manufacture of another commodity which is then exported, the said activity will indirectly contribute to the manufacture of the exported commodity, and will thus indirectly be affected by the export, and the same applies to the primary commodity-groups utilised within the activity in question. This is naturally merely another aspect of the relations between different activities within the production system which are based on the intermediate consumption of produced commodities.¹

The first question which will be answered concerns the size of the total production of each commodity-group which refers to exports. This quantity is equal firstly to the direct export of the commodity-group in question and in addition to the intermediate consumption of the commodity-group for export of all commodity-groups from the system. The values for a given period are obtained by the expression

$$\sum_i A_{ji} z_{i2} \quad j = 1, 2, \dots, 127 \quad (11)$$

The values for these expressions have been calculated for 1957 and are given in Table VII:15 (Column 2). The sum of all commodity-groups gives the total production carried on for export, and equals the sum for total production which, from other starting points, was obtained in Table VII:14.²

In this production of each commodity-group, primary commodity-groups are consumed, as usual, to various extents. As the above expression states production of the separate commodity-groups and thus also the extent to which the processes corresponding to the commodity-groups are utilised, the corresponding consumption of primary commodity-groups can be obtained through multiplying by the input coefficients in question. Using the same designations as before, we obtain for consumption of import

$$b_{\text{imp}.j} \sum_i A_{ji} z_{i2} \quad j = 1, 2, \dots, 127 \quad (12)$$

and for consumption of domestic primary commodity-groups

$$b_{\text{dom}.j} \sum_i A_{ji} z_{i2} \quad j = 1, 2, \dots, 127 \quad (13)$$

As can easily be confirmed, a summation of all commodity-groups (summation over j) gives in the former case the total import consumed for export and in the latter case the total amount of domestic primary com-

¹ Cf. Section A, commentary on Table VII:1 and Table VII:2.

² Cf. also Table VII:1.

TABLE VII: 15. *Production activities for exports 1957 (mill. kronor).*

(1)=commodity-group, (2)=production, (3)=imports, (4)=net exports, (5)=labour, (6)=other

(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
0001	385.1	5.8	94.3	131.2	-36.9	0066	1.8	0.1	1.0	0.5	0.5
0002	383.5	27.2	257.3	160.4	96.9	0067	18.0	2.9	13.0	8.4	4.6
0003	8.4	1.4	5.3	2.3	3.0	0068	22.9	2.2	16.5	11.0	5.5
0004	1824.9	5.8	1591.8	943.1	648.7	0069	31.1	3.8	19.7	12.8	6.9
0005	29.4	2.4	22.1	10.7	11.4	0070	22.4	2.2	13.8	4.9	8.9
0006	1045.6	45.2	861.2	184.0	677.2	0071	1357.0	18.9	433.7	247.9	185.8
0007	108.5	9.7	77.4	29.0	48.4	0072	21.9	1.5	12.2	8.1	4.1
0008	2556.9	182.5	454.1	184.5	269.6	0073	2.3	0.1	0.6	0.4	0.2
0009	85.6	29.7	36.5	11.1	25.4	0074	35.2	1.6	17.6	11.7	5.9
0010	159.9	34.2	62.5	24.3	38.2	0075	28.8	1.7	12.5	6.6	5.9
0011	253.3	75.4	63.9	23.5	40.4	0076	277.3	6.5	117.9	40.0	77.9
0012	90.9	9.8	39.3	24.7	14.6	0077	1907.3	154.4	671.0	245.2	425.8
0013	288.7	20.6	132.3	77.5	54.8	0078	195.5	13.1	60.7	13.6	47.1
0014	161.9	14.1	103.2	77.4	25.8	0079	813.3	46.2	213.3	121.4	91.9
0015	56.2	7.8	24.9	14.2	10.7	0080	135.0	14.5	52.0	28.9	23.1
0016	34.8	2.6	15.2	8.9	6.3	0081	71.5	4.0	27.6	16.3	11.3
0017	1.9	0.2	1.0	0.7	0.3	0082	50.2	1.5	30.7	20.4	10.3
0018	128.9	20.4	47.3	28.5	18.8	0083	42.3	0.4	26.2	15.9	10.3
0019	57.2	12.5	28.4	20.4	8.0	0084	6.6	1.0	1.5	0.4	1.1
0020	5.5	0.7	2.7	1.8	0.9	0085	6.4	0.3	2.8	1.5	1.3
0021	30.5	3.0	16.4	10.0	6.4	0086	7.9	0.4	2.2	0.6	1.6
0022	75.6	10.5	39.8	28.6	11.2	0087	6.7	0.7	4.3	0.9	3.4
0023	4.9	0.9	2.0	1.3	0.7	0088	209.6	2.9	-0.8	14.2	-15.0
0024	22.0	4.8	7.4	5.1	2.3	0089	93.4	5.6	11.1	6.5	4.6
0025	342.6	65.7	101.6	55.5	46.1	0090	11.8	1.5	3.5	2.4	1.1
0026	10.2	1.2	4.2	2.4	1.8	0091	3.3	0.3	1.1	0.5	0.6
0027	23.3	3.8	9.0	5.2	3.8	0092	1.9	0.4	0.2	0.1	0.1
0028	41.0	4.5	21.1	13.6	7.5	0093	23.9	12.5	3.8	0.8	3.0
0029	228.8	19.1	62.0	33.6	28.4	0094	4.4	0.4	1.4	0.5	0.9
0030	147.1	19.9	54.2	30.7	23.5	0095	4.2	0.2	2.9	1.0	1.9
0031	35.0	2.4	21.3	12.7	8.6	0096	0.5	0.0	0.4	0.0	0.4
0032	93.1	9.1	54.6	37.2	17.4	0097	60.7	12.2	18.4	14.0	4.4
0033	64.0	8.3	33.1	19.3	13.8	0098	48.5	11.5	15.8	11.9	3.9
0034	197.2	15.0	127.5	74.5	53.0	0099	15.7	4.3	4.2	4.1	0.1
0035	35.2	5.0	14.9	11.3	3.6	0100	60.6	11.4	28.6	9.1	19.5
0036	64.0	7.2	26.4	13.3	13.1	0101	6.8	1.3	2.9	1.9	1.0
0037	199.4	15.5	138.9	74.3	64.6	0102	19.2	3.6	8.0	6.4	1.6
0038	37.9	5.9	15.4	10.8	4.6	0103	38.0	4.4	22.7	13.1	9.6
0039	126.8	8.1	85.6	45.4	40.2	0104	23.7	11.2	7.4	4.8	2.6
0040	43.5	5.1	21.4	8.7	12.7	0105	7.4	1.2	2.9	2.1	0.8
0041	108.4	9.8	63.7	43.6	20.1	0106	0.7	0.1	0.3	0.2	0.1
0042	29.4	2.0	14.8	6.1	8.7	0107	13.8	2.3	7.0	5.2	1.8
0043	34.4	4.4	16.2	11.8	4.4	0108	72.6	20.3	37.3	19.9	17.4
0044	81.4	14.2	43.3	24.6	18.7	0109	309.2	70.4	106.2	35.2	71.0
0045	26.6	1.7	17.3	9.0	8.3	0110	26.1	2.1	17.7	5.1	12.6
0046	6.9	1.1	3.0	2.3	0.7	0111	80.3	10.0	40.0	23.0	17.0
0047	157.3	18.9	62.5	40.4	22.1	0112	88.1	22.9	17.7	1.7	16.0
0048	1028.4	167.1	371.8	274.1	97.7	0113	48.8	11.1	20.4	10.3	10.1
0049	18.1	2.5	9.9	4.6	5.3	0114	14.6	1.5	7.3	2.2	5.1
0050	151.9	7.5	108.0	66.1	41.9	0115	56.4	8.7	20.4	15.2	5.2
0051	137.1	11.6	90.6	59.0	31.6	0116	116.5	19.2	47.2	19.2	28.0
0052	28.9	4.4	14.9	9.8	5.1	0117	35.6	1.9	26.4	20.7	5.7
0053	26.3	2.6	16.1	8.2	7.9	0118	4.1	0.6	1.6	1.2	0.4
0054	17.0	1.5	9.4	5.7	3.7	0119	—	—	—	—	—
0055	50.3	4.5	27.2	13.2	14.0	0120	27.4	0.2	21.9	20.8	1.1
0056	5.2	0.6	2.8	2.0	0.8	0121	73.9	1.0	65.9	30.9	35.0
0057	40.5	11.9	16.3	6.7	9.6	0122	2406.9	39.7	2146.0	283.9	1862.1
0058	65.7	5.1	44.2	25.4	18.8	0123	311.5	12.7	237.7	166.7	71.0
0059	27.4	2.4	11.4	8.4	3.0	0124	330.3	19.0	278.9	151.5	127.4
0060	71.9	10.1	31.9	25.7	6.2	0125	3.6	0.2	2.5	1.7	0.8
0061	66.5	8.2	34.2	31.0	3.2	0126	146.9	20.1	88.7	44.4	44.3
0062	98.1	9.4	62.4	48.1	14.3	0127	1254.7	7.2	1035.0	588.3	446.7
0063	22.0	2.1	15.0	11.5	3.5	Total	22971.3	1668.5	12023.6	5570.5	6453.1
0064	51.7	3.6	40.4	21.4	19.0						
0065	13.7	4.2	7.4	2.0	5.4						

commodity-groups consumed for the same purpose, or the same amounts which in Table VII:14 were obtained from another starting-point. The expression for consumption of domestic primary commodity-groups can, as in the previous case, be used as a measure for net export, with the difference that the localisation in this case applies to the productive activity which is directly connected with the manufacture of each commodity-group. The expression concerned has been calculated for export values in 1957 and is shown in Table VII:15 (Columns 3 and 4).

In this case also the total amount of domestic production factors utilised can be made up in different ways, and it is particularly interesting to extract the amount consisting of labour services. This calculation was made and the result is shown in Table VII:15 (Columns 5 and 6).

Each of the calculated expressions gives meaningful information on the connection between export and activity within different parts of the production system in 1957, and it therefore illustrates in different ways the extent to which various activities co-operated in the manufacture of the total export. The seven different expressions give seven different measurements of this extent, but it is not possible to say that one of them is to be preferred to another. The choice to be made between them depends on the problem which is to be elucidated.

In conclusion, a list is given in Table VII:16 of the commodity-groups which, from different parts of view, made up the largest share of exports in 1957. The selection has been made by taking, for each of the expressions, the 15 commodity-groups which show the largest values in 1957. This means that in all 24 different groups are included. For each group, the proportion per cent of the sums concerned in Tables VII:14 and VII:15 has been calculated. The first column thus gives the percentage share of the total export, the second the percentage share of the total production for export etc. The groups have been listed in order of size with regard to the direct export.

The table can be said to be built on seven different criteria for the share in the 1957 exports. The seven criteria are given here and are illustrated at the same time by the type of questions with which they can deal.

I. Export of commodity-group *i*.

What part of the total export comprised export of commodity-group *i*?

II. Total production for export of commodity-group *i*.

What part of the total production for export can be referred to export of commodity-group *i*?

III. Net export of commodity-group *i*.

What part of the total utilisation of domestic (primary) production factors for export refers to the export of commodity-group *i*?

TABLE VII: 16. *Export shares according to seven different criteria 1957.*

1)=commodity-group

(1)	I	II	III	IV	V	VI	VII
0122	17.5	12.3	19.2	7.0	10.5	17.8	5.1
0077	10.8	11.2	12.1	11.8	8.3	5.6	4.4
0071	8.2	8.9	9.1	11.4	5.9	3.6	4.4
0006	6.4	4.5	6.8	3.5	4.6	7.2	3.3
0048	6.2	7.5	5.4	7.3	4.5	3.1	4.9
0079	5.2	6.7	5.2	5.9	3.5	1.8	2.2
0127	4.8	3.5	5.3	6.6	5.5	8.6	10.6
0008	3.1	6.0	2.7	2.4	11.1	3.8	3.3
0025	2.2	2.6	1.8	2.1	1.5	0.8	1.0
0034	1.4	1.3	1.4	1.8	0.9	1.1	1.3
0088	1.4	2.6	1.4	2.7	0.9	-0.0	0.3
0123	1.4	1.1	1.5	2.2	1.4	2.0	3.0
0078	1.4	1.6	1.4	1.2	0.9	0.5	0.2
0037	1.2	1.1	1.3	1.4	0.9	1.2	1.3
0076	1.1	1.1	1.2	1.3	1.2	1.0	0.7
0013	1.1	1.6	1.1	1.2	1.3	1.1	1.4
0047	1.1	1.4	1.0	1.2	0.7	0.5	0.7
0002	1.0	0.9	1.0	1.4	1.7	2.1	2.9
0050	1.0	0.8	1.0	1.3	0.7	0.9	1.2
0014	0.9	0.8	0.9	1.3	0.7	0.9	1.4
0004	0.8	0.6	0.9	1.2	7.9	13.2	16.9
0109	0.7	0.7	0.5	0.5	1.3	0.9	0.6
0001	0.6	0.8	0.6	1.2	1.7	0.8	2.4
0124	0.1	0.0	0.1	0.1	1.4	2.3	2.7

IV. Consumption of labour services for export of commodity-group i .

What part of total employment of labour for export refers to export of commodity-group i ?

V. Production of commodity-group i for export.

What part of the total production for export refers to production of commodity-group i ?

VI. Net export in production of commodity-group i .

What part of the total utilisation of domestic (primary) production factors for export has been utilised in the production of commodity-group i ?

VII. Consumptions of labour services in production of commodity-group i .

What part of the total employment of labour for export was employed in producing commodity-group i ?

The result of these calculations is shown in Table VII: 16. For commodity-group 0122 (shipping) the figures in columns III and VI are misleading, however, as costs abroad are not included among the imports.¹ In all, these costs amounted to 1,123 mill. kronor,² which means that the figures in columns III and VI should be reduced to about a half of those stated in the tables. A glance at the table reveals that the various apportionment figures can vary considerably for one and the same commodity-group. It is

¹ Cf. *Input-output-tabeller för Sverige år 1957*, Chapter IV, Section E.

² *Sjöfart 1957*, Table AE.

interesting also to compare the figures in pairs as follows: II–V (production), III–VI (net export) and IV–VII (labour). An excess of the first figure over the second in each pair occurs regularly for commodity-groups which show combinations of the following properties:

- (a) relatively large export of the commodity-group;
- (b) relatively small input of the commodity-group in production of commodity groups exported.

Typical examples of this are 0048 (ships), 0071 (sawn and planed timber), 0077 (cellulose), 0078 (newsprint), 0079 (other paper and cardboard) and 0088 (milk, butter and cheese).

The reverse, an excess of the second figure over the first in the pair of figures, occurs for commodity-groups characterised by combinations of the following properties:

- (a) relatively small export of the commodity-group;
- (b) relatively large input of the commodity-group in production of commodity-groups exported.

The most typical example of such a group is 0004 (timber and wood). Other examples are 0001 and 0002 (agricultural products), 0008 (iron and steel), 0109 (basic chemical products), 0123 and 0124 (railway and road transport) and 0127 (trade services).

In a comparison of the magnitudes of figures for different commodity-groups it should be borne in mind that the absolute magnitude depends to a certain extent on the group-division used. Products from the engineering industry in particular form on an average smaller groups than products from the remaining parts of the production system.

MATRIX TABLES

- A. Matrix A . Direct Consumption of Produced Commodity-Groups per Unit of Output.
- B. Matrix B . Direct Consumption of Primary Commodity-Groups per Unit of Output.
- C. Matrix $(I - A)^{-1}$. Total Production Requirement per Unit of Output.
- D. Matrix $B(I - A)^{-1}$. Total Consumption of Primary Commodity-Groups per Unit of Output.
- E. Matrix $(I - A)^{-1}Z$. Total Production for Different Types of Final Demand 1957.
- F. Matrix $B(I - A)^{-1}Z$. Total Consumption of Primary Commodity-Groups for Different Types of Final Demand 1957.

Row numbers refer to commodity-groups as stated in List of Commodity-Groups at the end of the volume.

Column numbers refer to activities corresponding to produced commodity-groups and to types of final demand as stated in List of Commodity-Groups and the List of Final Demand and Consumption 1957 at the end of the volume.

The columns for activities 27 and 28 have been summed in the matrix tables for confidence reasons. They have been used separately in all calculations.

A. MATRIX A. *Direct consumption of produced commodity-groups per unit of output.*

	1	2	3	4	5	6	7	8	9	10	11
0001	—	0.1350	0.0051	0.0000	—	—	—	—	—	—	—
0002	0.5872	—	—	0.0000	—	—	—	—	—	—	—
0003	—	—	0.0507	0.0000	—	—	—	—	—	—	—
0004	—	—	0.0039	0.0066	—	0.0013	0.0053	—	—	—	—
0005	0.0014	—	—	0.0000	—	—	—	—	—	—	—
0006	—	—	—	—	—	0.0673	—	0.0400	0.0025	—	—
0007	—	—	—	—	—	—	0.0037	0.0004	0.0026	0.2365	—
0008	—	—	0.0027	—	—	0.0045	0.0562	0.6424	0.0042	0.0016	0.0011
0009	—	—	—	—	—	—	—	0.0165	0.0527	0.0033	0.0000
0010	—	—	—	—	—	0.0000	0.0001	0.0001	0.0021	0.0005	0.1657
0011	—	—	—	—	—	0.0002	—	0.0000	0.0003	0.0048	0.1841
0012	—	—	—	—	—	0.0000	0.0000	0.0001	0.0018	0.0006	0.0000
0013	—	—	—	—	—	0.0004	0.0044	—	0.0010	0.0033	0.0002
0014	0.0003	0.0005	0.0025	—	—	0.0059	0.0010	0.0002	0.0003	0.0007	0.0028
0015	0.0004	—	—	—	—	0.0009	0.0030	—	0.0005	0.0005	0.0001
0016	—	—	—	—	—	0.0004	0.0000	0.0000	0.0001	0.0008	0.0000
0017	—	—	—	—	—	—	—	—	—	—	—
0018	0.0027	0.0162	—	—	0.0434	0.0019	0.0084	0.0001	0.0014	0.0029	0.0001
0019	—	—	—	—	—	0.0000	0.0003	0.0001	0.0001	0.0010	0.0227
0020	—	—	—	—	—	0.0001	0.0009	0.0000	0.0000	0.0005	0.0001
0021	—	—	—	—	—	—	—	—	—	—	—
0022	—	—	—	—	—	0.0000	—	—	0.0002	0.0037	0.0001
0023	—	—	—	—	—	—	—	0.0000	—	0.0000	0.0000
0024	—	—	—	—	—	0.0000	—	0.0001	0.0002	0.0009	0.0000
0025	—	—	—	—	—	0.0000	—	—	0.0007	0.0003	0.0000
0026	—	—	—	—	—	—	—	—	—	—	0.0000
0027	—	—	—	—	—	—	—	—	—	—	—
0028	—	—	—	—	—	0.0001	0.0001	—	—	—	0.0001
0029	—	—	—	—	—	0.0003	0.0013	0.0066	0.0051	0.0013	0.0002
0030	—	—	—	—	—	0.0000	—	0.0000	0.0002	0.0006	0.0001
0031	—	—	—	—	—	—	—	0.0000	—	—	0.0000
0032	—	—	—	—	—	—	—	0.0002	—	0.0007	0.0000
0033	—	—	—	—	—	—	—	—	—	—	—
0034	—	—	—	—	—	—	—	—	—	—	—
0035	—	—	—	—	—	—	—	—	—	—	—
0036	—	—	—	—	—	—	—	—	—	—	—
0037	—	—	—	—	—	0.0004	0.0024	—	0.0002	0.0005	0.0005
0038	—	—	—	—	—	0.0002	—	0.0006	0.0010	0.0009	0.0000
0039	—	—	—	—	—	—	—	—	—	—	—
0040	—	—	—	—	—	—	—	—	—	—	—
0041	—	—	—	—	—	0.0015	0.0097	0.0000	0.0005	0.0009	0.0002
0042	—	—	—	—	—	0.0001	0.0000	0.0000	0.0001	0.0005	0.0000
0043	—	—	—	—	—	0.0002	0.0001	0.0001	0.0003	0.0006	0.0000
0044	—	—	—	—	—	—	—	—	—	—	—
0045	—	—	—	—	—	—	—	—	—	—	—
0046	—	—	—	—	—	—	—	—	—	—	—
0047	—	—	—	—	—	0.0020	0.0000	0.0000	0.0004	0.0004	0.0000
0048	—	—	—	—	—	—	—	—	—	—	—
0049	—	—	—	—	—	0.0000	0.0001	—	0.0000	0.0002	0.0000
0050	—	—	—	—	—	0.0001	—	0.0000	—	—	0.0000
0051	—	—	—	—	—	0.0005	0.0010	0.0000	0.0018	0.0013	0.0003
0052	—	—	—	—	—	0.0000	—	—	0.0000	—	—
0053	—	—	—	—	—	—	—	—	—	—	—
0054	—	—	—	—	—	—	—	—	—	—	—
0055	—	—	—	—	—	0.0001	0.0015	0.0006	0.0034	0.0012	0.0000
0056	—	—	—	—	—	0.0002	0.0005	0.0000	0.0001	0.0002	0.0000
0057	—	—	—	—	—	0.0015	0.0025	0.0001	0.0004	0.0005	0.0000
0058	—	—	—	—	—	0.0000	0.0001	—	0.0001	0.0003	—
0059	—	—	—	—	—	0.0000	—	0.0003	0.0004	0.0004	0.0001
0060	0.0031	0.0069	—	0.0081	—	0.0006	0.0004	0.0000	0.0004	0.0001	0.0001
0061	0.0012	0.0081	—	—	—	0.0000	—	0.0001	0.0001	0.0001	0.0000
0062	0.0017	0.0169	—	—	—	0.0007	0.0062	0.0012	0.0019	0.0017	0.0004
0063	—	—	—	—	—	0.0001	0.0004	0.0002	0.0006	0.0003	0.0001
0064	0.0018	0.0019	—	—	—	0.0000	0.0002	0.0030	0.0179	0.0029	0.0000
0065	—	—	—	—	—	—	—	—	—	0.0005	—

Matrix A (continued)

	1	2	3	4	5	6	7	8	9	10	11
0066	—	—	—	—	—	—	—	—	—	—	—
0067	—	—	—	—	—	—	0.0001	0.0032	0.0030	0.0030	0.0000
0068	—	—	0.0086	—	—	0.0000	0.0000	—	0.0001	—	0.0000
0069	—	—	0.0033	—	—	0.0000	—	0.0000	0.0002	—	0.0000
0070	—	—	—	—	—	0.0001	0.0004	0.0006	0.0001	0.0000	0.0001
0071	—	—	0.0041	—	0.0460	0.0025	0.0135	0.0008	0.0076	0.0050	0.0019
0072	—	—	—	—	—	—	—	—	—	—	—
0073	—	—	—	—	—	—	—	—	—	—	—
0074	—	—	—	—	—	0.0000	0.0000	0.0000	0.0002	—	0.0005
0075	—	—	0.0030	—	—	0.0000	0.0000	0.0000	0.0000	—	0.0002
0076	—	—	—	—	—	—	—	—	—	—	—
0077	—	—	—	—	—	—	0.0054	—	—	—	—
0078	—	—	—	—	—	—	—	—	—	—	—
0079	—	—	0.0065	—	—	0.0001	0.0005	0.0001	0.0001	0.0001	0.0061
0080	—	—	—	—	—	0.0001	0.0004	—	0.0000	—	0.0001
0081	—	—	0.0109	—	—	0.0000	0.0020	0.0001	0.0003	0.0010	0.0009
0082	—	—	0.0016	0.0015	—	0.0003	0.0001	0.0002	0.0006	0.0027	0.0004
0083	—	—	—	0.0003	—	0.0000	—	0.0001	0.0003	0.0003	0.0010
0084	0.0095	—	—	0.0000	—	—	—	—	—	—	—
0085	—	—	—	0.0000	—	—	—	—	—	—	—
0086	0.0055	—	—	0.0000	—	—	—	—	—	—	—
0087	—	—	—	0.0000	—	—	—	—	—	—	—
0088	0.0252	—	—	0.0001	—	—	—	—	—	—	—
0089	0.0009	—	—	0.0001	—	—	—	—	—	—	—
0090	—	—	—	0.0000	—	—	—	—	—	—	—
0091	—	—	—	0.0000	—	—	—	—	—	—	—
0092	—	—	—	0.0000	—	—	—	—	—	—	—
0093	0.0410	—	—	0.0001	—	—	—	—	—	—	—
0094	0.0003	—	—	—	—	—	—	—	—	—	—
0095	0.0002	—	—	—	—	—	—	—	—	—	—
0096	—	—	—	0.0000	—	—	—	—	—	—	—
0097	—	—	—	—	—	—	0.0005	—	0.0000	0.0000	0.0000
0098	—	—	—	—	—	—	0.0006	—	0.0001	0.0001	—
0099	—	—	—	—	—	—	0.0000	—	0.0002	—	—
0100	—	—	—	—	—	0.0000	0.0000	—	0.0000	0.0000	—
0101	—	—	—	—	—	—	—	—	—	—	—
0102	—	—	—	0.0000	—	—	—	—	—	—	—
0103	0.0003	0.0021	—	0.0001	0.0241	0.0001	0.0004	0.0000	0.0004	0.0000	0.0004
0104	—	—	—	—	—	—	—	—	—	—	—
0105	—	—	—	—	—	—	—	—	—	—	—
0106	—	—	—	—	—	—	—	—	—	—	—
0107	—	—	—	—	—	0.0000	0.0010	0.0001	0.0002	0.0001	0.0001
0108	0.0006	0.0006	—	0.0004	—	0.0004	0.0034	—	0.0009	0.0002	0.0000
0109	—	0.0293	0.0089	0.0001	—	0.0015	0.0024	0.0008	0.0062	0.0018	0.0003
0110	0.0002	—	—	—	—	—	—	—	—	—	—
0111	—	—	—	0.0017	—	0.0134	0.0137	0.0001	—	0.0000	0.0011
0112	0.0107	—	—	—	—	0.0000	0.0000	—	0.0000	0.0000	0.0000
0113	—	—	—	—	—	0.0001	0.0012	—	0.0001	0.0000	0.0004
0114	0.0004	—	—	—	—	0.0000	0.0006	—	0.0001	0.0000	0.0001
0115	—	—	—	—	—	0.0000	0.0008	0.0000	0.0001	—	0.0001
0116	0.0020	0.0080	0.0064	0.0005	0.0262	0.0009	0.0033	0.0025	0.0031	0.0048	0.0015
0117	—	—	—	—	—	0.0002	—	0.0001	0.0009	0.0006	0.0000
0118	—	—	—	—	—	—	—	—	—	—	—
0119	—	—	—	—	—	—	—	—	—	—	—
0120	0.0003	0.0003	0.0013	0.0025	0.0006	0.0001	0.0004	0.0001	0.0003	0.0002	0.0000
0121	0.0043	0.0043	0.0121	0.0022	0.0013	0.0006	0.0028	0.0002	0.0021	0.0014	0.0002
0122	—	—	—	—	—	—	—	—	—	—	—
0123	—	0.0037	—	0.0004	—	0.0056	—	0.0035	0.0345	—	0.0148
0124	0.0265	0.0070	—	0.0987	—	0.0001	0.0002	—	—	—	—
0125	—	—	—	—	—	—	—	—	—	—	—
0126	—	—	—	—	—	—	—	—	—	—	—
0127	0.0126	0.0171	0.0736	0.0012	0.0268	0.0153	0.0339	0.0256	0.0583	0.0955	0.0404
Total	0.7403	0.2582	0.2051	0.1246	0.1684	0.1331	0.1976	0.7510	0.2259	0.3951	0.4502

12	13	14	15	16	17	18	19	20	21	22	
—	—	—	—	—	—	—	—	—	—	—	0066
—	0.0002	0.0005	0.0001	0.0003	—	0.0002	—	0.0001	—	0.0000	0067
—	—	0.0001	0.0000	0.0002	—	0.0000	—	—	0.0003	0.0004	0068
0.0006	0.0000	0.0024	0.0000	—	0.0002	0.0000	0.0001	0.0038	0.0029	0.0013	0069
0.0016	0.0025	0.0068	0.0004	0.0025	0.0008	0.0005	0.0007	0.0009	0.0006	0.0009	0070
0.0036	0.0066	0.0021	0.0052	—	0.0100	0.0045	0.0007	—	0.0151	0.0065	0071
—	—	—	—	—	0.0138	—	—	—	—	—	0072
—	—	—	—	—	—	—	—	—	—	—	0073
0.0005	0.0002	0.0085	0.0003	—	0.0046	0.0001	0.0060	0.0019	0.0002	0.0004	0074
0.0001	0.0001	0.0024	0.0001	—	0.0013	0.0000	0.0017	0.0005	0.0001	0.0001	0075
—	—	—	—	—	—	—	—	—	—	—	0076
—	—	—	—	—	—	—	—	—	—	—	0077
—	—	—	—	—	—	—	—	—	—	—	0078
0.0034	0.0030	0.0014	0.0018	0.0011	0.0049	0.0002	0.0008	0.0001	0.0014	0.0031	0079
0.0006	0.0002	0.0000	0.0005	—	0.0003	0.0004	0.0005	—	—	—	0080
0.0114	0.0017	0.0069	0.0060	0.0007	0.0069	0.0003	0.0006	0.0013	0.0106	0.0025	0081
0.0034	0.0006	0.0025	0.0025	0.0002	0.0016	0.0003	0.0023	0.0032	0.0013	0.0027	0082
0.0006	0.0004	0.0098	0.0016	—	0.0048	0.0014	0.0036	0.0014	0.0002	0.0039	0083
—	—	—	—	—	—	—	—	—	—	—	0084
—	—	—	—	—	—	—	—	—	—	—	0085
—	—	—	—	—	—	—	—	—	—	—	0086
—	—	—	—	—	—	—	—	—	—	—	0087
—	—	—	—	—	—	—	—	—	—	—	0088
—	—	—	—	—	—	—	—	—	—	—	0089
—	—	—	—	—	—	—	—	—	—	—	0090
—	—	—	—	—	—	—	—	—	—	—	0091
—	—	—	—	—	—	—	—	—	—	—	0092
—	—	—	—	—	—	—	—	—	—	—	0093
—	—	—	—	—	—	—	—	—	—	—	0094
—	—	—	—	—	—	—	—	—	—	—	0095
—	—	—	—	—	—	—	—	—	—	—	0096
—	0.0002	0.0002	—	0.0000	—	0.0001	—	—	—	0.0000	0097
—	0.0001	0.0000	0.0000	0.0004	0.0031	0.0000	—	—	0.0002	0.0063	0098
0.0000	—	0.0009	0.0001	0.0003	—	0.0005	—	0.0000	—	—	0099
—	0.0000	0.0000	—	0.0000	0.0004	0.0000	—	—	0.0000	0.0007	0100
—	—	—	—	—	—	—	—	—	—	—	0101
—	—	—	—	—	—	—	—	—	—	—	0102
0.0001	0.0013	0.0003	0.0004	0.0001	—	0.0001	0.0001	—	0.0002	0.0001	0103
—	—	—	—	—	—	—	—	—	—	—	0104
—	—	—	—	—	—	—	—	—	—	—	0105
—	—	—	—	—	—	—	—	—	—	—	0106
0.0005	0.0002	0.0007	0.0002	0.0016	0.0005	0.0005	0.0000	0.0000	0.0031	0.0008	0107
0.0002	0.0003	0.0002	0.0003	0.0035	0.0005	0.0013	0.0000	0.0013	0.0002	0.0001	0108
0.0014	0.0024	0.0011	0.0021	0.0018	0.0007	0.0009	0.0001	0.0008	0.0012	0.0046	0109
—	—	—	—	—	—	—	—	—	—	—	0110
—	—	—	0.0000	—	—	0.0001	—	0.0000	—	—	0111
0.0000	0.0008	0.0001	—	0.0000	—	0.0001	0.0000	—	0.0004	—	0112
0.0167	0.0001	0.0008	0.0005	—	0.0173	0.0014	0.0000	0.0038	0.0005	0.0006	0113
0.0002	0.0002	0.0003	0.0002	0.0002	0.0000	0.0002	0.0001	0.0001	0.0001	0.0001	0114
0.0017	0.0000	0.0036	0.0009	0.0007	0.0004	0.0003	0.0000	0.0188	0.0010	0.0000	0115
0.0007	0.0036	0.0014	0.0029	0.0018	0.0026	0.0008	0.0040	0.0011	0.0057	0.0016	0116
0.0024	0.0005	0.0007	—	—	0.0006	0.0004	0.0002	0.0008	—	0.0007	0117
—	—	—	—	—	—	—	—	—	—	—	0118
—	—	—	—	—	—	—	—	—	—	—	0119
0.0004	0.0004	0.0027	0.0021	0.0004	0.0015	0.0007	0.0008	0.0011	0.0017	0.0043	0120
0.0016	0.0016	0.0025	0.0017	0.0007	0.0026	0.0025	0.0035	0.0026	0.0010	0.0033	0121
—	—	—	—	—	—	—	—	—	—	—	0122
—	0.0004	—	—	—	—	—	—	—	—	—	0123
—	—	—	—	—	—	—	—	—	—	—	0124
—	—	—	—	—	—	—	—	—	—	—	0125
—	—	—	—	—	—	—	—	—	—	—	0126
0.0533	0.0242	0.0430	0.0548	0.0461	0.0492	0.0602	0.0492	0.0504	0.0464	0.0463	0127
0.4596	0.4704	0.2753	0.4193	0.4869	0.3624	0.4740	0.2861	0.3875	0.3615	0.3347	Total

Matrix A (continued)

	23	24	25	26	27	28	29	30	31	32	33
0066	—	—	—	—	—	—	—	—	—	—	—
0067	—	—	0.0000	—	0.0002	0.0006	0.0008	—	—	—	0.0001
0068	—	—	0.0000	—	0.0001	—	0.0000	—	0.0001	—	—
0069	0.0001	—	0.0046	—	0.0008	—	0.0000	—	—	0.0006	0.0000
0070	0.0373	0.0144	0.0017	0.0009	0.0011	0.0008	0.0021	0.0011	0.0033	0.0007	—
0071	0.0000	—	0.0015	0.0005	0.0125	0.0024	0.0011	0.0005	0.0126	0.0030	—
0072	—	—	0.0000	—	0.0000	0.0000	—	—	—	—	—
0073	—	—	—	—	—	—	—	—	—	—	—
0074	—	—	0.0009	0.0001	0.0012	0.0007	0.0016	—	0.0015	0.0004	—
0075	—	—	0.0003	0.0000	0.0004	0.0002	0.0004	—	0.0004	0.0001	—
0076	—	—	—	—	—	—	—	—	—	—	—
0077	—	—	—	—	—	—	—	—	—	—	—
0078	—	—	—	—	—	—	—	—	—	—	—
0079	0.0008	0.0002	0.0033	0.0024	0.0002	0.0003	0.0005	—	0.0012	0.0002	—
0080	0.0000	—	0.0001	0.0001	0.0014	0.0001	—	—	0.0007	—	—
0081	0.0030	0.0015	0.0023	0.0023	0.0000	0.0008	0.0002	—	0.0003	0.0003	—
0082	0.0013	0.0027	0.0035	0.0047	0.0009	0.0011	0.0009	0.0001	0.0015	0.0008	—
0083	0.0091	—	0.0020	0.0161	0.0015	0.0022	0.0006	0.0028	0.0012	0.0013	—
0084	—	—	—	—	—	—	—	—	—	—	—
0085	—	—	—	—	—	—	—	—	—	—	—
0086	—	—	—	—	—	—	—	—	—	—	—
0087	—	—	—	—	—	—	—	—	—	—	—
0088	—	—	—	—	—	—	—	—	—	—	—
0089	—	—	—	—	—	—	—	—	—	—	—
0090	—	—	—	—	—	—	—	—	—	—	—
0091	—	—	—	—	—	—	—	—	—	—	—
0092	—	—	—	—	—	—	—	—	—	—	—
0093	—	—	—	—	—	—	—	—	—	—	—
0094	—	—	—	—	—	—	—	—	—	—	—
0095	—	—	—	—	—	—	—	—	—	—	—
0096	—	—	—	—	—	—	—	—	—	—	—
0097	—	—	0.0011	—	0.0000	—	0.0000	—	0.0000	—	—
0098	0.0001	—	0.0041	0.0004	0.0000	0.0000	0.0001	—	—	0.0000	0.0000
0099	0.0000	—	0.0000	0.0002	0.0000	—	0.0000	—	0.0000	—	—
0100	0.0000	—	0.0004	0.0000	—	0.0000	0.0000	—	—	—	—
0101	—	—	—	—	—	—	—	—	—	—	—
0102	—	—	—	—	—	—	—	—	—	—	—
0103	0.0000	—	0.0013	0.0003	0.0000	0.0001	0.0038	0.0000	0.0003	—	—
0104	—	—	—	—	—	—	—	—	—	—	—
0105	—	—	—	—	—	—	—	—	—	—	—
0106	—	—	—	—	—	—	—	—	—	—	—
0107	0.0011	—	0.0004	—	0.0001	0.0003	0.0009	0.0003	0.0008	0.0004	—
0108	0.0000	—	0.0269	0.0467	0.0202	0.0003	0.0015	—	0.0003	0.0053	—
0109	0.0005	0.0206	0.0009	0.0007	—	0.0002	0.0004	—	0.0000	—	—
0110	—	—	—	—	—	—	—	—	—	—	—
0111	—	—	0.0000	—	0.0000	—	0.0000	—	0.0000	0.0000	—
0112	0.0000	—	0.0000	—	—	0.0004	0.0004	—	—	—	—
0113	—	—	0.0040	0.0053	0.0025	0.0001	0.0010	—	0.0012	0.0005	—
0114	0.0001	—	0.0023	0.0000	—	0.0001	0.0001	0.0002	0.0006	0.0001	—
0115	0.0001	—	0.0025	0.0003	0.0021	—	0.0000	0.0000	0.0004	0.0003	—
0116	0.0002	—	0.0045	0.0007	0.0029	0.0010	0.0024	0.0017	0.0017	0.0015	—
0117	0.0000	—	0.0004	0.0001	0.0152	0.0001	—	0.0014	0.0057	0.0008	—
0118	—	—	—	—	—	—	—	—	—	—	—
0119	—	—	—	—	—	—	—	—	—	—	—
0120	0.0028	0.0024	0.0005	0.0038	0.0009	0.0005	0.0003	0.0007	0.0013	0.0014	—
0121	0.0012	0.0011	0.0014	0.0022	0.0011	0.0011	0.0015	0.0031	0.0022	0.0020	—
0122	—	—	—	—	—	—	—	—	—	—	—
0123	—	—	—	—	—	—	—	—	—	—	—
0124	—	—	—	—	—	—	—	—	—	—	—
0125	—	—	—	—	—	—	—	—	—	—	—
0126	—	—	—	—	—	—	—	—	—	—	—
0127	0.0752	0.0800	0.0790	0.0602	0.0595	0.0203	0.0677	0.0479	0.0482	0.0594	—
Total	0.4135	0.4469	0.5118	0.4668	0.3983	0.6455	0.4962	0.3229	0.3158	0.3543	—

34	35	36	37	38	39	40	41	42	43	44	
—	—	—	—	—	—	—	—	—	—	—	0066
0.0030	0.0004	—	—	0.0001	—	—	—	—	—	—	0067
0.0000	0.0000	—	—	0.0083	—	0.0014	0.0003	0.0000	0.0001	0.0001	0068
—	0.0000	0.0006	—	—	0.0000	0.0029	0.0000	—	0.0001	0.0001	0069
0.0020	0.0004	0.0019	0.0096	0.0007	0.0007	0.0091	0.0005	0.0003	0.0001	0.0009	0070
0.0029	0.0132	0.0043	0.0045	0.0007	0.0032	0.0088	0.0063	0.0021	0.0019	0.0011	0071
0.0000	—	—	—	—	—	—	—	—	0.0005	—	0072
—	—	—	—	—	—	—	—	—	—	—	0073
0.0011	0.0000	0.0001	0.0002	0.0001	0.0009	0.0033	0.0001	0.0005	0.0002	0.0003	0074
0.0003	0.0000	0.0000	0.0001	0.0000	0.0003	0.0009	0.0000	0.0002	0.0001	0.0001	0075
—	—	—	—	—	—	—	—	—	—	—	0076
—	—	—	—	—	—	—	—	—	—	—	0077
—	—	—	—	—	—	—	—	—	—	—	0078
0.0002	0.0000	0.0003	0.0003	0.0002	0.0009	0.0017	0.0011	0.0009	0.0011	0.0003	0079
0.0001	0.0001	0.0001	—	0.0001	0.0000	—	0.0001	—	0.0010	0.0000	0080
0.0002	0.0003	0.0004	0.0026	—	0.0058	0.0037	0.0013	0.0011	0.0005	0.0001	0081
0.0032	0.0014	0.0021	0.0034	0.0001	0.0038	0.0006	0.0077	0.0004	0.0035	0.0038	0082
0.0036	0.0008	—	—	0.0029	0.0020	0.0014	0.0061	—	0.0001	0.0008	0083
—	—	—	—	—	—	—	—	—	—	—	0084
—	—	—	—	—	—	—	—	—	—	—	0085
—	—	—	—	—	—	—	—	—	—	—	0086
—	—	—	—	—	—	—	—	—	—	—	0087
—	—	—	—	—	—	—	—	—	—	—	0088
—	—	—	—	—	—	—	—	—	—	—	0089
—	—	—	—	—	—	—	—	—	—	—	0090
—	—	—	—	—	—	—	—	—	—	—	0091
—	—	—	—	—	—	—	—	—	—	—	0092
—	—	—	—	—	—	—	—	—	—	—	0093
—	—	—	—	—	—	—	—	—	—	—	0094
—	—	—	—	—	—	—	—	—	—	—	0095
—	—	—	—	—	—	—	—	—	—	—	0096
0.0000	—	0.0000	—	—	0.0001	—	0.0000	—	—	0.0000	0097
—	0.0006	0.0000	0.0002	—	—	0.0003	0.0001	0.0000	0.0000	0.0000	0098
0.0001	0.0000	—	—	—	0.0000	—	—	0.0081	—	—	0099
—	0.0001	0.0000	0.0000	—	—	0.0001	0.0001	—	0.0000	0.0000	0100
—	—	—	—	—	—	—	—	—	—	—	0101
—	—	—	—	—	—	—	—	—	—	—	0102
0.0001	0.0002	0.0005	0.0001	0.0000	0.0000	—	0.0005	0.0004	0.0004	—	0103
—	—	—	—	—	—	—	—	—	—	—	0104
—	—	—	—	—	—	—	—	—	—	—	0105
—	—	—	—	—	—	—	—	—	—	—	0106
0.0000	0.0005	0.0010	0.0005	0.0005	0.0005	0.0000	0.0015	0.0000	0.0001	0.0014	0107
0.0056	0.0305	0.0222	0.0001	0.0004	0.0030	0.0061	0.0029	0.0058	0.0042	0.0030	0108
0.0006	0.0001	0.0009	—	0.0013	0.0011	0.0014	0.0003	0.0001	—	0.0008	0109
—	—	—	—	—	—	—	—	—	—	—	0110
—	—	0.0000	—	—	—	—	0.0010	0.0000	0.0000	0.0020	0111
0.0000	—	0.0002	0.0001	0.0000	0.0000	—	0.0000	—	0.0000	0.0000	0112
0.0017	0.0063	0.0008	0.0007	0.0021	0.0016	0.0090	0.0021	0.0003	0.0025	0.0001	0113
0.0001	0.0002	0.0002	0.0007	0.0000	0.0002	0.0002	0.0001	0.0002	0.0000	0.0000	0114
0.0005	0.0004	0.0010	—	—	0.0055	0.0354	0.0011	—	0.0002	0.0003	0115
0.0015	0.0020	0.0014	0.0034	0.0020	0.0011	0.0013	0.0014	0.0011	0.0033	0.0006	0116
0.0006	0.0001	—	0.0001	0.0011	0.0007	0.0000	0.0006	0.0002	—	0.0019	0117
—	—	—	—	—	—	—	—	—	—	—	0118
—	—	—	—	—	—	—	—	—	—	—	0119
0.0014	0.0004	0.0002	0.0007	0.0001	0.0015	0.0004	0.0020	0.0004	0.0007	0.0003	0120
0.0025	0.0014	0.0011	0.0021	0.0026	0.0035	0.0012	0.0074	0.0027	0.0032	0.0018	0121
—	—	—	—	—	—	—	—	—	—	—	0122
—	—	—	—	—	—	—	—	—	—	—	0123
—	—	—	—	—	—	—	—	—	—	—	0124
—	—	—	—	—	—	—	—	—	—	—	0125
—	—	—	—	—	—	—	—	—	—	—	0126
0.0429	0.0604	0.0639	0.0363	0.0697	0.0329	0.0493	0.0478	0.0498	0.0619	0.0592	0127
0.2772	0.4338	0.4757	0.2257	0.4365	0.2611	0.3903	0.3218	0.4285	0.4010	0.2929	Total

56	57	58	59	60	61	62	63	64	65	66	
—	—	—	—	—	—	—	—	—	—	—	0001
—	—	—	—	—	—	—	—	—	—	—	0002
—	—	—	—	—	—	—	—	—	—	—	0003
—	—	—	—	—	—	—	—	0.0060	—	0.0000	0004
—	—	—	—	—	—	—	—	—	—	—	0005
—	—	—	—	—	—	—	—	—	—	—	0006
—	—	—	—	—	—	—	—	—	0.0004	—	0007
0.0050	0.0027	0.0030	0.0261	0.0007	0.0107	0.0531	0.0219	0.0023	0.0026	0.0313	0008
0.0011	—	0.0002	—	—	0.0000	0.0000	0.0002	—	—	—	0009
0.0000	0.1056	0.0007	0.0014	0.0001	0.0030	0.0011	—	0.0001	—	0.0013	0010
0.0499	0.0136	0.0662	0.0177	0.0016	0.0035	0.0014	0.0049	0.0001	—	0.0021	0011
0.0154	—	—	0.0081	0.0021	0.0006	0.0000	—	0.0007	—	0.0002	0012
0.0244	0.0117	0.0068	0.0075	0.0013	0.0047	0.0028	0.0123	0.0000	—	—	0013
—	0.0012	0.0054	0.0022	0.0037	0.0042	0.0055	0.0036	0.0037	—	0.0017	0014
—	0.0004	0.0015	0.0011	0.0084	0.0079	0.0140	0.0074	0.0001	—	—	0015
—	0.0000	0.0005	0.0440	0.0002	0.0006	0.0000	0.0010	—	—	—	0016
—	—	—	—	—	—	—	—	—	—	—	0017
0.0159	0.0000	0.0019	0.0594	0.0061	0.0137	0.0065	0.0035	0.0071	—	0.0021	0018
0.0025	0.0004	0.0118	0.0020	0.0002	0.0021	0.0003	0.0035	0.0010	—	—	0019
—	0.0000	0.0004	—	0.0011	0.0004	0.0000	0.0003	0.0000	—	—	0020
—	—	—	—	—	—	—	—	—	—	—	0021
0.0406	0.0000	0.0035	—	0.0007	0.0012	0.0006	0.0001	0.0001	—	—	0022
—	0.0000	0.0000	—	—	0.0000	—	0.0001	—	—	—	0023
0.0001	—	0.0059	—	0.0018	0.0011	0.0002	0.0087	—	—	—	0024
—	0.0000	—	—	0.1611	0.0013	0.0067	0.0033	—	—	—	0025
—	—	—	—	0.0120	—	0.0017	—	—	—	—	0026
—	—	—	—	—	—	—	—	—	—	—	0027
—	—	—	—	0.0030	0.0622	0.0114	0.0009	—	—	—	0028
—	0.0001	0.0015	0.0828	0.0003	0.0010	0.0017	0.0022	0.0003	—	—	0029
—	0.0000	—	—	0.0208	0.0386	0.0342	—	0.0000	—	—	0030
—	—	—	—	—	—	0.0012	0.0000	—	—	—	0031
—	—	0.0000	—	—	0.0000	0.0022	—	—	—	—	0032
—	—	—	—	—	—	0.0047	—	—	—	—	0033
—	—	—	—	—	—	0.0021	—	—	—	—	0034
—	—	—	—	—	—	0.0027	—	—	—	—	0035
—	—	—	—	—	—	—	—	—	—	—	0036
—	0.0001	0.0004	—	0.0047	0.0155	0.0125	0.0022	0.0002	—	—	0037
—	0.0000	—	0.0049	—	0.0084	0.0001	—	0.0001	—	—	0038
—	—	—	—	—	—	—	—	—	—	—	0039
—	—	—	—	—	—	—	—	—	—	—	0040
—	0.0000	0.0002	0.0011	0.0025	0.0180	0.0008	—	0.0004	—	—	0041
—	0.0000	—	0.0063	—	0.0000	0.0002	—	0.0000	—	—	0042
—	0.0000	0.0001	—	0.0004	0.0005	0.0003	0.0001	—	—	—	0043
—	—	—	—	—	0.0017	0.0028	—	—	—	—	0044
—	—	—	—	—	—	—	—	—	—	—	0045
—	—	—	0.0892	—	—	—	—	—	—	—	0046
—	0.0000	0.0000	—	0.0029	0.0009	0.0001	0.0001	—	—	—	0047
—	—	—	—	—	—	—	—	—	—	—	0048
—	0.0000	0.0000	—	0.0033	0.0005	0.0001	0.0001	0.0000	—	—	0049
—	0.0000	—	0.0025	0.0002	0.0004	0.0018	—	—	—	—	0050
—	0.0001	0.0001	—	0.0032	0.0242	0.0015	0.0291	0.0001	—	—	0051
—	—	0.0000	—	0.0006	0.0013	0.0007	0.0248	—	—	—	0052
—	—	—	—	—	—	—	—	—	—	—	0053
—	—	0.0000	—	—	0.0000	—	0.0000	—	—	—	0054
—	0.0002	0.0001	—	0.0006	0.0087	0.0008	0.0188	0.0002	0.0002	0.0001	0055
0.0002	0.0002	0.0002	0.0002	0.0012	0.0007	0.0007	0.0002	0.0002	—	0.0001	0056
0.0347	0.0074	0.0007	—	0.0007	0.0050	0.0123	0.0105	0.0010	—	0.0005	0057
—	—	0.0151	0.0013	0.0002	0.0030	0.0023	0.0004	—	—	—	0058
—	0.0007	0.0008	0.0005	0.0002	0.0000	—	0.0000	0.0004	0.0011	0.0015	0059
0.0019	0.0008	0.0003	0.0019	0.0328	0.0000	0.0009	0.0023	0.0046	0.0019	0.0057	0060
0.0002	0.0001	—	—	—	0.0056	—	—	—	—	—	0061
0.0018	0.0061	0.0020	—	0.0029	0.0049	0.0086	0.0004	0.0112	0.0001	0.0070	0062
0.0005	0.0020	0.0012	—	0.0021	0.0033	0.0004	0.0008	0.0017	0.0024	0.0007	0063
0.0001	0.0005	0.0000	—	—	0.0008	0.0001	0.0000	0.0334	0.0176	0.0448	0064
—	—	—	—	—	—	—	—	0.0005	0.0002	0.1452	0065

Matrix A (continued)

	45	46	47	48	49	50	51	52	53	54	55
0066	—	—	—	—	—	—	—	—	—	—	—
0067	0.0001	0.0013	0.0076	0.0001	—	0.0000	0.0000	—	—	0.0016	—
0068	—	—	—	0.0002	—	—	0.0065	0.0003	—	0.0094	0.0195
0069	0.0003	0.0008	0.0002	0.0004	—	—	0.0019	0.0031	0.0045	0.0025	0.0007
0070	—	0.0000	0.0002	0.0000	—	—	0.0008	0.0001	0.0012	0.0013	0.0002
0071	0.0003	0.0089	0.0018	0.0068	0.0018	0.0037	0.0049	0.0010	0.0023	0.0043	0.0000
0072	0.0001	—	—	0.0017	—	—	0.0001	0.0680	—	—	0.0000
0073	—	—	—	—	—	—	—	—	—	—	—
0074	0.0010	0.0002	—	0.0016	0.0010	0.0018	0.0003	0.0002	0.0009	—	0.0004
0075	0.0003	0.0000	—	0.0005	—	0.0005	0.0001	0.0000	0.0003	—	0.0001
0076	—	—	—	—	—	—	—	—	—	—	—
0077	—	—	—	—	—	—	—	—	—	—	—
0078	—	—	—	—	—	—	—	—	—	—	—
0079	0.0007	0.0001	0.0000	0.0002	0.0095	0.0072	0.0058	0.0011	0.0029	0.0015	0.0010
0080	0.0003	—	0.0002	0.0006	—	—	—	0.0003	0.0001	0.0000	—
0081	0.0032	0.0007	0.0003	—	0.0180	0.0032	0.0009	0.0042	0.0128	0.0129	0.0053
0082	0.0035	0.0044	0.0003	0.0007	0.0031	0.0027	0.0051	0.0024	0.0002	0.0001	0.0059
0083	0.0341	0.0009	0.0041	0.0034	—	0.0004	0.0001	0.0050	—	0.0083	0.0032
0084	—	—	—	—	—	—	—	—	—	—	—
0085	—	—	—	—	—	—	—	—	—	—	—
0086	—	—	—	—	—	—	—	—	—	—	—
0087	—	—	—	—	—	—	—	—	—	—	—
0088	—	—	—	—	—	—	—	—	—	—	—
0089	—	—	—	—	—	—	—	—	—	—	—
0090	—	—	—	—	—	—	—	—	—	—	—
0091	—	—	—	—	—	—	—	—	—	—	—
0092	—	—	—	—	—	—	—	—	—	—	—
0093	—	—	—	—	—	—	—	—	—	—	—
0094	—	—	—	—	—	—	—	—	—	—	—
0095	—	—	—	—	—	—	—	—	—	—	—
0096	—	—	—	—	—	—	—	—	—	—	—
0097	0.0001	—	0.0000	0.0000	—	—	0.0001	0.0003	0.0007	—	0.0000
0098	0.0002	0.0000	0.0000	0.0000	0.0011	0.0013	0.0009	0.0001	0.0014	—	—
0099	0.0000	0.0001	0.0004	0.0001	—	—	0.0000	—	0.0001	—	0.0000
0100	0.0000	0.0001	0.0000	0.0000	0.0001	0.0010	0.0004	0.0000	0.0001	—	—
0101	—	—	—	—	—	—	—	—	—	—	—
0102	—	—	—	—	—	—	—	—	—	—	—
0103	0.0002	0.0000	0.0000	0.0012	—	0.0000	0.0003	0.0005	0.0057	0.0004	0.0000
0104	—	—	—	—	—	—	—	—	—	—	—
0105	—	—	—	—	—	—	—	—	—	—	—
0106	—	—	—	—	—	—	—	—	—	—	—
0107	0.0008	0.0002	0.0018	0.0007	—	—	0.0000	0.0004	0.0162	—	0.0017
0108	0.0027	—	0.0005	0.0004	0.0375	0.0004	0.0008	0.0013	0.0304	0.0009	0.0007
0109	0.0008	0.0057	0.0002	—	0.0306	0.0009	0.0022	0.0191	0.0173	0.0036	0.0029
0110	—	—	—	—	—	—	—	—	—	—	—
0111	—	0.0000	—	0.0000	—	—	—	0.0001	—	0.0000	—
0112	—	0.0001	0.0000	0.0001	—	0.0000	0.0002	0.0001	0.0000	—	0.0001
0113	—	0.0019	0.0009	0.0024	0.0010	0.0006	0.0024	0.0011	0.0003	0.0039	0.0028
0114	0.0001	0.0001	0.0000	0.0001	—	—	0.0001	0.0004	0.0002	0.0001	0.0000
0115	0.0021	0.0000	—	0.0006	—	0.0118	0.0022	0.0028	0.0094	0.0003	0.0213
0116	0.0031	0.0052	0.0068	0.0030	0.0039	0.0006	0.0030	0.0022	0.0014	0.0004	0.0007
0117	0.0003	—	—	0.0299	—	0.0007	0.0021	0.0006	—	0.0002	—
0118	—	—	—	0.0040	—	—	—	—	—	—	—
0119	—	—	—	—	—	—	—	—	—	—	—
0120	0.0068	0.0007	0.0003	0.0005	0.0004	0.0014	0.0012	0.0017	0.0004	0.0022	0.0024
0121	0.0052	0.0031	0.0018	0.0117	0.0109	0.0030	0.0052	0.0031	0.0007	0.0031	0.0037
0122	—	—	—	—	—	—	—	—	—	—	—
0123	—	—	—	—	—	—	—	—	—	—	—
0124	—	—	—	—	—	—	—	—	—	—	—
0125	—	—	—	—	—	—	—	—	—	—	—
0126	—	—	—	—	—	—	—	—	—	—	—
0127	0.0439	0.0680	0.0743	0.0722	0.0486	0.0292	0.0365	0.0673	0.0395	0.0477	0.0439
Total	0.2818	0.4109	0.4825	0.4759	0.3157	0.2397	0.2548	0.3332	0.2910	0.3583	0.3695

56	57	58	59	60	61	62	63	64	65	66	
—	—	—	0.0049	—	—	—	—	—	—	—	0066
—	—	—	—	—	0.0001	—	—	0.0001	—	—	0067
—	0.0007	0.0001	0.0238	—	0.0001	—	0.0000	0.0000	—	—	0068
1.0602	—	0.0060	0.0016	0.0014	0.0008	0.0000	—	0.0000	—	0.0000	0069
—	0.0000	0.0004	0.0027	0.0004	0.0006	0.0005	0.0004	0.0031	—	0.0001	0070
—	0.0031	0.0128	—	0.0013	0.0103	0.0014	0.0004	0.0016	—	0.0035	0071
—	—	—	—	—	—	—	—	—	—	—	0072
—	—	—	—	—	—	—	—	—	—	—	0073
—	0.0032	0.0004	—	0.0002	0.0005	0.0002	0.0002	—	—	—	0074
—	0.0009	0.0001	—	0.0000	0.0001	0.0001	0.0001	0.0001	—	0.0002	0075
—	—	—	—	—	—	—	—	—	—	—	0076
—	—	—	—	—	—	—	—	—	0.0001	—	0077
—	—	—	—	—	—	—	—	—	—	—	0078
1.0055	0.0212	0.0014	0.0004	0.0011	0.0007	0.0001	0.0003	0.0012	0.0069	0.0002	0079
—	—	—	—	0.0002	0.0008	0.0002	0.0001	0.0000	—	0.0001	0080
1.0430	0.0001	0.0070	0.0031	0.0002	0.0003	0.0000	—	0.0097	0.0596	0.0012	0081
1.0027	0.0000	0.0124	0.0027	0.0018	0.0016	0.0002	0.0003	0.0020	0.0049	0.0019	0082
—	0.0000	0.0089	—	0.0015	0.0001	0.0011	0.0015	0.0017	0.0020	0.0015	0083
—	—	—	—	—	—	—	—	—	—	—	0084
—	—	—	—	—	—	—	—	—	—	—	0085
—	—	—	—	—	—	—	—	—	—	0.0003	0086
—	—	—	—	—	—	—	—	—	—	—	0087
—	—	—	—	—	—	—	—	—	—	—	0088
—	—	—	—	—	—	—	—	—	—	—	0089
—	—	—	—	—	—	—	—	—	—	—	0090
—	—	—	—	—	—	—	—	—	—	—	0091
—	—	—	—	—	—	—	—	—	—	—	0092
—	—	—	—	—	—	—	—	—	—	—	0093
—	—	—	—	—	—	—	—	—	—	—	0094
—	—	—	—	—	—	—	—	—	—	—	0095
—	—	—	—	—	—	—	—	—	—	—	0096
—	—	—	—	0.0001	0.0015	0.0000	0.0001	—	—	—	0097
—	0.0032	0.0000	—	—	0.0012	0.0001	0.0002	—	—	—	0098
—	0.0020	—	—	0.0001	0.0058	0.0002	—	0.0000	—	—	0099
—	0.0013	—	—	0.0000	0.0001	0.0000	0.0000	—	—	0.0001	0100
—	—	—	—	—	—	—	—	—	—	—	0101
—	—	—	—	—	—	—	—	—	—	—	0102
—	0.0000	0.0001	0.0013	0.0030	0.0021	0.0010	0.0000	0.0000	—	—	0103
—	—	—	—	—	—	—	—	0.0000	—	0.0000	0104
—	—	—	—	—	—	—	—	—	—	—	0105
—	—	—	—	—	—	—	—	—	—	—	0106
—	0.0000	0.0024	—	0.0008	0.0021	0.0013	0.0001	0.0000	—	0.0001	0107
—	0.0066	0.0001	—	0.0172	0.0040	0.0045	0.0000	0.0014	—	0.0007	0108
0.0038	0.0380	0.0088	—	0.0007	0.0013	0.0005	0.0000	0.0005	0.0019	0.0007	0109
—	—	—	—	—	—	—	—	—	—	—	0110
—	—	0.0000	—	—	0.0000	—	—	0.0067	—	0.0005	0111
—	0.0002	0.0000	—	0.0000	0.0004	0.0001	0.0002	0.0001	—	0.0001	0112
—	0.0032	0.0039	0.0004	0.0058	0.0055	0.0016	0.0027	0.0002	—	0.0004	0113
—	0.0001	0.0003	—	0.0009	0.0032	0.0004	0.0004	0.0000	—	0.0000	0114
—	0.0021	0.0089	0.0001	0.0001	0.0005	0.0001	0.0006	—	—	0.0006	0115
0.0008	0.0014	0.0010	0.0043	0.0131	0.0040	0.0087	0.0022	0.0019	—	0.0015	0116
—	0.0002	0.0013	—	0.0137	—	0.0000	0.0001	0.0001	—	—	0117
—	—	—	—	—	—	—	—	—	—	—	0118
—	—	—	—	—	—	—	—	—	—	—	0119
0.0019	0.0004	0.0024	0.0008	0.0010	0.0004	0.0006	0.0003	0.0013	0.0017	0.0007	0120
0.0028	0.0015	0.0031	0.0033	0.0026	0.0009	0.0025	0.0025	0.0023	0.0017	0.0018	0121
—	—	—	—	—	—	—	—	—	—	—	0122
—	—	—	—	—	—	—	—	—	—	—	0123
—	—	—	—	—	—	—	—	0.0003	—	—	0124
—	—	—	—	—	—	—	—	—	—	—	0125
—	—	—	—	—	—	—	—	—	—	—	0126
0.0464	0.0615	0.0362	0.0872	0.0639	0.0527	0.0409	0.0446	0.0380	0.0415	0.1022	0127
0.3612	0.3052	0.2490	0.4968	0.4146	0.3622	0.2675	0.2211	0.1481	0.1559	0.3628	Total

Matrix A (continued)

	67	68	69	70	71	72	73	74	75	76	77
0001	—	0.0003	—	—	—	—	—	—	—	—	0.0005
0002	0.0001	—	—	—	—	—	—	0.0002	—	—	—
0003	—	—	—	—	—	—	—	—	—	—	—
0004	0.0026	0.0001	0.0092	0.0005	0.5440	0.0144	0.0411	0.0221	0.2253	0.4656	0.3995
0005	—	—	—	—	—	—	—	—	—	—	—
0006	—	—	—	0.0006	—	—	—	—	—	—	—
0007	—	0.0002	0.0000	—	—	—	—	—	—	—	0.0057
0008	0.0010	0.0004	0.0044	0.0070	0.0003	0.0122	—	—	0.0001	—	—
0009	—	—	—	—	—	—	—	—	—	—	—
0010	0.0000	0.0035	0.0000	0.0003	0.0000	0.0000	0.0000	—	0.0018	—	—
0011	0.0000	0.0056	0.0000	0.0002	0.0000	0.0035	—	—	—	—	—
0012	—	—	0.0001	—	—	—	0.0036	—	—	—	0.0000
0013	—	—	—	—	—	—	—	—	—	0.0008	0.0036
0014	0.0007	0.0007	0.0002	—	0.0020	—	—	—	—	0.0003	0.0003
0015	—	—	—	—	0.0000	0.0090	0.0135	0.0357	0.0094	0.0003	0.0003
0016	—	—	—	—	—	—	0.0026	—	—	0.0002	0.0002
0017	—	—	—	—	—	—	—	—	—	—	—
0018	0.0002	0.0000	0.0016	0.0032	0.0005	0.0125	0.0027	0.0041	0.0034	0.0019	0.0016
0019	—	—	—	—	—	—	—	0.0009	0.0018	—	—
0020	—	—	—	—	—	—	—	—	—	—	—
0021	—	—	—	—	—	—	—	—	—	—	—
0022	0.0000	0.0111	0.0003	—	0.0000	—	—	—	—	0.0075	0.0013
0023	—	—	—	—	—	—	—	—	—	—	—
0024	—	—	—	—	—	—	—	—	—	0.0000	—
0025	—	—	—	—	—	—	—	—	—	0.0001	—
0026	—	—	—	—	—	—	—	—	—	—	—
0027	—	—	—	—	—	—	—	—	—	—	—
0028	—	—	—	—	—	—	—	—	—	—	—
0029	—	—	0.0007	—	—	—	—	—	0.0009	—	—
0030	—	—	—	—	—	—	—	—	—	—	—
0031	—	—	—	—	—	—	—	—	—	—	—
0032	—	—	—	—	—	—	—	—	—	—	—
0033	—	—	—	—	—	—	—	—	—	0.0004	—
0034	0.0001	—	—	—	—	—	—	—	—	—	—
0035	—	—	—	—	—	—	—	—	—	—	—
0036	—	—	—	—	—	—	—	—	—	—	—
0037	—	—	—	—	—	—	—	—	—	—	—
0038	—	—	—	—	—	—	—	—	—	—	—
0039	—	—	—	—	—	—	—	—	—	—	—
0040	—	—	—	—	—	—	0.0016	—	—	—	—
0041	—	—	—	—	—	—	—	—	—	—	—
0042	—	—	—	—	—	—	—	—	—	—	—
0043	—	—	—	—	—	—	—	—	—	—	—
0044	—	—	—	—	—	—	—	—	—	—	—
0045	—	—	—	—	—	—	—	—	—	—	—
0046	—	—	—	—	—	—	—	—	—	—	—
0047	—	—	—	—	—	—	0.0015	—	—	—	—
0048	—	—	—	—	—	—	—	—	—	—	—
0049	—	—	—	—	—	—	—	—	—	—	—
0050	—	—	—	—	—	—	—	—	—	—	—
0051	—	—	—	—	—	—	—	—	—	—	—
0052	—	—	—	—	—	—	—	—	—	—	—
0053	—	—	—	—	—	—	—	—	—	—	—
0054	—	—	—	—	—	—	0.0046	—	—	—	—
0055	0.0001	0.0003	0.0006	0.0001	—	—	—	0.0005	0.0001	0.0004	0.0002
0056	0.0001	0.0001	0.0001	0.0000	—	—	—	—	0.0000	0.0000	0.0000
0057	0.0006	0.0005	0.0007	0.0003	—	—	0.0007	—	0.0002	0.0000	0.0000
0058	—	—	—	—	—	—	—	—	—	—	—
0059	0.0016	0.0004	0.0009	0.0007	—	—	—	—	0.0002	0.0028	0.0042
0060	0.0060	0.0018	0.0008	0.0017	0.0008	0.0009	0.0016	0.0008	0.0016	0.0013	0.0006
0061	—	—	—	—	—	—	0.0007	0.0007	—	—	—
0062	0.0044	0.0004	0.0049	0.0046	0.0011	0.0049	0.0058	0.0011	0.0056	0.0248	0.0268
0063	0.0014	0.0035	0.0009	0.0012	—	—	—	0.0053	0.0008	0.0037	0.0013
0064	0.0499	0.0523	0.0176	0.0313	—	0.0000	—	—	—	0.0018	0.0040
0065	0.0074	0.0003	0.0000	0.0084	—	—	—	—	0.0066	—	—

78	79	80	81	82	83	84	85	86	87	88	
—	—	—	—	—	—	—	0.0106	—	0.0000	0.9089	0001
—	—	—	—	—	—	0.5079	0.0137	0.3197	—	—	0002
—	—	—	—	—	—	—	0.0001	—	0.0001	—	0003
0.0427	0.0256	0.1655	—	—	—	—	0.0001	—	—	0.0005	0004
—	—	—	—	—	—	—	—	—	—	—	0005
—	—	—	—	—	—	—	—	—	—	—	0006
—	—	—	—	—	—	—	—	—	—	—	0007
—	—	0.0006	0.0006	0.0000	0.0000	—	—	—	—	—	0008
—	—	—	—	—	—	—	—	—	—	—	0009
—	—	—	0.0002	0.0008	0.0003	—	—	—	—	—	0010
—	—	0.0000	0.0003	0.0013	0.0005	—	—	—	—	0.0006	0011
—	—	—	0.0006	0.0001	—	—	0.0001	0.0000	0.0019	0.0046	0012
—	0.0002	0.0048	0.0002	0.0000	0.0000	—	—	—	—	—	0013
0.0018	0.0002	0.0015	0.0010	0.0004	—	—	0.0000	0.0001	0.0001	0.0001	0014
0.0018	0.0002	0.0013	0.0009	0.0003	0.0000	—	0.0000	0.0000	0.0003	0.0000	0015
—	—	—	—	—	—	—	—	—	—	—	0016
0.0010	0.0001	0.0008	—	—	—	—	—	—	—	—	0017
—	—	—	—	—	—	—	—	—	—	—	0018
0.0082	0.0011	0.0101	0.0006	0.0026	0.0001	—	0.0001	0.0006	0.0010	0.0007	0019
—	—	—	—	—	—	—	—	—	—	—	0020
—	—	—	—	—	—	—	—	—	—	—	0021
0.0030	0.0021	0.0099	0.0000	0.0001	0.0000	—	0.0011	0.0001	0.0046	0.0006	0022
—	—	—	0.0005	0.0003	0.0001	—	—	—	—	—	0023
—	—	—	—	—	—	—	—	—	—	—	0024
—	—	—	—	—	—	—	—	—	—	—	0025
—	—	—	—	—	—	—	—	—	—	—	0026
—	—	—	—	—	—	—	—	—	—	—	0027
—	—	—	—	—	—	—	—	—	—	—	0028
—	—	—	—	—	—	—	—	—	—	—	0029
—	—	—	—	—	—	—	—	—	—	—	0030
—	—	—	—	—	—	—	—	—	—	—	0031
—	—	—	—	—	—	—	—	—	—	—	0032
—	—	—	—	—	—	—	—	—	—	—	0033
—	—	—	—	—	—	—	—	—	—	—	0034
—	—	—	—	—	—	—	—	—	—	—	0035
—	—	—	—	—	—	—	—	—	—	—	0036
—	—	—	—	—	—	—	—	—	—	—	0037
—	—	—	—	—	—	—	—	—	—	—	0038
—	—	—	—	—	—	—	—	—	—	—	0039
—	—	—	—	—	—	—	—	—	—	—	0040
—	—	—	—	—	—	—	—	—	—	—	0041
—	—	—	—	—	—	—	—	—	—	—	0042
—	—	—	—	—	—	—	—	—	—	—	0043
—	—	—	—	—	—	—	—	—	—	—	0044
—	—	—	—	—	—	—	—	—	—	—	0045
—	—	—	—	—	—	—	—	—	—	—	0046
—	—	—	—	—	—	—	—	—	—	—	0047
—	—	—	—	—	—	—	—	—	—	—	0048
—	—	—	—	—	—	—	—	—	—	—	0049
—	—	—	—	—	—	—	—	—	—	—	0050
—	—	—	—	—	—	—	—	—	—	—	0051
—	—	—	—	—	—	—	—	—	—	—	0052
—	—	—	—	—	—	—	—	—	—	—	0053
—	—	—	—	—	—	—	—	—	—	—	0054
0.0007	0.0015	0.0008	0.0002	0.0002	0.0003	0.0002	0.0001	0.0000	0.0001	0.0001	0055
—	—	—	—	—	—	—	—	—	—	—	0056
0.0000	—	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0057
—	—	0.0001	0.0002	0.0001	0.0001	0.0002	0.0001	0.0001	0.0002	0.0004	0058
—	—	—	—	—	—	—	—	—	—	—	0059
—	0.0009	0.0010	0.0005	0.0016	0.0004	—	0.0006	0.0002	0.0009	0.0007	0060
0.0004	0.0007	0.0019	0.0004	0.0011	0.0014	0.0011	0.0118	0.0002	0.0018	0.0021	0061
—	—	—	—	—	—	—	—	—	—	—	0062
0.0158	0.0015	0.0458	0.0033	0.0029	0.0027	0.0007	0.0032	0.0022	0.0050	0.0044	0063
0.0055	0.0124	0.0074	0.0008	0.0007	0.0020	0.0019	0.0010	0.0003	0.0005	0.0006	0064
0.0020	0.0038	—	0.0005	0.0000	—	—	—	0.0031	—	0.0000	0065
—	—	—	—	—	—	—	—	—	—	—	0066

Matrix A (continued)

	67	68	69	70	71	72	73	74	75	76	77
0066	—	—	—	—	—	—	0.0039	0.0000	—	—	—
0067	0.0002	0.0031	0.0019	—	0.0007	—	0.0001	—	—	—	—
0068	—	—	—	—	—	—	—	—	—	—	—
0069	—	0.0006	0.0606	0.0000	—	0.0008	0.0006	0.0002	0.0002	—	—
0070	—	0.0024	0.0018	0.0272	0.0000	0.0011	0.0066	0.0013	0.0006	0.0000	0.0000
0071	0.0048	0.0053	0.0345	0.0003	0.0724	0.0427	0.3942	0.1868	0.1139	0.0001	0.0292
0072	—	—	—	—	—	0.0639	0.0046	0.0000	0.0000	—	—
0073	—	—	—	—	—	—	—	—	—	—	—
0074	—	—	—	—	—	0.0002	0.0693	0.0559	0.0001	—	—
0075	0.0000	0.0020	0.0035	0.0002	0.0000	0.0453	0.0035	0.0151	0.0185	—	0.0000
0076	—	—	—	—	—	—	—	—	—	—	—
0077	—	—	—	—	—	—	0.0009	—	—	—	0.0085
0078	—	—	—	—	—	—	—	—	—	—	—
0079	0.0021	0.0018	0.0130	0.0320	0.0000	0.0013	0.0067	0.0036	0.0018	0.0001	0.0020
0080	—	0.0002	0.0002	—	0.0008	0.0063	0.0306	0.0192	—	—	—
0081	0.0003	0.0063	0.0169	0.0322	0.0003	0.0104	—	0.0036	0.0049	—	0.0012
0082	0.0008	0.0094	0.0029	0.0045	0.0001	0.0048	0.0054	0.0049	0.0037	0.0002	0.0001
0083	0.0018	0.0023	0.0041	0.0025	—	0.0020	0.0023	0.0019	0.0014	0.0001	0.0001
0084	—	—	—	—	—	—	—	—	—	—	—
0085	—	—	—	—	—	—	—	—	—	—	—
0086	—	—	—	—	—	—	—	—	—	—	—
0087	—	—	—	—	—	—	—	—	—	—	—
0088	—	—	—	—	—	—	—	—	—	—	—
0089	—	—	—	—	—	—	—	—	—	—	—
0090	—	—	—	—	—	—	—	—	—	—	—
0091	—	—	—	—	—	—	—	—	—	—	—
0092	—	—	—	—	—	—	—	—	—	—	—
0093	—	—	0.0013	0.0010	—	—	—	—	—	—	—
0094	—	—	—	—	—	—	—	—	—	—	—
0095	—	—	—	—	—	—	—	—	—	—	—
0096	—	—	—	—	—	—	—	—	—	—	—
0097	—	—	—	—	—	0.0121	—	0.0007	0.0007	0.0001	0.0007
0098	0.0000	0.0000	0.0002	0.0063	0.0000	0.0113	—	0.0004	0.0004	—	0.0004
0099	0.0000	—	0.0002	0.0002	—	0.0026	—	0.0003	0.0006	—	—
0100	0.0000	0.0004	0.0000	0.0010	—	0.0013	—	0.0005	0.0005	0.0001	0.0001
0101	—	—	—	—	—	—	—	—	—	—	—
0102	—	—	—	—	—	—	—	—	—	0.0000	—
0103	—	—	—	0.0017	0.0000	0.0124	—	0.0000	0.0002	—	—
0104	0.0000	—	—	—	—	—	—	—	—	—	—
0105	—	—	—	—	—	—	—	—	—	—	—
0106	—	—	—	—	—	—	—	—	—	—	—
0107	0.0000	—	—	—	—	0.0006	—	0.0001	0.0001	0.0004	0.0001
0108	0.0005	0.0003	0.0001	—	0.0004	0.0312	—	—	0.0002	0.0003	0.0005
0109	0.0000	0.0039	0.0062	0.0322	—	0.0000	0.0000	0.0229	0.0002	0.0020	0.0320
0110	—	—	—	—	—	—	—	—	—	—	—
0111	—	—	—	—	—	—	—	—	—	0.0001	0.0000
0112	0.0000	0.0000	0.0000	—	—	—	—	—	—	—	—
0113	0.0003	0.0052	0.0007	0.0013	—	0.0113	0.0011	0.0099	0.0056	—	0.0000
0114	0.0001	0.0000	0.0001	—	—	—	—	—	—	0.0001	0.0001
0115	—	—	—	0.0065	—	0.0051	0.0014	0.0007	0.0002	0.0010	—
0116	0.0015	0.0001	0.0028	0.0078	0.0003	0.0035	0.0033	0.0047	0.0285	0.0005	0.0007
0117	—	—	—	—	—	—	—	—	—	—	—
0118	—	—	—	—	—	—	—	—	—	—	—
0119	—	—	—	—	—	—	—	—	—	—	—
0120	0.0009	0.0020	0.0012	0.0014	0.0001	0.0017	0.0019	0.0017	0.0014	0.0002	0.0001
0121	0.0032	0.0036	0.0020	0.0021	0.0003	0.0017	0.0018	0.0017	0.0017	0.0009	0.0004
0122	—	—	—	—	0.0005	—	0.0000	0.0000	—	0.0006	0.0005
0123	—	—	—	—	0.0014	—	0.0001	0.0000	0.0012	0.0051	0.0044
0124	—	—	0.0002	—	0.0378	0.0012	0.0030	0.0016	0.0085	0.0218	0.0188
0125	—	—	—	—	—	—	—	—	—	—	—
0126	—	—	—	—	—	—	—	—	—	—	—
0127	0.0220	0.0504	0.0497	0.0661	0.0026	0.0467	0.0506	0.0461	0.0562	0.0054	0.0170
Total	0.1150	0.1809	0.2472	0.2867	0.6666	0.3790	0.6720	0.4553	0.5090	0.5513	0.5672

78	79	80	81	82	83	84	85	86	87	88	
—	—	—	0.0004	—	—	—	—	—	—	—	0066
—	—	—	—	—	—	—	—	—	—	—	0067
—	—	—	—	—	—	—	—	—	—	—	0068
—	—	—	0.0001	0.0000	0.0000	—	—	—	0.0000	0.0016	0069
—	0.0002	0.0001	0.0000	0.0001	0.0000	—	—	—	—	—	0070
0.0029	0.0073	0.1591	0.0006	0.0008	—	—	0.0011	0.0000	0.0006	0.0009	0071
—	—	—	—	—	—	—	—	—	—	—	0072
—	—	—	—	—	—	—	—	—	—	—	0073
0.0001	0.0000	—	0.0001	0.0001	0.0000	—	—	—	—	—	0074
—	—	—	0.0000	—	—	—	0.0003	0.0001	0.0008	0.0004	0075
0.4124	0.0489	0.0178	—	—	—	—	—	—	—	—	0076
0.0965	0.4648	0.0062	0.0000	0.0001	—	—	—	—	—	0.0000	0077
—	—	—	—	—	0.2241	—	—	—	—	—	0078
0.0064	0.0516	0.0015	0.3132	0.2136	0.0011	0.0035	0.0037	0.0020	0.0064	0.0006	0079
—	—	0.0002	0.0003	—	—	—	—	—	—	—	0080
—	0.0015	0.0029	0.0622	0.0018	0.0006	0.0304	0.0223	0.0176	0.0197	0.0027	0081
0.0006	0.0015	0.0003	0.0412	0.0457	0.0250	0.0001	0.0078	0.0003	0.0040	0.0009	0082
—	0.0012	0.0014	0.0014	0.0105	0.0023	0.0012	0.0017	0.0000	0.0065	0.0024	0083
—	—	—	—	—	—	0.0244	0.2558	—	0.0002	0.0004	0084
—	—	—	—	—	—	—	—	—	0.0009	—	0085
—	0.0002	—	—	—	—	—	0.0443	0.2804	0.0338	0.0007	0086
—	—	—	—	—	—	—	0.0040	—	0.0487	0.0000	0087
—	—	—	—	—	—	0.0023	0.0141	—	0.0348	—	0088
—	—	—	—	—	—	—	0.0001	0.0003	—	0.0005	0089
—	—	—	—	—	—	—	—	—	—	0.0004	0090
—	—	—	—	—	—	—	0.0026	—	0.0010	—	0091
—	—	—	—	—	—	—	0.0356	0.0000	0.0060	0.0022	0092
0.0002	0.0011	—	0.0004	—	—	0.0001	0.0276	0.0001	0.0161	0.0006	0093
—	—	—	0.0005	0.0001	0.0000	—	—	0.0000	0.0003	—	0094
—	—	—	—	—	—	—	0.0003	—	0.0003	—	0095
—	—	—	—	—	—	—	—	—	—	—	0096
0.0036	0.0045	0.0003	0.0001	0.0000	0.0002	—	0.0000	—	—	—	0097
0.0022	0.0022	—	0.0002	0.0005	0.0000	0.0002	0.0000	0.0001	—	0.0000	0098
—	0.0005	—	0.0002	0.0000	0.0001	0.0003	0.0000	0.0002	0.0001	0.0000	0099
0.0006	0.0001	—	0.0002	0.0002	0.0000	0.0003	0.0000	0.0001	—	0.0001	0100
—	—	—	—	—	—	—	—	—	—	—	0101
—	—	—	—	—	—	—	—	—	—	—	0102
—	0.0000	—	0.0003	0.0005	0.0001	—	—	—	—	—	0103
—	—	—	—	0.0010	—	—	—	0.0000	0.0000	—	0104
—	—	—	—	—	—	—	—	—	—	—	0105
—	—	—	—	—	—	—	—	—	—	—	0106
—	0.0001	0.0001	0.0001	0.0001	0.0000	0.0003	0.0000	0.0000	0.0000	0.0002	0107
—	0.0001	0.0010	0.0003	0.0006	0.0007	0.0003	0.0005	0.0000	0.0001	0.0000	0108
0.0017	0.0008	0.0042	0.0076	0.0001	0.0002	0.0001	—	0.0006	0.0000	0.0001	0109
—	—	—	—	0.0000	—	—	—	—	—	0.0000	0110
—	0.0000	—	0.0002	0.0000	—	—	—	—	—	—	0111
—	0.0018	0.0051	0.0001	0.0001	0.0000	—	0.0053	0.0000	0.0069	0.0009	0112
0.0000	0.0000	0.0018	0.0207	0.0161	0.0057	—	—	0.0001	0.0000	0.0000	0113
—	0.0005	0.0012	0.0038	0.0000	0.0001	0.0001	0.0001	0.0000	0.0002	0.0008	0114
—	—	0.0001	0.0229	0.0011	0.0002	0.0003	0.0010	0.0000	0.0001	0.0014	0115
0.0002	0.0035	0.0030	0.0091	0.0034	0.0007	0.0003	0.0004	0.0004	0.0048	0.0003	0116
—	—	—	—	—	—	—	—	—	—	—	0117
—	—	—	—	—	—	—	—	—	—	—	0118
—	—	—	—	—	—	—	—	—	—	—	0119
0.0000	0.0003	0.0004	0.0014	0.0047	0.0651	0.0002	0.0004	0.0002	0.0009	0.0004	0120
0.0001	0.0011	0.0016	0.0035	0.0034	0.0091	0.0007	0.0044	0.0003	0.0010	0.0009	0121
0.0000	0.0000	—	—	—	—	—	—	—	—	—	0122
0.0005	0.0003	0.0015	—	—	—	—	—	—	—	0.0010	0123
0.0020	0.0012	0.0123	—	—	—	—	—	—	—	0.0411	0124
—	—	—	—	—	—	—	—	—	—	—	0125
—	—	—	—	—	—	—	—	—	—	—	0126
0.0096	0.0354	0.0342	0.0561	0.0401	0.0272	0.0419	0.0448	0.0366	0.0369	0.0045	0127
0.6224	0.6809	0.5077	0.5585	0.3572	0.3706	0.6191	0.5210	0.6663	0.2477	0.9904	Total

Matrix A (continued)

	89	90	91	92	93	94	95	96	97	98	99
0066	—	—	—	—	—	—	—	—	—	—	—
0067	—	—	—	—	—	—	—	—	—	—	—
0068	0.0000	—	—	—	0.0000	—	—	—	—	—	—
0069	0.0000	—	0.0201	—	0.0003	0.0336	0.0088	0.0000	—	—	—
0070	—	—	—	—	—	—	0.0000	—	—	—	—
0071	0.0002	0.0112	0.0005	0.0000	0.0000	0.0041	0.0066	0.0001	0.0007	0.0005	0.0000
0072	—	—	—	—	—	—	—	—	—	—	—
0073	—	—	—	—	—	—	—	—	—	—	—
0074	—	—	—	—	—	—	—	—	0.0001	—	—
0075	0.0000	0.0124	0.0018	0.0000	0.0002	0.0207	0.0173	—	—	—	—
0076	—	—	—	—	—	—	—	—	—	—	—
0077	—	—	—	—	—	0.0148	0.0002	—	—	—	0.0003
0078	—	—	—	—	—	—	—	—	—	—	—
0079	0.0008	0.0014	0.0048	0.0035	0.0016	0.0004	0.0002	0.0026	0.0006	—	0.0153
0080	—	—	—	—	—	—	—	—	—	—	—
0081	0.0015	0.0102	0.0413	0.0108	0.0132	0.0032	0.0011	0.0020	0.0005	0.0004	0.0002
0082	0.0009	0.0051	0.0057	0.0031	0.0038	0.0047	0.0102	0.0013	0.0018	0.0004	0.0006
0083	0.0006	0.0016	0.0121	0.0017	0.0021	0.0006	0.0045	0.0005	0.0006	0.0004	0.0003
0084	0.0018	0.0004	0.0067	—	0.0124	—	0.0000	—	—	—	—
0085	—	—	—	—	—	—	—	—	—	—	—
0086	0.0006	0.0116	0.0922	0.0007	0.0082	0.0052	0.0300	0.0003	—	—	—
0087	0.0001	—	0.0017	0.0007	0.0003	—	—	0.0000	—	—	—
0088	0.0037	0.0007	0.0080	0.0223	0.0357	—	—	—	—	—	—
0089	0.2061	—	0.0334	0.0003	0.0020	—	—	—	—	—	—
0090	0.0007	0.0924	0.0031	—	0.0069	—	—	—	—	—	—
0091	0.0008	0.0015	0.0068	—	0.0000	—	0.0000	—	—	—	—
0092	0.0008	0.0017	0.0009	0.0941	0.0004	—	—	—	—	—	—
0093	0.0027	0.0200	0.0236	0.0036	0.0076	0.0006	0.0110	0.0002	0.0000	0.0004	—
0094	—	—	—	—	0.0000	0.2342	0.0000	0.0001	0.0001	—	—
0095	—	—	—	—	0.0000	0.0005	0.0515	—	—	—	—
0096	—	—	—	—	—	—	—	—	—	—	—
0097	—	—	—	—	—	—	0.0000	—	0.3249	0.0003	0.0001
0098	0.0000	—	—	—	—	—	0.0003	—	0.0189	0.2682	0.0028
0099	0.0000	0.0000	—	—	0.0000	—	0.0001	—	—	0.0140	0.2382
0100	0.0000	—	—	—	0.0001	—	0.0000	—	0.0265	0.0013	—
0101	—	—	—	—	—	—	—	—	—	—	—
0102	—	—	—	—	—	—	—	—	0.0030	—	0.0000
0103	—	—	—	—	—	—	—	—	0.0246	0.0163	—
0104	0.0000	0.0000	—	—	—	—	0.0000	—	—	—	—
0105	—	—	—	—	—	—	—	—	—	—	—
0106	—	—	—	—	—	—	—	—	—	—	—
0107	0.0000	0.0000	—	0.0000	0.0000	—	0.0002	—	—	—	—
0108	0.0000	0.0000	—	0.0000	0.0000	0.0001	0.0005	—	—	—	—
0109	0.0000	0.0000	0.0000	0.0001	0.0034	0.0013	0.0006	0.0002	0.0027	0.0058	0.0019
0110	—	—	—	0.0002	0.0015	0.0001	—	—	—	—	—
0111	—	—	—	—	—	—	—	—	—	—	—
0112	0.0003	0.0036	0.0104	0.4594	0.0574	—	0.0000	0.0000	0.0008	0.0001	—
0113	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0005	0.0000	0.0086	0.0132	—
0114	0.0001	0.0001	0.0003	0.0003	0.0000	0.0001	0.0006	0.0000	0.0004	0.0014	—
0115	0.0021	—	0.0062	—	0.0003	—	0.0000	0.0008	—	—	—
0116	0.0003	0.0006	0.0012	0.0001	0.0023	0.0003	0.0209	0.0001	0.0014	0.0043	0.0039
0117	—	—	—	—	—	—	—	—	—	—	—
0118	—	—	—	—	—	—	—	—	—	—	—
0119	—	—	—	—	—	—	—	—	—	—	—
0120	0.0006	0.0013	0.0009	0.0002	0.0019	0.0008	0.0006	0.0002	0.0005	0.0002	0.0004
0121	0.0010	0.0068	0.0024	0.0004	0.0017	0.0011	0.0018	0.0001	0.0013	0.0009	0.0001
0122	—	—	—	—	—	—	—	—	—	—	—
0123	—	—	—	—	—	—	—	—	—	—	—
0124	—	—	—	—	—	—	—	—	—	0.0000	—
0125	—	—	—	—	—	—	—	—	—	—	—
0126	—	—	—	—	—	—	—	—	—	—	—
0127	0.0094	0.1118	0.1213	0.0756	0.0870	0.0661	0.0345	0.0098	0.0708	0.1042	0.0921
Total	0.8206	0.5824	0.5574	0.6856	0.3166	0.5726	0.2537	0.0231	0.4957	0.4381	0.4598

100	101	102	103	104	105	106	107	108	109	110	
—	—	—	—	—	—	—	—	—	—	—	0066
—	—	—	—	—	—	—	—	—	—	—	0067
—	—	—	—	—	—	—	—	—	0.0001	—	0068
0.0000	—	—	—	—	—	—	—	0.0000	0.0010	0.0227	0069
—	—	—	—	—	—	—	—	—	0.0000	—	0070
0.0011	—	0.0005	0.0000	0.0004	—	—	0.0041	0.0009	0.0034	0.0002	0071
—	—	—	—	—	—	—	—	—	—	—	0072
—	—	—	—	—	—	—	—	—	—	—	0073
0.0000	0.0002	0.0002	0.0014	0.0000	—	0.0172	0.0062	—	—	—	0074
—	—	—	—	—	—	0.0007	0.0001	—	0.0003	—	0075
—	—	—	—	—	—	—	—	—	—	—	0076
0.0624	—	—	—	—	—	—	—	—	0.0033	—	0077
—	—	—	—	—	—	—	—	—	—	—	0078
0.0005	0.0009	0.0005	0.0021	0.0006	0.0004	0.0039	0.0047	0.0007	—	0.0008	0079
—	—	—	—	—	—	—	—	—	—	—	0080
0.0047	0.0052	0.0022	0.0052	0.0007	0.0020	0.0077	0.0136	0.0042	0.0086	0.0085	0081
0.0014	0.0022	0.0059	0.0024	0.0010	0.0013	0.0041	0.0057	0.0045	0.0002	0.0030	0082
0.0002	0.0101	0.0079	0.0065	0.0008	0.0017	0.0152	0.0047	0.0057	—	0.0164	0083
—	—	—	—	—	—	—	—	—	—	—	0084
—	—	—	—	—	—	—	—	—	—	—	0085
—	—	—	—	—	—	—	—	—	—	0.0004	0086
—	—	—	—	—	—	—	—	—	—	—	0087
0.0000	—	—	0.0001	0.0665	0.0005	—	0.0127	0.0000	—	0.0053	0088
—	—	—	—	—	—	—	—	—	—	—	0089
—	—	—	—	—	—	—	—	—	—	—	0090
—	—	—	—	—	—	—	—	—	—	0.0025	0091
—	—	—	—	—	—	—	—	—	—	—	0092
—	—	0.0003	0.0001	—	—	—	—	—	0.0000	0.0130	0093
—	—	—	—	—	—	—	—	—	0.0052	0.0023	0094
—	—	—	—	—	—	—	—	—	—	—	0095
—	—	—	—	—	—	—	—	—	—	—	0096
0.0309	0.0550	0.1051	0.0247	—	—	—	—	0.0010	—	—	0097
0.0037	0.0541	0.0757	0.0430	—	—	—	—	0.0327	—	—	0098
—	—	0.0019	0.0147	—	—	—	—	0.0002	—	—	0099
0.0785	0.1043	0.0340	0.0196	—	—	—	—	0.0351	0.0001	—	0100
0.0000	0.0065	0.0005	0.0015	—	0.0193	—	—	0.0001	—	—	0101
0.0000	0.0005	0.0448	0.0001	—	—	—	—	—	—	—	0102
0.0398	0.0403	0.0036	0.0351	0.0025	0.0017	0.0023	0.0036	0.0005	—	—	0103
—	—	—	0.0000	0.0391	0.2276	0.2044	0.0196	—	—	—	0104
0.0000	—	0.0053	0.0072	—	0.0387	0.0241	0.0128	—	—	—	0105
—	—	—	—	—	—	0.0029	—	—	—	—	0106
0.0003	—	0.0082	0.0120	0.0001	0.0104	0.0081	0.0358	0.0000	—	—	0107
0.0000	—	0.0003	0.0010	0.0051	0.0003	0.0305	—	0.0095	—	—	0108
0.0281	0.0006	—	0.0045	0.0105	0.0001	0.0004	0.0028	0.0021	0.2882	0.0834	0109
—	—	—	—	—	—	—	—	—	—	—	0110
—	—	—	—	—	—	—	—	—	—	—	0111
0.0003	0.0012	—	0.0005	0.0058	—	—	0.0020	0.0003	—	—	0112
0.0015	0.0014	—	0.0011	0.0106	0.0020	0.0029	0.0020	0.0210	0.0016	—	0113
—	0.0006	0.0000	0.0041	—	—	0.0000	0.0004	0.0021	—	0.0000	0114
0.0000	0.0023	0.0014	0.0026	—	—	0.0008	0.0540	0.0038	—	0.0032	0115
0.0025	0.0003	0.0002	0.0021	0.0156	0.0011	0.0077	0.0116	0.0006	0.0097	0.0152	0116
—	—	—	—	—	—	—	—	—	—	—	0117
—	—	—	—	—	—	—	—	—	—	—	0118
—	—	—	—	—	—	—	—	—	—	—	0119
0.0007	0.0009	0.0025	0.0343	0.0011	0.0017	0.0012	0.0029	0.0016	0.0002	0.0030	0120
0.0023	0.0013	0.0025	0.0058	0.0021	0.0016	0.0024	0.0025	0.0032	0.0004	0.0033	0121
—	—	—	—	—	—	—	—	—	—	—	0122
—	—	—	—	—	—	—	—	—	—	—	0123
—	—	0.0000	—	0.0001	0.0000	0.0000	—	—	—	—	0124
—	—	—	—	—	—	—	—	—	—	—	0125
—	—	—	—	—	—	—	—	—	—	—	0126
0.0576	0.0758	0.0834	0.0422	0.0444	0.1052	0.0939	0.0476	0.0449	0.0632	0.0317	0127
0.3413	0.3732	0.3970	0.2872	0.2139	0.4361	0.4418	0.3189	0.2070	0.4289	0.2411	Total

Matrix A (continued)

	111	112	113	114	115	116	117	118	119	120	121
0001	—	—	—	—	—	—	—	—	—	—	—
0002	0.0003	0.0988	0.0005	—	—	—	—	—	—	—	—
0003	—	—	—	—	—	—	—	—	—	—	—
0004	0.0268	0.0001	—	—	—	0.0339	—	—	0.0026	—	—
0005	—	—	—	—	—	—	—	—	—	—	—
0006	—	—	—	—	—	—	—	—	—	—	—
0007	—	—	0.0000	—	—	—	—	—	—	—	—
0008	0.0091	0.0000	—	0.0004	0.0112	0.0002	—	—	0.0140	—	—
0009	—	—	—	—	—	—	—	—	—	—	—
0010	0.0065	0.0000	0.0011	—	0.0026	0.0007	—	—	—	—	0.0002
0011	0.0397	0.0000	0.0013	0.0000	0.0167	0.0007	—	—	0.0009	—	0.0000
0012	—	0.0061	0.0578	0.0060	—	0.0072	—	—	0.0135	—	—
0013	—	—	—	—	—	—	—	—	0.0042	—	—
0014	0.0014	—	—	—	—	—	—	—	0.0021	—	0.0062
0015	0.0009	—	—	—	—	—	—	—	0.0063	—	0.0000
0016	—	—	—	—	—	—	—	—	0.0006	—	—
0017	—	—	—	—	—	—	—	—	0.0023	—	—
0018	0.0057	—	—	—	—	—	—	—	0.0159	0.0001	0.0028
0019	—	—	—	—	—	—	—	—	—	—	—
0020	—	—	—	—	—	—	—	0.0573	—	—	—
0021	—	—	—	—	—	—	—	—	—	—	—
0022	0.0088	0.0000	0.0000	0.0091	0.0200	0.0092	—	—	0.0007	0.0007	0.0000
0023	—	—	—	—	—	—	—	—	—	—	—
0024	—	—	—	—	0.0014	0.0002	—	—	0.0003	—	—
0025	—	—	—	—	—	—	—	—	—	—	0.0030
0026	—	—	—	—	—	—	—	—	—	—	0.0000
0027	—	—	—	—	—	—	—	—	—	—	—
0028	—	—	—	—	—	—	—	—	—	—	—
0029	—	—	—	—	—	—	—	—	0.0015	—	—
0030	—	—	—	—	—	—	—	—	—	—	—
0031	—	—	—	—	—	—	—	—	—	—	—
0032	—	—	—	—	—	—	—	—	—	—	—
0033	—	—	—	—	—	—	—	—	—	—	—
0034	—	—	—	—	—	—	—	—	—	—	—
0035	—	—	—	—	—	—	—	—	—	—	—
0036	—	—	—	—	—	—	—	—	—	—	—
0037	0.0001	—	—	—	—	—	—	—	—	—	—
0038	—	—	—	—	—	0.0003	—	—	0.0068	—	—
0039	—	—	—	—	—	—	—	—	—	—	—
0040	—	—	—	—	—	—	—	—	0.0007	—	—
0041	—	—	—	—	—	—	—	—	0.0015	—	—
0042	—	—	—	—	—	—	—	—	—	—	—
0043	—	—	—	—	—	—	—	—	0.0019	—	—
0044	—	—	—	—	—	—	—	—	—	—	—
0045	—	—	—	—	—	—	—	—	0.0009	—	—
0046	—	—	—	—	—	—	—	—	—	—	—
0047	0.0002	—	—	—	—	—	—	—	—	—	—
0048	—	—	—	—	—	—	—	—	—	—	—
0049	—	—	—	—	—	—	—	—	—	—	0.0003
0050	—	—	—	—	—	—	—	—	—	—	0.0260
0051	—	—	—	—	—	—	—	0.0107	—	—	0.0004
0052	—	—	—	—	—	—	—	—	—	—	0.0008
0053	—	—	—	—	—	—	—	—	—	—	—
0054	—	—	—	—	—	—	—	—	—	—	—
0055	0.0009	0.0002	0.0004	0.0007	0.0010	0.0004	—	0.0701	0.0006	0.0000	0.0021
0056	—	0.0000	0.0000	0.0001	—	0.0000	—	0.0168	—	—	—
0057	—	—	—	—	—	—	—	0.1911	0.0004	—	0.0074
0058	—	—	—	—	—	—	—	—	—	—	—
0059	0.0011	0.0004	0.0004	0.0027	0.0008	0.0005	—	—	0.0159	—	—
0060	0.0014	0.0004	0.0015	0.0010	0.0007	0.0021	—	—	0.0100	0.0032	—
0061	—	—	—	—	—	—	—	—	—	—	—
0062	0.0012	0.0004	0.0019	0.0029	0.0046	0.0020	—	—	0.0134	0.0064	—
0063	0.0008	0.0008	0.0008	0.0023	0.0113	0.0020	—	—	0.0027	0.0002	0.0001
0064	—	—	0.0053	0.0011	—	0.0026	0.0018	—	0.0098	—	—
0065	—	—	—	—	—	—	—	—	0.0130	—	—

122	123	124	125	126	127	
0.0000	—	—	—	—	—	0001
0.0001	—	—	—	—	—	0002
0.0000	—	—	—	—	—	0003
—	0.0001	—	—	—	0.0001	0004
0.0001	—	—	—	—	—	0005
—	—	—	—	—	—	0006
—	—	—	—	—	—	0007
—	0.0087	—	—	—	—	0008
—	—	—	—	—	—	0009
—	0.0013	—	—	—	—	0010
—	—	—	—	—	—	0011
—	—	—	—	—	0.0018	0012
—	—	—	—	—	—	0013
0.0004	0.0032	0.0004	0.0011	0.0001	—	0014
—	0.0014	0.0002	0.0007	—	—	0015
—	—	—	—	—	—	0016
—	—	—	—	—	—	0017
0.0007	0.0017	0.0004	0.0011	0.0001	0.0001	0018
—	—	—	—	—	—	0019
—	—	—	—	—	—	0020
—	—	—	—	—	—	0021
0.0005	0.0013	0.0006	0.0018	0.0001	—	0022
—	—	—	—	—	—	0023
—	—	—	—	—	—	0024
—	—	—	—	—	—	0025
—	—	—	—	—	—	0026
—	—	—	—	—	—	0027
—	0.0019	—	—	—	—	0028
—	—	—	—	—	—	0029
—	—	—	—	0.0022	—	0030
—	—	—	—	—	—	0031
—	—	—	—	—	—	0032
—	—	—	—	—	—	0033
—	—	—	—	—	—	0034
—	—	—	—	—	—	0035
—	—	—	—	—	—	0036
—	—	0.0046	0.0246	0.0007	—	0037
—	—	—	—	—	—	0038
—	—	—	—	—	—	0039
—	0.0000	—	—	—	—	0040
—	0.0001	—	—	—	—	0041
—	—	—	—	—	—	0042
—	0.0001	—	—	—	—	0043
—	—	—	—	—	—	0044
—	—	—	—	—	—	0045
—	—	—	—	—	—	0046
—	0.0001	—	—	—	—	0047
0.0713	—	—	—	—	—	0048
—	—	—	—	—	—	0049
—	—	—	—	—	—	0050
—	—	0.0001	0.0018	0.0000	—	0051
—	0.0004	0.0000	0.0003	—	—	0052
—	—	—	—	—	—	0053
—	0.0000	0.0000	0.0004	—	—	0054
—	0.0000	0.0001	0.0008	0.0000	—	0055
—	0.0005	0.0000	0.0001	—	—	0056
—	0.0055	—	—	—	—	0057
—	—	—	—	—	—	0058
—	—	—	—	—	—	0059
—	—	0.0651	0.1232	—	0.0144	0060
—	0.1052	—	0.0368	0.1950	—	0061
—	—	—	—	—	—	0062
—	—	0.0003	0.0027	0.0000	—	0063
—	0.0075	—	—	—	—	0064
—	—	—	—	—	—	0065

Matrix A (continued)

	111	112	113	114	115	116	117	118	119	120	121
0066	—	—	—	—	—	—	—	—	0.0438	—	0.0092
0067	—	—	—	—	—	—	—	—	0.0132	—	—
0068	—	—	—	—	—	—	—	—	0.0013	—	0.0001
0069	—	0.0001	0.0006	0.0062	—	0.0049	—	—	0.0029	—	—
0070	0.0019	—	0.0001	—	—	0.0000	—	—	0.0069	—	—
0071	0.0079	0.0000	0.0028	0.0008	—	0.0001	—	—	0.0305	—	0.0008
0072	—	—	—	—	—	—	—	—	—	—	0.0021
0073	—	—	—	—	—	—	—	—	0.0199	—	0.0002
0074	—	—	—	—	—	—	—	—	0.0514	—	0.0008
0075	—	—	0.0001	—	0.0005	0.0094	0.0002	—	0.0160	—	0.0001
0076	—	—	—	—	—	—	—	—	—	—	—
0077	0.0261	0.0000	0.0023	0.0040	0.0097	0.0011	—	—	—	—	—
0078	—	—	—	—	—	—	—	—	—	—	—
0079	0.0164	0.0000	0.0009	0.0162	0.0777	0.0074	0.0023	—	0.0001	0.0016	0.0019
0080	—	—	—	—	—	—	—	—	0.0081	—	—
0081	0.0169	0.0002	0.0039	0.0736	0.0037	0.0303	0.0212	—	0.0001	0.0021	0.0001
0082	0.0071	0.0001	0.0119	0.0049	0.0004	0.0050	0.0011	0.0038	0.0019	0.0178	0.0125
0083	0.0003	0.0000	0.0090	0.0423	0.0134	0.0317	0.0017	—	—	0.0001	0.0003
0084	—	—	—	—	—	—	—	—	—	—	—
0085	—	—	—	—	—	—	—	—	—	—	—
0086	—	—	—	—	—	—	—	—	—	—	—
0087	—	—	—	—	—	—	—	—	—	—	—
0088	—	—	—	—	—	—	—	—	—	—	—
0089	—	—	—	—	—	—	—	—	—	—	—
0090	—	—	—	—	—	—	—	—	—	—	—
0091	—	—	—	—	—	—	—	—	—	—	—
0092	—	—	—	—	—	—	—	—	—	—	—
0093	0.0059	—	0.0003	—	—	0.0010	—	—	—	—	—
0094	—	0.0002	0.0081	0.0048	0.0057	0.0018	—	—	—	—	—
0095	—	—	—	—	—	—	—	—	—	—	—
0096	—	—	—	—	—	—	—	—	—	—	—
0097	—	0.0000	—	—	—	0.0030	—	—	—	0.0001	—
0098	0.0022	0.0002	—	—	0.0027	0.0006	—	—	—	0.0003	—
0099	—	—	—	—	—	0.0410	0.0013	—	—	0.0003	—
0100	0.0002	0.0000	—	—	0.0002	—	—	—	—	—	—
0101	—	—	—	—	—	—	—	—	—	—	—
0102	—	—	—	—	—	—	—	—	0.0001	0.0003	0.0007
0103	—	—	—	—	—	—	—	—	0.0001	0.0003	—
0104	—	—	—	—	—	—	—	—	—	—	—
0105	—	—	—	—	—	—	—	—	—	—	—
0106	—	—	—	—	—	—	—	—	—	—	—
0107	0.0007	—	—	—	—	—	0.0010	—	—	—	—
0108	0.0010	—	—	—	—	—	—	—	0.0010	—	—
0109	0.0641	0.0449	0.0955	0.0860	0.1459	0.0194	—	—	—	—	—
0110	—	—	—	—	—	—	—	—	0.0001	—	—
0111	0.0428	—	0.0100	—	—	0.0012	—	—	0.0030	—	—
0112	0.0068	0.3331	0.0268	0.0495	—	0.0659	—	—	—	—	—
0113	0.0003	0.0001	0.0275	—	0.0016	0.0030	0.1190	—	0.0012	—	—
0114	0.0050	0.0001	0.0002	0.0154	0.0000	0.0009	0.0008	—	0.0002	0.0004	—
0115	0.0009	0.0000	—	0.0052	0.0465	0.0459	0.0022	0.0115	0.0003	0.0001	—
0116	0.0213	0.0001	0.0092	0.0014	0.0441	0.0130	0.0050	—	0.0169	0.0006	0.0049
0117	—	—	—	—	—	—	—	—	0.0225	—	—
0118	—	—	—	—	—	—	—	—	0.0059	—	—
0119	—	—	—	—	—	—	—	—	0.0252	—	—
0120	0.0007	0.0004	0.0020	0.0017	0.0017	0.0048	0.0012	0.0013	0.0006	—	0.0084
0121	0.0016	0.0002	0.0039	0.0017	0.0038	0.0063	0.0023	0.0032	0.0021	0.0033	0.0006
0122	—	—	—	—	—	—	—	—	—	0.0054	—
0123	0.0012	—	0.0000	—	—	0.0005	—	—	0.0001	0.0847	0.0002
0124	0.0016	—	0.0000	—	—	0.0007	—	—	0.0237	0.0369	0.0003
0125	—	—	—	—	—	—	—	—	—	—	0.0000
0126	—	—	—	—	—	—	—	—	—	0.0215	—
0127	0.0391	0.0523	0.0681	0.0548	0.0566	0.0692	0.0438	0.0912	0.0819	0.0070	0.0126
Total	0.3765	0.5393	0.3545	0.3949	0.4847	0.4301	0.2046	0.4570	0.5237	0.1935	0.0962

122	123	124	125	126	127	
—	—	—	—	—	—	0066
—	0.0000	—	—	—	—	0067
0.0001	0.0001	—	—	—	—	0068
0.0001	0.0000	—	—	—	0.0005	0069
—	0.0000	—	—	—	—	0070
—	0.0184	0.0006	0.0001	—	0.0003	0071
—	0.0003	—	—	—	—	0072
—	—	—	—	—	—	0073
—	0.0007	—	—	—	—	0074
—	0.0028	—	—	—	—	0075
—	—	—	—	—	—	0076
—	—	—	—	—	—	0077
—	—	—	—	—	—	0078
0.0001	0.0001	0.0000	0.0000	—	0.0020	0079
—	—	—	—	—	—	0080
0.0006	0.0001	0.0001	0.0000	—	0.0082	0081
0.0007	0.0031	0.0011	0.0049	0.0026	0.0066	0082
0.0001	0.0001	0.0005	0.0002	0.0008	0.0130	0083
0.0001	—	—	—	—	—	0084
0.0006	—	—	—	—	—	0085
0.0002	—	—	—	—	—	0086
0.0000	—	—	—	—	—	0087
0.0014	—	—	—	—	—	0088
0.0010	—	—	—	—	—	0089
0.0001	—	—	—	—	—	0090
0.0003	—	—	—	—	—	0091
0.0002	—	—	—	—	—	0092
0.0002	—	—	—	—	—	0093
—	—	—	—	—	—	0094
0.0000	—	—	—	—	—	0095
0.0001	—	—	—	—	—	0096
—	0.0002	—	—	—	—	0097
—	—	—	—	—	—	0098
0.0001	—	—	0.0020	—	—	0099
—	—	—	—	—	—	0100
—	—	—	—	—	—	0101
0.0001	0.0011	0.0001	0.0030	—	—	0102
0.0012	0.0002	—	—	—	0.0002	0103
—	—	—	—	—	—	0104
—	—	—	—	—	—	0105
—	—	—	—	—	—	0106
0.0002	0.0001	0.0005	0.0004	—	—	0107
—	0.0001	0.0091	0.0060	0.0000	—	0108
0.0001	0.0002	—	0.0003	—	—	0109
0.0001	—	—	—	—	—	0110
—	0.0000	—	—	—	—	0111
—	—	—	—	—	—	0112
0.0029	0.0001	—	—	—	—	0113
0.0001	0.0001	—	—	—	—	0114
—	0.0001	—	—	—	0.0007	0115
0.0019	0.0007	0.0001	0.0022	0.0028	0.0000	0116
—	—	—	—	—	—	0117
—	—	—	—	—	—	0118
—	—	—	—	—	—	0119
0.0005	0.0022	0.0008	0.0005	0.0024	0.0046	0120
0.0016	0.0016	0.0065	0.0025	0.0109	0.0080	0121
—	—	—	—	—	0.0063	0122
—	—	—	—	—	0.0651	0123
—	0.0101	—	—	—	0.0161	0124
—	—	—	—	—	0.0029	0125
—	—	—	—	0.0337	0.0038	0126
0.0040	0.0148	0.0064	0.0137	0.0071	0.0146	0127
0.0919	0.1962	0.0978	0.2313	0.2586	0.1694	Total

B. MATRIX B. *Direct consumption of primary commodity-groups per unit of output.*

	1	2	3	4	5	6	7	8	9	10	11
0198	—	—	—	—	—	—	—	0.0206	0.0111	0.1536	0.0451
1001-1005	0.0004	—	0.0293	0.0001	—	0.0000	0.0001	—	—	—	—
1006-1007	—	—	—	—	—	0.0003	0.0017	0.0004	0.0012	0.1049	—
1008-1011, 1198	—	—	0.0013	—	—	0.0022	0.0259	0.0225	0.0182	0.0322	0.2897
1012-1063	0.0001	0.0001	0.0005	—	0.0086	0.0201	0.0101	0.0018	0.0112	0.0135	0.0012
1064-1070	0.0001	0.0002	0.0045	—	—	0.0000	0.0004	0.0010	0.0020	0.0005	0.0001
1071-1075	—	—	0.0008	—	0.0029	0.0002	0.0008	0.0001	0.0005	0.0003	0.0002
1076-1083	—	—	0.0012	0.0001	—	0.0000	0.0002	0.0000	0.0000	0.0002	0.0005
1084-1096	0.0026	—	—	0.0000	—	—	—	—	—	—	—
1097-1103	0.0001	0.0006	—	0.0000	0.0069	0.0000	0.0010	0.0000	0.0003	0.0001	0.0001
1104-1108	0.0001	0.0001	—	0.0001	—	0.0001	0.0010	0.0000	0.0003	0.0001	0.0000
1109-1116	0.0058	0.0209	0.0080	0.0005	0.0109	0.0031	0.0054	0.0015	0.0051	0.0031	0.0012
0201	0.0165	0.0036	0.0196	0.0011	—	0.0136	0.0335	0.0110	0.0810	0.0331	0.0122
0202	—	—	0.0034	—	—	0.0026	0.0001	0.0048	0.0082	0.0004	0.0004
0203	0.0009	0.0040	0.0228	0.0005	0.0116	0.0008	0.0026	0.0019	0.0015	0.0019	0.0004
1201	0.0001	0.0000	0.0001	0.0000	—	0.0001	0.0002	0.0001	0.0005	0.0002	0.0001
1202	—	—	0.0147	—	—	0.0115	0.0003	0.0206	0.0357	0.0017	0.0019
1203	0.0034	0.0153	0.0870	0.0020	0.0444	0.0029	0.0101	0.0074	0.0056	0.0073	0.0016
1301	—	—	—	—	—	0.0005	0.0002	0.0007	—	0.0026	—
1302	0.0012	—	—	0.0000	—	—	—	—	—	—	—
1303	—	—	—	—	—	—	—	—	—	—	—
1304	—	—	—	—	—	—	—	—	—	—	—
1305	—	—	—	—	—	—	—	0.0007	0.2607	—	—
1306	—	—	—	—	—	—	—	0.0107	0.0004	0.0013	0.0002
1307	0.0003	0.0102	—	—	—	0.0002	0.0056	0.0000	0.0005	0.0060	0.0002
1309	—	0.0207	0.0007	0.0000	—	0.0000	0.0243	—	0.0000	0.0386	0.0002
0401	—	—	—	—	—	0.0266	0.0622	0.0146	0.0472	0.0550	0.0316
0402	—	—	—	—	—	0.1494	0.2056	0.0576	0.0815	0.0972	0.0611
0403	—	—	—	—	—	—	—	—	0.0012	—	—
0404	-0.0010	-0.0018	—	—	—	—	—	—	—	—	—
0405	0.0035	0.0134	0.0765	0.0016	0.0550	0.0015	0.0023	0.0039	0.0054	0.0037	0.0016
0406	0.0011	0.0015	0.0044	0.0000	0.0015	0.0021	0.0020	0.0006	0.0015	0.0015	0.0002
199, 407	-0.1162	0.2347	0.2438	0.3525	0.3257	0.6289	0.4069	0.0665	0.1934	0.0459	0.1000
2201.1	—	—	—	—	—	0.3925	1.2929	0.4244	3.0498	2.1710	0.2526
2202.1	—	—	—	—	—	0.0963	0.0027	0.1651	0.2859	0.0146	0.0002
2203.1	—	—	—	—	—	0.0033	0.0100	0.0005	0.0023	0.0029	0.0012
2203.2	—	—	—	—	—	0.0160	0.0575	0.0704	0.0445	0.0571	0.0147
2301.1	—	—	—	—	—	0.0043	0.0021	0.0061	—	0.0226	—
2401.1	—	—	—	—	—	0.0006	0.0027	0.0004	0.0009	0.0016	0.0009
2401.2	—	—	—	—	—	0.0005	0.0009	0.0004	0.0011	0.0020	0.0007
2401.3	—	—	—	—	—	0.0001	0.0002	0.0001	0.0002	0.0004	0.0001
2402.1	—	—	—	—	—	0.0094	0.0174	0.0040	0.0066	0.0077	0.0048
2402.2	—	—	—	—	—	0.0003	0.0005	0.0002	0.0001	0.0001	0.0005
2402.3	—	—	—	—	—	0.0189	0.0345	0.0087	0.0142	0.0162	0.0112
1001-1127, 1201-1203 = competitive imports	0.0128	0.0373	0.1474	0.0028	0.0737	0.0406	0.0571	0.0554	0.0804	0.1640	0.2967
1301-1309 = non- competitive imports	0.0016	0.0309	0.0007	0.0000	—	0.0007	0.0301	0.0122	0.2616	0.0486	0.0005
1001-1127, 1201-1309 = imports	0.0144	0.0682	0.1481	0.0028	0.0737	0.0413	0.0872	0.0676	0.3421	0.2125	0.2972
201-301 = electric power, fuels	0.0208	0.0229	0.1476	0.0037	0.0560	0.0819	0.0471	0.0465	0.1324	0.0473	0.0167
0401-0403 = labour	0.3406	0.4183	0.2764	0.5168	0.3640	0.1760	0.2678	0.0721	0.1299	0.1522	0.0926
1991, 0401-0403 = value added	0.2280	0.6661	0.6010	0.8710	0.7463	0.8086	0.6789	0.1431	0.3303	0.2033	0.1944
199, 401-403, 407 = lab., cap. serv., etc.	0.2244	0.6530	0.5202	0.8693	0.6897	0.8049	0.6746	0.1387	0.3233	0.1981	0.1926
0198-0407, 1001-1407 = all primary comm.	0.2597	0.7418	0.7949	0.8754	0.8316	0.8669	0.8024	0.2490	0.7741	0.6049	0.5498

12	13	14	15	16	17	18	19	20	21	22	
0.0004	0.0002	0.0048	0.0002	—	0.0008	0.0000	0.0306	0.0015	0.0202	0.0001	0198
—	—	—	—	—	—	—	—	—	—	—	1001-1005
—	0.0002	—	—	—	—	—	—	—	—	—	1006-1007
0.0405	0.0290	0.0417	0.0615	0.0522	0.0560	0.0667	0.1767	0.0268	0.0635	0.1072	1008-1011, 1198
0.0495	0.0205	0.0205	0.0623	0.0080	0.0349	0.0799	0.0173	0.0763	0.0205	0.0182	1012-1063
0.0015	0.0022	0.0067	0.0004	0.0022	0.0008	0.0005	0.0008	0.0024	0.0018	0.0013	1064-1070
0.0003	0.0004	0.0007	0.0003	—	0.0012	0.0003	0.0004	0.0001	0.0009	0.0004	1071-1075
0.0011	0.0003	0.0008	0.0006	0.0001	0.0009	0.0001	0.0002	0.0002	0.0008	0.0005	1076-1083
—	—	—	—	—	—	—	—	—	—	—	1084-1086
0.0000	0.0006	0.0008	0.0002	0.0004	0.0018	0.0003	0.0000	0.0000	0.0001	0.0037	1097-1103
0.0002	0.0001	0.0002	0.0001	0.0012	0.0003	0.0004	0.0000	0.0003	0.0009	0.0002	1104-1108
0.0071	0.0033	0.0031	0.0030	0.0022	0.0071	0.0015	0.0017	0.0097	0.0038	0.0036	1109-1116
0.0057	0.0172	0.0143	0.0112	0.0135	0.0065	0.0237	0.0278	0.0085	0.0113	0.0101	0201
0.0000	0.0000	0.0004	0.0001	0.0004	—	0.0002	0.0021	0.0007	0.0002	0.0000	0202
0.0006	0.0016	0.0015	0.0011	0.0002	0.0012	0.0015	0.0020	0.0007	0.0009	0.0007	0203
0.0000	0.0001	0.0001	0.0001	0.0001	0.0000	0.0001	0.0002	0.0000	0.0001	0.0001	1201
0.0001	0.0000	0.0016	0.0006	0.0016	0.0000	0.0011	0.0089	0.0030	0.0010	0.0000	1202
0.0025	0.0061	0.0056	0.0044	0.0009	0.0045	0.0057	0.0077	0.0028	0.0035	0.0025	1203
0.0001	0.0013	0.0013	—	—	0.0008	0.0005	0.0000	0.0011	0.0002	—	1301
—	—	—	—	—	—	—	—	—	—	—	1302
—	—	—	—	—	—	—	—	—	—	—	1303
—	—	—	—	—	—	—	—	—	—	—	1304
—	0.0032	—	—	—	—	—	—	—	—	—	1305
0.0000	0.0006	0.0023	0.0040	0.0051	0.0019	0.0000	0.0011	—	0.0002	0.0002	1306
0.0000	0.0007	0.0003	—	0.0002	0.0011	0.0000	0.0000	0.0001	0.0009	0.0000	1307
0.0047	0.0016	—	0.0005	0.0003	0.0001	0.0003	0.0000	0.0004	0.0008	0.0002	1309
0.0510	0.0808	0.1422	0.0619	0.0852	0.1141	0.0439	0.1011	0.0957	0.1044	0.1360	0401
0.2212	0.1875	0.3335	0.1895	0.1714	0.2484	0.1753	0.2555	0.2312	0.2232	0.2414	0402
0.0000	—	0.0026	0.0006	0.0003	—	0.0022	0.0002	—	0.0014	0.0010	0403
—	—	—	—	—	—	—	—	—	—	—	0404
0.0021	0.0037	0.0050	0.0032	0.0018	0.0020	0.0110	0.0068	0.0018	0.0029	0.0022	0405
0.0055	0.0023	0.0031	0.0057	0.0016	0.0044	0.0067	0.0009	0.0079	0.0038	0.0037	0406
0.1463	0.1658	0.1317	0.1690	0.1642	0.1488	0.1040	0.0717	0.1410	0.1718	0.1321	199, 407
0.0734	0.5286	0.3161	0.1546	0.1118	0.0741	0.3082	0.4410	0.0881	0.1686	0.1428	2201.1
0.0011	—	0.0136	0.0036	0.0133	—	0.0088	0.0026	0.0252	0.0018	—	2202.1
0.0025	0.0033	0.0027	0.0019	0.0010	0.0025	0.0045	0.0024	0.0019	0.0034	0.0011	2203.1
0.0199	0.0537	0.0530	0.0406	0.0079	0.0312	0.0798	0.0799	0.0196	0.0307	0.0240	2203.2
0.0005	0.0109	0.0108	—	—	0.0071	0.0043	0.0002	0.0094	0.0012	—	2301.1
0.0016	0.0024	0.0035	0.0017	0.0020	0.0033	0.0014	0.0032	0.0032	0.0025	0.0029	2401.1
0.0016	0.0022	0.0035	0.0023	0.0028	0.0027	0.0021	0.0023	0.0038	0.0031	0.0032	2401.2
0.0003	0.0004	0.0009	0.0009	0.0007	0.0014	0.0007	0.0009	0.0011	0.0008	0.0015	2401.3
0.0181	0.0162	0.0275	0.0231	0.0154	0.0191	0.0182	0.0221	0.0231	0.0149	0.0181	2402.1
0.0017	0.0003	0.0035	0.0055	0.0021	0.0013	0.0014	0.0010	0.0059	0.0063	0.0058	2402.2
0.0407	0.0342	0.0569	0.0392	0.0307	0.0445	0.0438	0.0469	0.0523	0.0442	0.0503	2402.3
0.1028	0.0631	0.0818	0.1335	0.0689	0.1075	0.1566	0.2141	0.1219	0.0970	0.1377	1001-1127, 1201-1203
0.0048	0.0074	0.0039	0.0045	0.0056	0.0040	0.0009	0.0011	0.0016	0.0021	0.0004	= competitive imports
0.1076	0.0704	0.0857	0.1380	0.0745	0.1114	0.1575	0.2152	0.1235	0.0991	0.1381	1301-1309 = non-
0.0091	0.0263	0.0247	0.0176	0.0167	0.0131	0.0328	0.0487	0.0169	0.0171	0.0133	competitive imports
0.2722	0.2684	0.4783	0.2520	0.2568	0.3625	0.2213	0.3568	0.3269	0.3291	0.3783	1001-1127, 1201-1309
0.4259	0.4402	0.6181	0.4300	0.4245	0.5177	0.3431	0.4362	0.4776	0.5067	0.5163	= imports
0.4184	0.4342	0.6100	0.4210	0.4211	0.5113	0.3253	0.4285	0.4679	0.5008	0.5104	201-301 = electric
0.5404	0.5296	0.7247	0.5807	0.5131	0.6376	0.5260	0.7139	0.6125	0.6385	0.6653	power, fuels
											0401-0403 = labour
											199, 401-407 = value
											added
											199, 401-403, 407 =
											lab., cap. serv., etc.
											0198-0407, 1001-1407
											= all primary comm.

Matrix B (continued)

	23	24	25	26	27	28	29	30	31	32	33
0198	—	—	0.0002	0.0001	—	0.0080	0.0444	0.0042	0.0007	—	0.0017
1001-1005	—	—	—	—	—	—	—	—	—	—	—
1006-1007	—	—	—	—	—	—	—	—	—	—	—
1008-1011, 1198	0.0984	0.1770	0.0152	0.0050	—	0.0424	0.0139	0.0351	0.0307	0.0144	0.0529
1012-1063	0.0383	0.0038	0.1528	0.0910	—	0.0625	0.0398	0.0885	0.0267	0.0644	0.0695
1064-1070	0.0308	0.0119	0.0033	0.0007	—	0.0013	0.0009	0.0019	0.0009	0.0030	0.0006
1071-1075	—	—	0.0002	0.0000	—	0.0008	0.0002	0.0002	0.0000	0.0009	0.0002
1076-1083	0.0004	0.0002	0.0005	0.0007	—	0.0001	0.0001	0.0001	0.0000	0.0002	0.0001
1084-1096	—	—	—	—	—	—	—	—	—	—	—
1097-1103	0.0001	—	0.0038	0.0004	—	0.0000	0.0000	0.0012	—	0.0001	—
1104-1108	0.0003	—	0.0064	0.0109	—	0.0047	0.0001	0.0006	0.0001	0.0003	0.0014
1109-1116	0.0005	0.0124	0.0052	0.0025	—	0.0028	0.0008	0.0018	0.0008	0.0014	0.0009
0201	0.0036	0.0166	0.0040	0.0069	—	0.0096	0.0085	0.0089	0.0027	0.0057	0.0048
0202	0.0002	0.0002	0.0000	0.0001	—	0.0006	0.0028	0.0001	0.0002	0.0021	—
0203	0.0006	0.0022	0.0008	0.0009	—	0.0012	0.0020	0.0007	0.0016	0.0005	0.0008
1201	0.0000	0.0001	0.0000	0.0000	—	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000
1202	0.0007	0.0008	0.0001	0.0005	—	0.0026	0.0122	0.0006	0.0010	0.0090	—
1203	0.0025	0.0086	0.0030	0.0036	—	0.0047	0.0075	0.0027	0.0060	0.0020	0.0029
1301	0.0000	0.0000	0.0000	—	—	—	0.0021	0.0002	—	—	—
1302	—	—	—	—	—	—	—	—	—	—	—
1303	—	—	—	—	—	—	—	—	—	—	—
1304	—	—	—	—	—	—	—	—	—	—	—
1305	—	—	—	—	—	—	—	—	—	—	—
1306	0.0110	—	0.0001	0.0001	—	0.0020	0.0001	0.0012	0.0002	—	0.0001
1307	—	—	0.0000	—	—	—	0.0001	0.0003	0.0000	0.0000	—
1309	0.0010	—	0.0006	0.0015	—	—	0.0029	0.0001	—	—	—
0401	0.0617	0.0561	0.0437	0.0656	—	0.0932	0.0287	0.0762	0.1754	0.1227	0.1136
0402	0.2024	0.1750	0.1183	0.1744	—	0.2067	0.1182	0.1326	0.1874	0.2770	0.1874
0403	0.0010	—	0.0000	—	—	0.0001	0.0000	—	0.0001	0.0000	0.0001
0404	—	—	—	—	—	—	—	—	—	—	—
0405	0.0016	0.0058	0.0017	0.0017	—	0.0027	0.0032	0.0014	0.0008	0.0013	0.0014
0406	0.0028	0.0054	0.0167	0.0115	—	0.0070	0.0012	0.0093	0.0033	0.0063	0.0081
199, 407	0.1286	0.0771	0.1117	0.1547	—	0.1491	0.0646	0.1358	0.2385	0.1727	0.1994
2201.1	0.0340	0.2440	0.0651	0.1014	—	0.1469	0.1429	0.1536	0.0785	0.0943	0.0988
2202.1	0.0020	0.0051	0.0008	0.0010	—	0.0208	0.0473	0.0053	0.0075	—	—
2203.1	0.0019	0.0030	0.0039	0.0014	—	0.0053	0.0029	0.0032	0.0022	0.0010	0.0036
2203.2	0.0182	0.0764	0.0177	0.0291	—	0.0315	0.0359	0.0171	0.0411	0.0164	0.0189
2301.1	0.0004	0.0003	—	—	—	—	0.0178	0.0017	—	—	—
2401.1	0.0007	0.0014	0.0013	0.0013	—	0.0029	0.0009	0.0027	0.0066	0.0037	0.0037
2401.2	0.0022	0.0014	0.0011	0.0031	—	0.0028	0.0008	0.0019	0.0019	0.0032	0.0021
2401.3	0.0012	0.0006	0.0002	0.0004	—	0.0006	0.0003	0.0002	0.0007	0.0005	0.0008
2402.1	0.0145	0.0141	0.0093	0.0164	—	0.0169	0.0011	0.0116	0.0144	0.0237	0.0156
2402.2	0.0033	0.0012	0.0001	0.0006	—	0.0003	0.0001	0.0000	—	0.0000	0.0000
2402.3	0.0366	0.0320	0.0196	0.0361	—	0.0366	0.0227	0.0252	0.0312	0.0542	0.0341
1001-1127, 1201-1203 = competitive imports	0.1720	0.2147	0.1905	0.1154	—	0.1221	0.0756	0.1326	0.0662	0.0957	0.1284
1301-1309 = non- competitive imports	0.0121	0.0000	0.0007	0.0016	—	0.0020	0.0052	0.0019	0.0002	0.0000	0.0001
1001-1127, 1201-1309 = imports	0.1840	0.2147	0.1912	0.1171	—	0.1242	0.0808	0.1345	0.0664	0.0957	0.1285
201-301 = electric power, fuels	0.0077	0.0285	0.0070	0.0121	—	0.0188	0.0351	0.0134	0.0115	0.0194	0.0085
0401-0403 = labour 199, 401-407 = value added	0.2651	0.2310	0.1620	0.2400	—	0.3000	0.1469	0.2088	0.3629	0.3997	0.3011
199, 401-403, 407 = lab., cap. serv., etc.	0.3981	0.3193	0.2920	0.4080	—	0.4588	0.2161	0.3553	0.6055	0.5801	0.5099
0198-0407, 1001-1407 = all primary comm.	0.3937	0.3081	0.2737	0.3948	—	0.4491	0.2116	0.3446	0.6014	0.5724	0.5005
	0.5865	0.5531	0.4882	0.5332	—	0.6023	0.3545	0.5038	0.6771	0.6841	0.6456

34	35	36	37	38	39	40	41	42	43	44	
0.0112	0.0020	0.0014	0.0017	0.0079	—	—	0.0000	0.0001	—	—	0198
—	—	—	—	—	—	—	—	—	—	—	1001-1005
—	—	—	—	—	—	—	—	—	—	—	1006-1007
0.0176	0.0305	0.0191	0.0382	0.1147	0.0050	0.0066	0.0224	0.0116	0.0418	0.0464	1008-1011, 1198
0.0428	0.0891	0.0762	0.0200	0.0262	0.0475	0.0732	0.0600	0.0434	0.0780	0.1183	1012-1063
0.0022	0.0004	0.0018	0.0079	0.0036	0.0006	0.0092	0.0006	0.0003	0.0002	0.0008	1064-1070
0.0002	0.0008	0.0003	0.0003	0.0001	0.0003	0.0008	0.0004	0.0002	0.0002	0.0001	1071-1075
0.0002	0.0001	0.0001	0.0003	0.0001	0.0006	0.0004	0.0005	0.0001	0.0002	0.0002	1076-1083
—	—	—	—	—	—	—	—	—	—	—	1084-1096
0.0001	0.0004	0.0002	0.0001	—	0.0001	0.0002	0.0002	0.0036	0.0001	0.0000	1097-1103
0.0013	0.0073	0.0055	0.0001	0.0002	0.0008	0.0014	0.0011	0.0018	0.0010	0.0011	1104-1108
0.0017	0.0031	0.0019	0.0018	0.0023	0.0038	0.0186	0.0021	0.0007	0.0022	0.0011	1109-1116
0.0105	0.0060	0.0045	0.0110	0.0110	0.0049	0.0097	0.0074	0.0051	0.0065	0.0049	0201
0.0004	0.0006	0.0003	0.0003	0.0004	0.0000	0.0001	0.0000	—	—	0.0000	0202
0.0005	0.0014	0.0007	0.0013	0.0005	0.0003	0.0010	0.0007	0.0005	0.0010	0.0009	0203
0.0001	0.0000	0.0000	0.0001	0.0001	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	1201
0.0019	0.0026	0.0011	0.0014	0.0019	0.0001	0.0003	0.0001	—	—	0.0002	1202
0.0019	0.0053	0.0028	0.0050	0.0019	0.0013	0.0038	0.0027	0.0021	0.0038	0.0033	1203
—	0.0005	0.0003	0.0000	0.0015	0.0000	0.0008	0.0001	0.0001	—	0.0026	1301
—	—	—	—	—	—	—	—	—	—	—	1302
—	—	—	—	—	—	—	—	—	—	—	1303
—	—	—	—	—	—	—	—	—	—	—	1304
—	—	—	—	—	—	—	—	—	—	—	1305
0.0032	0.0000	0.0002	0.0004	0.0009	0.0036	—	—	0.0030	—	—	1306
0.0023	0.0002	0.0001	0.0006	0.0005	—	—	0.0000	—	—	0.0000	1307
—	—	—	—	0.0016	0.0003	0.0013	0.0000	—	—	0.0002	1309
0.1714	0.1242	0.0768	0.1281	0.0551	0.1161	0.0503	0.2001	0.0792	0.1247	0.1397	0401
0.2062	0.1967	0.1307	0.2448	0.2297	0.2416	0.1490	0.2015	0.1281	0.2173	0.1615	0402
0.0002	0.0000	—	—	—	0.0001	0.0000	0.0002	0.0001	—	0.0006	0403
—	—	—	—	—	—	—	—	—	—	—	0404
0.0029	0.0032	0.0004	0.0010	0.0023	0.0010	0.0016	0.0028	0.0024	0.0020	0.0006	0405
0.0044	0.0092	0.0073	0.0027	0.0052	0.0044	0.0087	0.0061	0.0039	0.0086	0.0092	0406
0.2396	0.0825	0.1905	0.3068	0.0956	0.3063	0.2727	0.1692	0.2851	0.1114	0.2154	199, 407
0.0920	0.0814	0.0658	0.2201	0.2078	0.0685	0.1586	0.1298	0.0430	0.0392	0.2047	2401.1
0.0154	0.0043	—	—	0.0052	0.0003	—	0.0003	—	—	0.0011	2202.1
0.0058	0.0067	0.0003	0.0006	0.0049	0.0008	0.0011	0.0037	0.0016	0.0021	0.0009	2203.1
0.0133	0.0355	0.0207	0.0372	0.0077	0.0104	0.0308	0.0227	0.0187	0.0298	0.0140	2203.2
—	0.0039	0.0023	—	0.0131	0.0003	0.0066	0.0009	0.0006	—	0.0220	2301.1
0.0047	0.0033	0.0032	0.0031	0.0026	0.0041	0.0019	0.0068	0.0023	0.0051	0.0056	2401.1
0.0043	0.0040	0.0023	0.0038	0.0006	0.0032	0.0017	0.0042	0.0019	0.0027	0.0026	2401.2
0.0011	0.0010	0.0003	0.0006	0.0002	0.0011	0.0002	0.0008	0.0004	0.0015	0.0004	2401.3
0.0185	0.0180	0.0109	0.0153	0.0169	0.0190	0.0121	0.0161	0.0109	0.0216	0.0109	2402.1
0.0009	0.0002	0.0010	0.0033	—	0.0035	0.0009	0.0001	0.0003	—	0.0013	2402.2
0.0401	0.0407	0.0252	0.0403	0.0331	0.0488	0.0286	0.0339	0.0238	0.0473	0.0261	2402.3
0.0700	0.1397	0.1091	0.0754	0.1512	0.0601	0.1145	0.0900	0.0639	0.1276	0.1715	1001-1127, 1201-1203 = competitive imports
0.0055	0.0007	0.0026	0.0010	0.0045	0.0039	0.0021	0.0002	0.0031	—	0.0028	1301-1309 = non- competitive imports
0.0755	0.1404	0.1116	0.0764	0.1557	0.0640	0.1166	0.0902	0.0669	0.1276	0.1744	1001-1127, 1201-1309 = imports
0.0152	0.0164	0.0098	0.0192	0.0174	0.0067	0.0157	0.0110	0.0079	0.0114	0.0119	201-301 = electric power, fuels
0.3778	0.3209	0.2076	0.3729	0.2848	0.3579	0.1993	0.4019	0.2074	0.3420	0.3018	0401-0403 = labour
0.6246	0.4158	0.4058	0.6835	0.3879	0.6696	0.4823	0.5799	0.4988	0.4639	0.5270	199, 401-407 = value added
0.6174	0.4035	0.3981	0.6798	0.3804	0.6642	0.4720	0.5711	0.4925	0.4534	0.5172	199, 401-403, 407 = lab., cap. serv., etc.
0.7228	0.5662	0.5243	0.7743	0.5635	0.7389	0.6097	0.6782	0.5715	0.5991	0.7071	0198-0407, 1001-1407 = all primary comm.

Matrix B (continued)

	45	46	47	48	49	50	51	52	53	54	55
0198	0.0017	0.0012	0.0039	0.0014	0.0351	0.0045	0.0004	0.0011	0.0001	0.0000	0.0032
1001-1005	—	—	—	—	—	—	—	—	—	—	—
1006-1007	—	—	—	—	—	—	—	—	—	—	—
1008-1011, 1198	0.0012	0.0780	0.0573	0.0731	0.0688	0.0109	0.0458	0.0068	0.0250	0.0107	0.0334
1012-1063	0.0555	0.0730	0.0286	0.0823	0.0189	0.0278	0.0182	0.1193	0.0341	0.0550	0.0321
1064-1070	0.0001	0.0006	0.0013	0.0003	—	0.0000	0.0038	0.0015	0.0029	0.0058	0.0075
1071-1075	0.0001	0.0006	0.0001	0.0006	0.0001	0.0004	0.0003	0.0015	0.0002	0.0003	0.0000
1076-1083	0.0009	0.0002	0.0001	0.0001	0.0019	0.0008	0.0006	0.0005	0.0010	0.0011	0.0007
1084-1096	—	—	—	—	—	—	—	—	—	—	—
1097-1103	0.0003	0.0001	0.0002	0.0005	0.0006	0.0015	0.0010	0.0005	0.0031	0.0001	0.0000
1104-1108	0.0009	0.0000	0.0006	0.0003	0.0088	0.0001	0.0002	0.0004	0.0114	0.0002	0.0006
1109-1116	0.0027	0.0063	0.0033	0.0023	0.0203	0.0058	0.0043	0.0140	0.0150	0.0037	0.0116
0201	—	0.0078	0.0082	0.0048	0.0113	0.0050	0.0121	0.0032	0.0077	0.0087	0.0051
0202	0.0000	—	0.0006	0.0002	—	—	0.0001	0.0000	0.0006	0.0000	0.0001
0203	0.0007	0.0009	0.0054	0.0004	0.0020	0.0003	0.0014	0.0004	0.0009	0.0002	0.0007
1201	—	0.0000	0.0000	0.0000	0.0001	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000
1202	0.0001	—	0.0026	0.0007	—	—	0.0006	0.0002	0.0026	0.0001	0.0005
1203	0.0027	0.0036	0.0208	0.0016	0.0076	0.0011	0.0055	0.0014	0.0033	0.0009	0.0026
1301	—	0.0001	0.0011	0.0002	0.0002	0.0006	0.0002	0.0004	0.0003	—	—
1302	—	—	—	—	—	—	—	—	—	—	—
1303	—	—	—	—	0.0023	—	—	—	—	—	—
1304	—	—	—	—	—	—	—	—	—	—	—
1305	—	—	—	—	—	—	—	—	—	—	—
1306	—	—	—	—	0.0020	—	0.0005	0.0037	0.0002	0.0009	—
1307	0.0005	0.0007	—	0.0002	0.0041	0.0000	0.0018	0.0001	0.0000	0.0021	—
1309	—	—	—	—	—	0.0000	0.0007	0.0021	—	—	0.0049
0401	0.1226	0.1281	0.1037	0.0701	0.0792	0.1935	0.2319	0.1739	0.1510	0.1633	0.0691
0402	0.2161	0.1989	0.1533	0.1964	0.1736	0.2400	0.1981	0.1648	0.1589	0.1752	0.1931
0403	0.0001	—	—	0.0000	0.0011	0.0016	0.0001	0.0003	—	0.0002	0.0010
0404	—	—	—	—	—	—	—	—	—	—	—
0405	0.0002	0.0041	0.0163	0.0012	0.0016	0.0005	0.0013	0.0023	0.0006	0.0007	0.0042
0406	0.0054	0.0089	0.0041	0.0101	0.0046	0.0029	0.0029	0.0177	0.0058	0.0047	0.0045
199, 407	0.3065	0.0760	0.1059	0.0774	0.2402	0.2631	0.2132	0.1507	0.2842	0.2030	0.2604
2201.1	0.1112	0.0885	0.1486	0.0710	0.2138	0.0446	0.2456	0.0709	0.1282	0.1362	0.0445
2202.1	—	—	0.0222	0.0042	—	—	—	—	—	—	0.0043
2203.1	0.0002	0.0028	0.0017	0.0026	0.0020	0.0004	0.0017	0.0078	0.0004	0.0008	0.0030
2203.2	0.0199	0.0370	0.2343	0.0117	0.0556	0.0120	0.0438	0.0006	0.0244	0.0063	0.0257
2301.1	—	0.0005	0.0097	0.0019	0.0017	0.0049	0.0017	0.0038	—	0.0012	—
2401.1	0.0027	0.0033	0.0026	0.0026	0.0027	0.0054	0.0077	0.0047	0.0048	0.0037	0.0025
2401.2	0.0054	0.0031	0.0022	0.0009	0.0020	0.0032	0.0052	0.0025	0.0023	0.0054	0.0018
2401.3	0.0003	0.0010	0.0008	0.0004	0.0006	0.0011	0.0020	0.0014	0.0001	0.0017	0.0004
2402.1	0.0148	0.0162	0.0164	0.0135	0.0131	0.0115	0.0174	0.0087	0.0100	0.0137	0.0157
2402.2	0.0004	—	0.0005	0.0002	0.0024	0.0048	0.0024	0.0041	0.0034	0.0023	0.0048
2402.3	0.0330	0.0343	0.0374	0.0296	0.0339	0.0315	0.0419	0.0257	0.0285	0.0328	0.0428
1001-1127, 1201-1203 = competitive imports	0.0643	0.1624	0.1149	0.1617	0.1271	0.0483	0.0804	0.1461	0.0987	0.0778	0.0891
1301-1309 = non- competitive imports	0.0005	0.0008	0.0011	0.0004	0.0086	0.0006	0.0032	0.0064	0.0005	0.0079	—
1001-1127, 1201-1309 = imports	0.0648	0.1632	0.1161	0.1621	0.1357	0.0489	0.0836	0.1524	0.0992	0.0858	0.0891
201-301 = electric power, fuels	0.0035	0.0124	0.0389	0.0080	0.0211	0.0069	0.0200	0.0056	0.0153	0.0100	0.0090
0401-0403 = labour	0.3388	0.3269	0.2570	0.2665	0.2539	0.4351	0.4301	0.3390	0.3099	0.3387	0.2631
199, 401-407 = value added	0.6509	0.4160	0.3832	0.3551	0.5002	0.7016	0.6476	0.5097	0.6006	0.5471	0.5323
199, 401-403, 407 = lab., cap. serv., etc.	0.6453	0.4030	0.3628	0.3439	0.4941	0.6983	0.6434	0.4897	0.5941	0.5417	0.5236
0198-0407, 1001-1407 = all primary comm.	0.7182	0.5891	0.5175	0.5240	0.6843	0.7603	0.7452	0.6668	0.7089	0.6417	0.6305

56	57	58	59	60	61	62	63	64	65	66	
—	—	0.0002	—	0.0000	0.0003	0.0007	0.0093	—	—	—	0198
—	—	—	—	—	—	—	—	0.0001	—	—	1001-1005
—	—	—	—	—	—	—	—	—	0.0002	—	1006-1007
0.0186	0.1848	0.0236	0.0206	0.0010	0.0112	0.0280	0.0138	0.0013	0.0008	0.0180	1008-1011, 1198
0.0468	0.0065	0.0355	0.0511	0.1167	0.0851	0.0540	0.0797	0.0032	0.0003	0.0010	1012-1063
0.0249	0.0003	0.0028	0.0116	0.0009	0.0009	0.0004	0.0004	0.0103	0.0014	0.0061	1064-1070
—	0.0004	0.0008	—	0.0001	0.0007	0.0001	0.0000	0.0001	—	0.0003	1071-1075
0.0033	0.0014	0.0011	0.0003	0.0002	0.0001	0.0000	0.0000	0.0008	0.0045	0.0002	1076-1083
—	—	—	—	—	—	—	—	—	—	0.0000	1084-1096
—	0.0036	0.0000	0.0004	0.0010	0.0054	0.0005	0.0002	0.0000	—	0.0001	1097-1103
—	0.0015	0.0007	—	0.0042	0.0015	0.0014	0.0000	0.0003	—	0.0002	1104-1108
0.0026	0.0253	0.0106	0.0020	0.0079	0.0053	0.0046	0.0022	0.0021	0.0011	0.0015	1109-1116
0.0149	0.0068	0.0056	0.0006	0.0074	0.0072	0.0066	0.0062	0.0236	0.0648	0.0105	0201
0.0013	0.0003	0.0000	0.0000	0.0000	0.0000	0.0003	—	0.0021	0.0011	0.0001	0202
0.0014	0.0009	0.0004	0.0003	0.0011	0.0018	0.0009	0.0001	0.0054	0.0502	0.0022	0203
0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0004	0.0001	1201
0.0056	0.0013	0.0002	0.0000	0.0000	0.0002	0.0014	—	0.0090	0.0049	0.0005	1202
0.0055	0.0036	0.0015	0.0012	0.0043	0.0069	0.0036	0.0003	0.0206	0.1919	0.0082	1203
—	0.0010	0.0000	0.0001	0.0018	0.0046	0.0007	—	0.0170	0.0403	0.0000	1301
—	—	—	—	—	—	—	—	—	—	—	1302
—	—	—	—	—	—	—	—	—	—	—	1303
—	—	—	—	—	—	—	—	—	—	—	1304
—	—	—	—	—	—	—	—	—	—	—	1305
—	0.0582	0.0003	—	—	—	0.0002	0.0001	—	—	—	1306
—	0.0001	0.0000	—	0.0013	0.0006	0.0001	0.0005	0.0001	0.0253	0.0196	1307
—	0.0035	0.0000	—	0.0001	0.0001	—	—	0.0001	0.0003	0.0012	1309
0.1428	0.0566	0.0955	0.0555	0.0889	0.0902	0.1147	0.1317	0.0612	0.0359	0.0536	0401
0.2327	0.1090	0.2865	0.2516	0.2691	0.3761	0.3755	0.3895	0.3529	0.1103	0.2260	0402
—	0.0002	0.0051	0.0000	0.0000	—	0.0004	0.0003	—	—	—	0403
0.0019	0.0009	0.0018	0.0019	0.0029	0.0032	0.0028	0.0010	0.0028	0.0082	0.0039	0405
0.0064	0.0029	0.0044	0.0053	0.0144	0.0086	0.0058	0.0096	0.0005	0.0006	0.0007	0406
0.1301	0.2255	0.2742	0.1008	0.0617	0.0276	0.1296	0.1338	0.3335	0.3015	0.2831	199, 407
0.2080	0.1154	0.0532	0.0044	0.1796	0.1381	0.1408	0.0917	0.3587	1.5508	0.1340	2201.1
—	0.0042	0.0011	0.0003	0.0001	0.0008	0.0104	—	0.0421	0.0398	0.0024	2202.1
0.0024	0.0008	0.0022	0.0042	0.0074	0.0041	0.0037	—	0.0235	0.0092	0.0209	2203.1
0.0385	0.0263	0.0102	0.0040	0.0245	0.0506	0.0294	0.0065	0.1131	1.7849	0.0659	2203.2
—	0.0082	0.0002	0.0006	0.0154	0.0390	0.0058	—	0.2000	0.3433	0.0018	2301.1
0.0032	0.0016	0.0031	0.0015	0.0036	0.0033	0.0050	0.0035	0.0022	0.0012	0.0015	2401.1
0.0048	0.0016	0.0030	0.0016	0.0040	0.0017	0.0027	0.0042	0.0016	0.0008	0.0015	2401.2
0.0010	0.0003	0.0004	0.0007	0.0010	0.0004	0.0007	0.0011	0.0056	0.0025	0.0043	2401.3
0.0082	0.0070	0.0237	0.0189	0.0328	0.0318	0.0323	0.0314	0.0377	0.0097	0.0188	2402.1
0.0158	0.0013	0.0057	0.0000	—	0.0003	0.0003	0.0018	0.0005	0.0004	0.0002	2402.2
0.0477	0.0181	0.0612	0.0404	0.0690	0.0672	0.0688	0.0685	0.0739	0.0222	0.0412	2402.3
0.1073	0.2289	0.0769	0.0872	0.1365	0.1173	0.0941	0.0968	0.0479	0.2055	0.0363	1001-1127, 1201-1203 = competitive imports
—	0.0628	0.0004	0.0001	0.0032	0.0053	0.0010	0.0007	0.0171	0.0659	0.0208	1301-1309=non- competitive imports
0.1073	0.2916	0.0773	0.0873	0.1397	0.1226	0.0951	0.0975	0.0650	0.2714	0.0571	1001-1127, 1201-1309 = imports
0.0288	0.0140	0.0078	0.0023	0.0148	0.0208	0.0136	0.0066	0.0827	0.3536	0.0217	201-301=electric power, fuels
0.3755	0.1658	0.3871	0.3071	0.3581	0.4663	0.4906	0.5215	0.4141	0.1462	0.2796	0401-0403=labour
0.5138	0.3951	0.6675	0.4150	0.4371	0.5057	0.6288	0.6659	0.7508	0.4566	0.5674	199, 401-407= value added
0.5056	0.3913	0.6613	0.4078	0.4198	0.4939	0.6202	0.6553	0.7475	0.4477	0.5627	199, 401-403, 407= lab., cap. serv., etc.
0.6388	0.6948	0.7510	0.5032	0.5854	0.6377	0.7325	0.7789	0.8519	0.8441	0.6372	0198-0407, 1001-1407 = all primary comm.

Matrix B (continued)

	67	68	69	70	71	72	73	74	75	76	77
1098											
1001-1005	0.0001	—	0.0001	0.0000	0.0089	0.0002	0.0007	0.0004	0.0037	0.0076	0.0065
1006-1007	—	0.0001	0.0000	—	—	—	—	—	—	—	0.0025
1008-1011, 1198	0.0005	0.0080	0.0021	0.0026	0.0001	0.0070	0.0000	—	0.0030	—	—
1012-1063	0.0007	0.0080	0.0016	0.0009	0.0005	0.0035	0.0175	0.0054	0.0020	0.0065	0.0030
1064-1070	0.0660	0.0319	0.0125	0.0251	0.0001	0.0012	0.0058	0.0012	0.0007	0.0002	0.0003
1071-1075	0.0003	0.0007	0.0028	0.0000	0.0005	0.0120	0.0125	0.0119	0.0095	0.0000	0.0018
1076-1083	0.0002	0.0009	0.0021	0.0044	0.0000	0.0010	0.0008	0.0007	0.0006	0.0000	0.0002
1084-1096	—	—	0.0000	0.0000	—	—	—	—	—	—	—
1097-1103	0.0000	0.0004	0.0002	0.0045	0.0000	0.0237	—	0.0014	0.0017	0.0002	0.0009
1104-1108	0.0001	0.0001	0.0000	—	0.0001	0.0075	—	0.0000	0.0001	0.0002	0.0001
1109-1116	0.0008	0.0040	0.0051	0.0257	0.0001	0.0070	0.0023	0.0191	0.0138	0.0019	0.0195
0201	0.0373	0.0298	0.0350	0.0162	0.0099	0.0076	0.0029	0.0106	0.0104	0.0786	0.0248
0202	0.0008	0.0022	0.0003	0.0020	0.0000	0.0000	0.0000	0.0000	0.0000	—	0.0000
0203	0.0132	0.0052	0.0099	0.0022	0.0007	0.0004	0.0002	0.0003	0.0011	0.0008	0.0093
1201	0.0002	0.0002	0.0002	0.0001	0.0001	0.0000	0.0000	0.0001	0.0001	0.0005	0.0001
1202	0.0034	0.0094	0.0012	0.0126	0.0000	0.0002	0.0000	0.0000	0.0000	—	0.0001
1203	0.0506	0.0199	0.0381	0.0085	0.0026	0.0014	0.0008	0.0012	0.0042	0.0031	0.0355
1301	0.0286	0.0004	0.0013	0.0004	0.0004	—	—	—	0.0001	0.0002	0.0032
1302	—	—	—	—	—	—	—	—	0.0192	—	—
1303	—	—	—	0.0002	—	—	—	—	—	—	—
1304	—	—	—	—	—	0.0011	—	—	—	—	—
1305	—	—	—	—	—	—	—	—	—	—	—
1306	—	—	0.0003	—	—	—	—	—	—	—	—
1307	0.0002	0.0033	0.0022	0.0020	—	—	—	—	—	0.0001	0.0000
1309	0.0003	0.0052	0.0450	0.0060	—	—	—	0.0030	—	0.0024	0.0007
0401	0.0853	0.1224	0.0795	0.0759	0.0286	0.0662	0.0562	0.0566	0.0507	0.0198	0.0196
0402	0.3819	0.3581	0.3316	0.1410	0.1540	0.2999	0.1252	0.2765	0.1752	0.1245	0.1090
0403	—	0.0002	—	0.0010	—	0.0014	0.0001	0.0004	0.0020	—	0.0000
0404	—	—	—	—	—	—	—	—	—	—	—
0405	0.0056	0.0042	0.0051	0.0050	0.0017	0.0010	0.0008	0.0014	0.0015	0.0033	0.0035
0406	0.0002	0.0012	0.0017	0.0031	0.0000	0.0044	0.0020	0.0018	0.0011	0.0007	0.0017
199, 407	0.2087	0.2035	0.1749	0.3728	0.1251	0.1743	0.1000	0.1529	0.1905	0.1982	0.1902
2201.1	0.4627	0.7301	0.7415	0.2667	0.1796	0.0689	0.0464	0.0840	0.1326	3.2035	1.1724
2202.1	0.0426	0.0152	0.0014	0.1167	0.0001	0.0012	0.0003	0.0003	0.0003	—	0.0012
2203.1	0.0158	0.0112	0.0046	0.0142	0.0097	0.0022	0.0025	0.0046	0.0041	0.0023	0.0024
2203.2	0.1993	0.1945	0.3002	0.0785	0.0048	0.0060	0.0012	0.0015	0.0227	0.0195	0.2612
2301.1	0.9377	0.0770	0.0147	0.0042	0.0033	—	—	—	0.0010	0.0018	0.0272
2401.1	0.0024	0.0034	0.0020	0.0019	0.0008	0.0017	0.0022	0.0018	0.0013	0.0007	0.0007
2401.2	0.0023	0.0035	0.0020	0.0024	0.0008	0.0019	0.0013	0.0015	0.0014	0.0004	0.0003
2401.3	0.0075	0.0103	0.0062	0.0064	0.0025	0.0062	0.0044	0.0053	0.0043	0.0014	0.0012
2402.1	0.0404	0.0263	0.0325	0.0128	0.0174	0.0303	0.0102	0.0294	0.0162	0.0109	0.0088
2402.2	0.0011	0.0140	0.0060	0.0010	0.0003	0.0021	—	0.0012	0.0021	0.0003	0.0002
2402.3	0.0855	0.0819	0.0782	0.0294	0.0352	0.0679	0.0228	0.0634	0.0374	0.0244	0.0201
1001-1127, 1201-1203 = competitive imports	0.1229	0.0835	0.0660	0.0844	0.0131	0.0647	0.0405	0.0414	0.0393	0.0201	0.0708
1301-1309 = non- competitive imports	0.0291	0.0089	0.0488	0.0086	0.0004	0.0011	—	0.0030	0.0193	0.0027	0.0039
1001-1127, 1201-1309 = imports	0.1520	0.0924	0.1148	0.0930	0.0134	0.0658	0.0405	0.0444	0.0586	0.0228	0.0748
201-301 = electric power, fuels	0.1341	0.0671	0.0860	0.0430	0.0137	0.0096	0.0040	0.0122	0.0159	0.0832	0.0731
0401-0403 = labour 199, 401-407 = value added	0.4672	0.4806	0.4111	0.2180	0.1827	0.3674	0.1815	0.3334	0.2279	0.1443	0.1285
199, 401-403, 407 = lab., cap. serv. etc.	0.6817	0.6895	0.5928	0.5989	0.3094	0.5472	0.2844	0.4894	0.4209	0.3464	0.3239
0198-0407, 1001-1407 = all primary comm.	0.6758	0.6841	0.5860	0.5908	0.3077	0.5417	0.2815	0.4862	0.4184	0.3425	0.3187
	0.8850	0.8191	0.7528	0.7133	0.3334	0.6210	0.3280	0.5447	0.4910	0.4487	0.4328

78	79	80	81	82	83	84	85	86	87	88	
—	—	—	—	—	—	—	—	—	—	—	0198
0.0007	0.0004	0.0027	—	—	—	0.1482	0.0011	0.0119	0.0001	0.0000	1001-1005
—	—	—	—	—	—	—	—	—	—	—	1006-1007
—	—	0.0003	0.0007	0.0018	0.0008	—	—	—	—	0.0002	1009-1011, 1198
0.0055	0.0038	0.0121	0.0009	0.0010	0.0004	0.0003	0.0009	0.0003	0.0037	0.0013	1012-1063
0.0002	0.0005	0.0001	0.0001	0.0001	0.0000	—	—	0.0003	0.0000	0.0007	1064-1070
0.0002	0.0005	0.0099	0.0001	0.0001	—	—	0.0001	0.0000	0.0002	0.0001	1071-1075
0.0004	0.0044	0.0004	0.0200	0.0141	0.0006	0.0022	0.0020	0.0013	0.0019	0.0003	1076-1083
0.0000	0.0000	—	0.0001	0.0000	0.0000	0.0009	0.0137	0.0106	0.0055	0.0003	1084-1096
0.0052	0.0060	0.0003	0.0006	0.0006	0.0003	0.0005	0.0000	0.0002	0.0000	0.0001	1097-1103
—	0.0000	0.0003	0.0001	0.0005	0.0002	0.0001	0.0001	0.0000	0.0000	0.0001	1104-1108
0.0011	0.0029	0.0069	0.0250	0.0070	0.0023	0.0003	0.0030	0.0006	0.0052	0.0014	1109-1116
0.0274	0.0267	0.0491	0.0042	0.0073	0.0047	0.0078	0.0142	0.0064	0.0050	0.0045	0201
—	—	—	0.0000	0.0001	0.0001	—	0.0002	0.0004	0.0000	0.0000	0202
0.0105	0.0053	0.0150	0.0010	0.0005	0.0006	0.0007	0.0026	0.0058	0.0008	0.0017	0203
0.0002	0.0002	0.0003	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	1201
—	—	—	0.0001	0.0003	0.0003	—	0.0009	0.0017	0.0001	0.0000	1202
0.0403	0.0201	0.0573	0.0036	0.0021	0.0023	0.0028	0.0098	0.0220	0.0030	0.0066	1203
0.0060	0.0104	0.0058	0.0003	—	0.0001	—	0.0002	0.0001	0.0001	0.0010	1301
—	—	—	0.0000	0.0000	0.0000	—	0.0060	0.0000	0.0880	0.0001	1302
—	—	—	—	—	—	—	—	—	—	—	1303
—	—	—	0.0000	0.0005	0.0019	—	—	—	—	—	1304
—	—	—	—	—	—	—	—	—	—	—	1305
—	—	—	—	—	—	—	—	—	—	—	1306
0.0002	0.0007	0.0000	—	—	—	0.0000	0.0006	0.0000	0.0000	0.0003	1307
—	0.0035	0.0011	0.0035	0.0016	0.0004	0.0000	0.0002	0.0002	0.0002	0.0003	1309
0.0139	0.0304	0.0349	0.0721	0.1159	0.2034	0.0175	0.0363	0.0241	0.0564	0.0187	0401
0.0559	0.1188	0.1792	0.1541	0.2901	0.1721	0.0371	0.1955	0.0484	0.0801	0.0489	0402
0.0000	—	—	0.0016	0.0010	—	—	0.0000	—	0.0000	—	0403
—	—	—	—	—	—	—	—	—	—	-0.2208	0404
0.0038	0.0031	0.0060	0.0012	0.0020	0.0008	0.0761	0.0039	0.0023	0.3312	0.1278	0405
0.0010	0.0012	0.0014	0.0033	0.0011	0.0002	0.0208	0.0027	0.0093	0.0034	0.0004	0406
0.2051	0.0802	0.1093	0.1488	0.1952	0.2378	0.0655	0.1850	0.1878	0.1672	0.0159	199, 407
0.7282	0.6503	1.8036	0.0494	0.0628	0.0553	0.1501	0.2441	0.1471	0.0769	0.0640	2201.1
—	—	—	0.0005	0.0012	0.0008	0.0003	0.0017	0.0145	0.0002	0.0003	2202.1
—	0.0013	0.0035	0.0019	0.0014	0.0025	0.0019	0.0087	0.0014	0.0020	0.0043	2203.1
0.3118	0.1571	0.4231	0.0245	0.0122	0.0099	0.0156	0.0280	0.2099	0.0273	0.0344	2203.2
0.0531	0.0883	0.0493	0.0023	—	0.0011	0.0017	0.0047	0.0076	0.0069	0.0062	2301.1
0.0003	0.0008	0.0011	0.0011	0.0039	0.0008	0.0005	0.0008	0.0006	0.0009	0.0003	2401.1
0.0002	0.0010	0.0008	0.0021	0.0035	0.0109	0.0004	0.0010	0.0006	0.0014	0.0008	2401.2
0.0007	0.0022	0.0024	0.0059	0.0085	0.0162	0.0013	0.0033	0.0014	0.0051	0.0017	2401.3
0.0032	0.0101	0.0150	0.0104	0.0207	0.0118	0.0031	0.0137	0.0038	0.0034	0.0041	2402.1
—	0.0019	0.0003	0.0060	0.0073	0.0006	0.0005	0.0058	0.0005	0.0064	0.0005	2402.2
0.0065	0.0265	0.0337	0.0353	0.0600	0.0263	0.0081	0.0425	0.0105	0.0192	0.0103	2402.3
0.0538	0.0388	0.0906	0.0514	0.0275	0.0072	0.1554	0.0318	0.0489	0.0198	0.0109	1001-1127, 1201-1203 = competitive imports
0.0062	0.0145	0.0069	0.0038	0.0021	0.0024	0.0001	0.0070	0.0004	0.0883	0.0016	1301-1309 = non- competitive imports
0.0600	0.0533	0.0975	0.0553	0.0296	0.0096	0.1554	0.0387	0.0493	0.1081	0.0125	1001-1127, 1201-1309 = imports
0.0844	0.0627	0.1275	0.0092	0.0102	0.0081	0.0113	0.0279	0.0364	0.0092	0.0138	201-301 = electric power, fuels
0.0697	0.1493	0.2141	0.2278	0.4070	0.3755	0.0546	0.2318	0.0725	0.1365	0.0676	0401-0403 = labour
0.2796	0.2338	0.3308	0.3811	0.6053	0.6144	0.2170	0.4233	0.2719	0.6383	-0.0091	199, 401-407 = value added
0.2748	0.2295	0.3234	0.3766	0.6023	0.6134	0.1201	0.4167	0.2602	0.3037	0.0836	199, 401-403, 407 = lab., cap. serv., etc.
0.3776	0.3191	0.4923	0.4415	0.6428	0.6294	0.3809	0.4790	0.3337	0.7523	0.0096	0198-0407, 1001-1407 = all primary comm.

Matrix B (continued)

	89	90	91	92	93	94	95	96	97	98	99
0198	—	—	—	—	—	—	—	—	—	—	—
1001-1005	0.0046	0.0529	0.0377	0.0000	0.0083	0.0103	0.0045	0.0001	—	0.0000	0.0020
1006-1007	—	—	—	—	—	—	—	—	—	—	—
1008-1011, 1198	0.0000	—	—	—	0.0005	—	0.0025	—	—	—	—
1012-1063	0.0004	0.0193	0.0097	0.0032	0.0016	0.0133	0.0027	0.0013	0.0001	0.0011	0.0000
1064-1070	0.0000	—	0.0083	—	0.0001	0.0140	0.0037	0.0000	—	—	—
1071-1075	0.0000	0.0029	0.0003	0.0000	0.0000	0.0039	0.0035	0.0000	0.0000	0.0000	—
1076-1083	0.0002	0.0009	0.0034	0.0011	0.0011	0.0005	0.0005	0.0003	0.0001	0.0000	0.0010
1084-1096	0.0496	0.0337	0.0091	0.0022	0.0045	0.0376	0.0021	0.0000	0.0000	0.0000	—
1097-1103	0.0000	0.0000	—	—	0.0001	—	0.0003	—	0.0974	0.0424	0.0056
1104-1108	0.0000	0.0000	—	0.0000	0.0000	0.0000	0.0002	—	—	—	—
1109-1116	0.0012	0.0019	0.0078	0.2083	0.0298	0.0010	0.0093	0.0005	0.0056	0.0095	0.0027
0201	0.0023	0.0045	0.0036	0.0020	0.0026	0.0063	0.0072	0.0005	0.0058	0.0103	0.0106
0202	0.0000	0.0000	—	—	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	—
0203	0.0006	0.0018	0.0016	0.0004	0.0006	0.0029	0.0039	0.0001	0.0019	0.0022	0.0019
1201	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001
1202	0.0001	0.0001	—	—	0.0000	0.0002	0.0001	0.0001	0.0000	0.0002	—
1203	0.0025	0.0068	0.0060	0.0016	0.0024	0.0111	0.0151	0.0003	0.0073	0.0084	0.0071
1301	0.0001	—	—	0.0000	0.0000	0.0021	0.0001	0.0001	0.0002	0.0046	0.0014
1302	0.0003	0.0034	0.0143	0.0006	0.4716	0.0016	0.0001	0.0730	—	—	—
1303	—	—	—	—	—	—	—	—	—	—	—
1304	—	—	—	—	—	—	—	—	0.0886	0.1656	0.2553
1305	—	—	—	—	—	—	—	—	—	—	—
1306	—	—	—	—	—	—	—	—	—	—	—
1307	0.0007	0.0027	0.0004	0.0009	0.0001	—	0.0001	0.0000	—	—	—
1309	0.0000	0.0000	0.0019	0.0002	0.0010	0.0002	0.0011	0.0000	0.0001	0.0027	—
0401	0.0164	0.0446	0.0447	0.0115	0.0122	0.0357	0.0675	0.0033	0.0619	0.0580	0.0397
0402	0.0533	0.1548	0.1037	0.0175	0.0218	0.0799	0.1713	0.0144	0.1677	0.1867	0.2148
0403	0.0000	—	0.0001	—	—	—	—	—	0.0020	0.0006	0.0046
0404	—	-0.0039	—	—	—	—	—	—	—	—	-0.0180
0405	0.0125	0.0015	0.0016	0.0009	0.0005	0.0187	0.3320	0.8269	0.0009	0.0014	0.0011
0406	0.0116	0.0065	0.0104	0.0121	0.0580	0.0084	0.0032	0.0002	0.0101	0.0051	0.0008
199, 407	0.0229	0.0831	0.1780	0.0518	0.0664	0.1795	0.1152	0.0556	0.0545	0.0631	0.0095
2201.1	0.0279	0.0398	0.0437	0.0251	0.0336	0.1915	0.0941	0.0079	0.0915	0.2136	0.1668
2202.1	0.0002	0.0011	0.0004	0.0001	0.0001	0.0039	0.0010	0.0000	0.0001	0.0012	—
2203.1	0.0035	0.0037	0.0034	0.0006	0.0010	0.0018	0.0273	0.0000	0.0009	0.0009	0.0017
2203.2	0.0172	0.0372	0.0512	0.0183	0.0173	0.1723	0.0713	0.0027	0.0527	0.0615	0.0492
2301.1	0.0011	0.0030	0.0028	0.0003	0.0013	0.0182	0.0077	0.0017	0.0014	0.0338	0.0117
2401.1	0.0003	0.0010	0.0010	0.0002	0.0003	0.0015	0.0011	0.0001	0.0014	0.0011	0.0010
2401.2	0.0008	0.0015	0.0013	0.0004	0.0003	0.0015	0.0021	0.0001	0.0014	0.0011	0.0010
2401.3	0.0016	0.0042	0.0043	0.0010	0.0011	0.0035	0.0049	0.0002	0.0040	0.0029	0.0026
2402.1	0.0039	0.0088	0.0049	0.0012	0.0018	0.0076	0.0130	0.0016	0.0097	0.0108	0.0142
2402.2	0.0009	0.0146	0.0088	0.0004	0.0006	0.0006	0.0025	0.0001	0.0097	0.0019	0.0082
2402.3	0.0104	0.0389	0.0280	0.0033	0.0048	0.0160	0.0339	0.0036	0.0387	0.0388	0.0523
1001-1127, 1201-1203 = competitive imports	0.0585	0.1185	0.0823	0.2163	0.0486	0.0921	0.0445	0.0027	0.1107	0.0617	0.0185
1301-1309 = non- competitive imports	0.0011	0.0061	0.0166	0.0018	0.4728	0.0039	0.0015	0.0732	0.0889	0.1728	0.2567
1001-1127, 1201-1309 = imports	0.0596	0.1247	0.0989	0.2181	0.5214	0.0959	0.0459	0.0759	0.1995	0.2345	0.2752
201-301 = electric power, fuels	0.0055	0.0131	0.0112	0.0040	0.0056	0.0228	0.0265	0.0011	0.0152	0.0257	0.0210
0401-0403 = labour	0.0697	0.1994	0.1486	0.0290	0.0340	0.1156	0.2388	0.0177	0.2315	0.2453	0.2591
199, 401-407 = value added	0.1169	0.2867	0.3385	0.0939	0.1588	0.3221	0.6892	0.9004	0.2970	0.3149	0.2525
199, 401-403, 407 = lab., cap. serv., etc.	0.0927	0.2826	0.3265	0.0809	0.1004	0.2951	0.3540	0.0734	0.2861	0.3084	0.2686
0198-0407, 1001-1407 = all primary comm.	0.1794	0.4176	0.4426	0.3144	0.6834	0.4274	0.7463	0.9769	0.5043	0.5619	0.5402

100	101	102	103	104	105	106	107	108	109	110	
—	—	—	—	—	—	—	—	—	—	—	0198
—	—	0.0000	—	0.0000	0.0707	—	—	—	—	0.0006	1001-1005
—	—	—	—	—	—	—	—	—	0.0113	—	1006-1007
—	—	—	—	—	—	—	—	—	0.0030	—	1009-1011, 1198
0.0002	0.0030	0.0028	0.0021	0.0001	0.0025	0.0027	0.0201	0.0081	0.0022	0.0038	1012-1063
0.0000	—	—	—	—	—	—	—	0.0002	0.0009	0.0094	1064-1070
0.0001	0.0000	0.0000	0.0000	0.0000	—	0.0004	0.0004	0.0001	0.0003	0.0000	1071-1075
0.0009	0.0006	0.0005	0.0007	0.0001	0.0002	0.0011	0.0014	0.0006	0.0006	0.0009	1076-1083
—	—	0.0000	0.0006	0.4090	0.0032	—	0.0782	—	0.0008	0.0017	1084-1096
0.1071	0.1803	0.1777	0.0720	0.0007	0.0076	0.0007	0.0010	0.0455	0.0001	—	1097-1103
0.0001	—	0.0027	0.0040	0.0102	0.0774	0.0774	0.0152	0.0006	—	—	1104-1108
0.0185	0.0026	0.0007	0.0061	0.0187	0.0012	0.0047	0.0300	0.0103	0.0608	0.0577	1109-1116
0.0155	0.0046	0.0025	0.0059	0.0092	0.0038	0.0036	0.0045	0.0118	0.0519	0.0053	0201
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0001	0.0026	0.0000	0202
0.0092	0.0011	0.0006	0.0039	0.0030	0.0006	0.0005	0.0013	0.0028	0.0029	0.0013	0203
0.0001	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0001	0.0003	0.0000	1201
0.0000	0.0001	0.0001	0.0001	0.0000	0.0001	0.0003	0.0001	0.0003	0.0109	0.0000	1202
0.0353	0.0041	0.0023	0.0148	0.0113	0.0024	0.0017	0.0051	0.0107	0.0110	0.0050	1203
0.0028	0.0006	0.0001	0.0005	0.0040	0.0002	0.0003	0.0019	0.0009	0.0030	—	1301
—	—	—	—	—	—	—	—	—	—	—	1302
—	—	—	—	—	—	—	—	0.1840	—	—	1303
0.0029	0.0039	0.0000	0.0124	0.0000	—	0.0003	0.0140	—	—	—	1304
—	—	—	—	—	—	—	—	—	—	—	1305
—	—	—	—	—	—	—	—	—	—	—	1306
—	—	—	—	—	—	—	—	0.0007	0.0887	0.0000	1307
0.0132	0.0001	—	0.0005	0.0192	0.0004	0.0036	—	0.0159	0.0306	—	1309
0.0408	0.0721	0.0897	0.1080	0.0516	0.0703	0.0656	0.0969	0.0835	0.0293	0.1339	0401
0.1091	0.1985	0.2339	0.2266	0.1506	0.1859	0.2556	0.2573	0.1904	0.0845	0.0623	0402
0.0000	0.0107	0.0089	0.0099	0.0001	0.0262	0.0070	0.0255	0.0000	—	0.0000	0403
—	—	—	—	—	—	—	—	—	—	—	0404
0.0030	0.0009	0.0007	0.0013	0.0017	0.0130	0.0006	0.0053	0.0017	0.0027	0.0007	0405
0.0138	0.0210	0.0189	0.0094	0.0019	0.0087	0.0081	0.0071	0.0071	0.0045	0.0053	0406
0.2860	0.1226	0.0608	0.2340	0.0946	0.0895	0.1242	0.1154	0.2178	0.1683	0.4709	199, 407
0.4174	0.0543	0.0217	0.0665	0.1309	0.0376	0.0340	0.0460	0.1930	2.3797	0.0775	2201.1
0.0001	0.0010	0.0003	0.0005	0.0001	0.0005	0.0019	0.0010	0.0006	0.0010	—	2202.1
0.0007	0.0012	0.0013	0.0019	0.0014	0.0014	0.0010	0.0136	0.0021	0.0012	0.0007	2203.1
0.2629	0.0274	0.0136	0.0540	0.0822	0.0151	0.0104	0.0137	0.0753	0.0770	0.0361	2203.2
0.0242	0.0049	0.0010	0.0044	0.0340	0.0015	0.0024	0.0165	0.0076	0.0072	—	2301.1
0.0018	0.0020	0.0019	0.0013	0.0012	0.0014	0.0019	0.0021	0.0021	0.0013	0.0042	2401.1
0.0011	0.0020	0.0024	0.0018	0.0013	0.0018	0.0018	0.0022	0.0030	0.0005	0.0034	2401.2
0.0027	0.0057	0.0068	0.0051	0.0035	0.0055	0.0055	0.0078	0.0007	0.0000	0.0011	2401.3
0.0103	0.0069	0.0054	0.0075	0.0143	0.0234	0.0167	0.0286	0.0142	0.0072	0.0034	2402.1
0.0362	0.1074	0.0046	0.0003	—	—	0.0136	0.0019	0.0047	—	0.0039	2402.2
0.0291	0.0559	0.0623	0.0336	0.0332	0.0467	0.0613	0.0595	0.0394	0.0158	0.0147	2402.3
0.1623	0.1908	0.1868	0.1005	0.4502	0.1653	0.0890	0.1516	0.0763	0.1021	0.0791	1001-1127, 1201-1203
0.0190	0.0045	0.0002	0.0134	0.0232	0.0006	0.0041	0.0159	0.2014	0.1223	0.0000	= competitive imports
0.1813	0.1953	0.1870	0.1139	0.4734	0.1659	0.0931	0.1676	0.2778	0.2244	0.0792	1301-1309 = non-
0.0629	0.0106	0.0056	0.0251	0.0276	0.0071	0.0064	0.0131	0.0266	0.0825	0.0116	competitive imports
0.1500	0.2813	0.3325	0.3445	0.2023	0.2834	0.3282	0.3798	0.2739	0.1138	0.1962	1001-1127, 1201-1309
0.4527	0.4258	0.4129	0.5982	0.3005	0.3936	0.4610	0.5076	0.5005	0.2893	0.6731	= imports
0.4359	0.4038	0.3933	0.5785	0.2969	0.3719	0.4524	0.4952	0.4917	0.2822	0.6671	201-301 = electric
0.6587	0.6268	0.6030	0.7128	0.7861	0.5639	0.5582	0.6811	0.7930	0.5711	0.7589	power, fuels
											0401-0403 = labour
											199, 401-407 =
											value added
											199, 401-403, 407 =
											lab., cap. serv., etc.
											0198-0407, 1001-1407
											= all primary comm.

Matrix B (continued)

	111	112	113	114	115	116	117	118	119	120	121
0198	—	—	—	—	—	—	—	—	—	—	—
1001-1005	0.0005	0.0065	0.0000	—	—	0.0006	—	—	0.0000	—	—
1006-1007	—	—	0.0000	—	—	—	—	—	—	—	—
1008-1011, 1198	0.0278	0.0000	0.0023	0.0002	0.0099	0.0014	—	—	0.0070	—	0.0003
1012-1063	0.0099	0.0010	0.0074	0.0077	0.0144	0.0074	—	0.1415	0.0102	0.0005	0.0099
1064-1070	0.0016	0.0001	0.0007	0.0026	—	0.0022	0.0001	—	0.0110	—	0.0000
1071-1075	0.0005	—	0.0002	0.0000	0.0001	0.0017	0.0000	—	0.0056	—	0.0001
1076-1083	0.0026	0.0000	0.0009	0.0067	0.0055	0.0031	0.0016	0.0001	0.0001	0.0008	0.0006
1084-1096	0.0002	0.0000	0.0013	0.0008	0.0009	0.0003	—	—	—	—	—
1097-1103	0.0013	0.0000	—	—	0.0015	0.0212	0.0006	—	0.0000	0.0005	0.0000
1104-1108	0.0004	—	—	—	—	—	0.0003	—	0.0002	—	—
1109-1116	0.0431	0.1078	0.0833	0.0659	0.0896	0.0546	0.0402	0.0046	0.0080	0.0004	0.0020
0201	0.0093	0.0034	0.0046	0.0024	0.0074	0.0113	0.0015	0.0020	0.0073	0.0025	0.0052
0202	0.0027	—	0.0039	0.0001	0.0000	0.0000	0.0001	0.0003	0.0000	0.0003	—
0203	0.0036	0.0014	0.0049	0.0015	0.0006	0.0025	0.0012	0.0009	0.0011	0.0005	—
1201	0.0001	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000
1202	0.0116	0.0000	0.0165	0.0005	0.0002	0.0002	0.0004	0.0013	0.0001	0.0014	—
1203	0.0136	0.0052	0.0184	0.0056	0.0023	0.0094	0.0048	0.0036	0.0044	0.0018	—
1301	0.0007	0.0001	0.0004	0.0003	0.0090	0.0030	—	—	—	—	—
1302	0.0023	0.1248	0.0138	—	—	0.0112	—	—	—	—	—
1303	—	—	—	—	—	—	—	—	—	—	—
1304	—	—	—	—	—	—	—	—	—	—	—
1305	—	—	—	—	—	—	—	—	—	—	—
1306	—	—	—	—	—	—	—	—	—	—	—
1307	—	0.0012	0.0033	0.0003	—	0.0042	—	—	—	—	—
1309	0.0042	0.0125	0.0743	0.0133	0.0195	0.0427	0.0049	—	—	—	—
0401	0.0778	0.0046	0.1287	0.0869	0.0929	0.0786	—	—	—	—	—
0402	0.2090	0.0145	0.0821	0.0640	0.1729	0.0856	—	—	—	—	—
0403	0.0002	—	0.0000	0.0000	0.0046	0.0002	—	—	—	—	—
0404	—	—	—	-0.0200	—	-0.0265	—	—	—	—	—
0405	0.0016	0.1321	0.0011	0.1233	0.0013	0.0025	0.0045	0.0034	0.0044	0.0020	0.0002
0406	0.0044	0.0070	0.0061	0.0058	0.0079	0.0066	0.0027	0.0118	0.0017	0.0001	0.0009
199, 407	0.1945	0.0382	0.1913	0.2372	0.0746	0.2456	0.1501	0.0774	0.0379	0.0366	0.4670
2201.1	0.2199	0.0749	0.0501	0.0335	0.0870	0.2535	—	—	—	—	—
2202.1	0.0013	0.0000	0.0005	0.006	0.0011	0.0001	—	—	—	—	—
2203.1	0.0019	0.0002	0.0024	0.0019	0.0012	0.0030	—	—	—	—	—
2203.2	0.0780	0.0384	0.0157	0.0367	0.0137	0.0430	—	—	—	—	—
2301.1	0.0056	0.0007	0.0036	0.0027	0.0770	0.0259	—	—	—	—	—
2401.1	0.0029	0.0002	0.0026	0.0014	0.0026	0.0015	—	—	—	—	—
2401.2	0.0015	0.0001	0.0031	0.0023	0.0030	0.0023	—	—	—	—	—
2401.3	0.0004	0.0000	0.0024	0.0017	0.0011	0.0012	—	—	—	—	—
2402.1	0.0123	0.0014	0.0066	0.0030	0.0137	0.0071	—	—	—	—	—
2402.2	0.0077	0.0000	0.0011	0.0041	0.0062	0.0011	—	—	—	—	—
2402.3	0.0430	0.0031	0.0164	0.0140	0.0398	0.0175	—	—	—	—	—
1001-1127, 1201-1203 competitive imports	0.1132	0.1209	0.1311	0.0900	0.1246	0.1022	0.0480	0.1511	0.0466	0.0054	0.0131
1301-1309=non- competitive imports	0.0072	0.1386	0.0919	0.0139	0.0285	0.0612	0.0049	—	—	—	—
1001-1127, 1201-1309 = imports	0.1204	0.2595	0.2229	0.1040	0.1532	0.1635	0.0529	0.1511	0.0466	0.0054	0.0131
201-301=electric power, fuels	0.0416	0.0101	0.0487	0.0103	0.0196	0.0265	0.0080	0.0081	0.0129	0.0066	0.0052
0401-0403=labour 199, 401-407=value added	0.2871	0.0192	0.2108	0.1509	0.2703	0.1644	0.5824	0.2960	0.3772	0.7590	0.4175
199, 401-403, 407= lab., cap. serv., etc.	0.4875	0.1965	0.4083	0.4972	0.3541	0.3926	0.7397	0.3886	0.4212	0.7978	0.8855
0198-0407, 1001-1407 =all primary comm.	0.4815	0.0573	0.4020	0.3880	0.3449	0.4100	0.7325	0.3734	0.4151	0.7956	0.8845
	0.6235	0.4607	0.6455	0.6051	0.5153	0.5699	0.7954	0.5430	0.4763	0.8065	0.9038

122	123	124	125	126	127	
—	—	—	—	—	—	0198
0.0001	0.0000	—	—	—	0.0000	1001-1005
—	—	—	—	—	—	1006-1007
—	0.0063	—	—	—	—	1009-1011, 1198
0.0006	0.0039	0.0027	0.0088	0.0011	0.0002	1012-1063
0.0001	0.0007	—	—	—	0.0002	1064-1070
—	0.0017	0.0000	0.0000	—	0.0000	1071-1075
0.0001	0.0001	0.0001	0.0002	0.0001	0.0011	1076-1083
0.0002	—	—	—	—	—	1084-1096
0.0004	0.0004	0.0000	0.0010	—	0.0001	1097-1103
0.0001	0.0000	0.0023	0.0015	0.0000	—	1104-1108
0.0018	0.0005	0.0001	0.0011	0.0012	0.0003	1109-1116
0.0004	0.0291	0.0009	0.0455	0.0007	0.0098	0201
—	0.0010	—	0.0000	0.0000	0.0002	0202
0.0027	0.0014	0.0117	0.0108	0.0299	0.0007	0203
0.0000	0.0002	0.0000	0.0003	0.0000	0.0001	1201
—	0.0042	—	0.0002	0.0001	0.0007	1202
0.0104	0.0054	0.0447	0.0413	0.1145	0.0025	1203
0.0009	0.0159	—	0.0000	—	—	1301
0.0001	—	—	—	—	—	1302
—	—	—	—	—	—	1303
—	—	—	—	—	—	1304
—	—	—	—	—	—	1305
—	—	—	—	—	—	1306
—	—	—	—	—	—	1307
—	—	—	—	—	—	1309
—	—	—	—	—	—	0401
—	—	—	—	—	—	0402
—	—	—	—	—	—	0403
—	—	—	—	—	—	0404
0.0000	0.0010	0.0478	0.0016	0.0000	0.0027	0405
0.0003	0.0006	0.0004	0.0012	0.0003	0.0001	0406
0.7721	0.1964	0.3326	0.1837	0.2909	0.3431	199, 407
—	—	—	—	—	—	2201.1
—	—	—	—	—	—	2202.1
—	—	—	—	—	—	2203.1
—	—	—	—	—	—	2203.2
—	—	—	—	—	—	2301.1
—	—	—	—	—	—	2401.1
—	—	—	—	—	—	2401.2
—	—	—	—	—	—	2401.3
—	—	—	—	—	—	2402.1
—	—	—	—	—	—	2402.2
—	—	—	—	—	—	2402.3
0.0137	0.0235	0.0499	0.0545	0.1170	0.0052	1001-1127, 1201-1203 = competitive imports
0.0010	0.0159	—	0.0000	—	—	1301-1309 = non- competitive imports
0.0147	0.0393	0.0499	0.0545	0.1170	0.0052	1001-1127, 1201- 1309 = imports
0.0144	0.0572	0.0573	0.0982	0.1453	0.0139	201-301 = electric power, fuels
0.1180	0.5350	0.4589	0.4714	0.3026	0.4689	0401-0403 = labour
0.8903	0.7330	0.8397	0.6578	0.5938	0.8148	199, 401-407 = value added
0.8901	0.7314	0.7915	0.6550	0.5934	0.8119	199, 401-403, 407 = lab., cap. serv., etc.
0.9081	0.8038	0.9022	0.7687	0.7414	0.8306	0198-0407, 1001-1407 = all primary comm.

C. MATRIX $(I-A)^{-1}$. Total production requirement per unit of output.

	1	2	3	4	5	6	7	8	9	10	11
0001	1.1186	0.1510	0.0061	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0002	0.6699	1.0906	0.0037	0.0001	0.0004	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
0003	0.0000	0.0000	1.0534	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0004	0.0013	0.0012	0.0116	1.0070	0.0289	0.0042	0.0178	0.0035	0.0063	0.0084	0.0063
0005	0.0017	0.0002	0.0000	0.0000	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0006	0.0006	0.0008	0.0004	0.0001	0.0012	1.0731	0.0075	0.1206	0.0037	0.0024	0.0008
0007	0.0009	0.0013	0.0004	0.0000	0.0001	0.0003	1.0043	0.0017	0.0037	0.2382	0.0492
0008	0.0141	0.0175	0.0097	0.0014	0.0277	0.0214	0.1754	2.8073	0.0219	0.0566	0.0195
0009	0.0003	0.0004	0.0002	0.0000	0.0006	0.0004	0.0031	0.0491	1.0561	0.0046	0.0011
0010	0.0003	0.0003	0.0002	0.0001	0.0002	0.0006	0.0010	0.0009	0.0028	1.0025	0.2069
0011	0.0006	0.0005	0.0003	0.0002	0.0003	0.0013	0.0015	0.0006	0.0012	0.0076	1.2276
0012	0.0010	0.0006	0.0003	0.0001	0.0005	0.0002	0.0005	0.0007	0.0023	0.0010	0.0005
0013	0.0038	0.0046	0.0003	0.0004	0.0097	0.0016	0.0078	0.0007	0.0022	0.0066	0.0022
0014	0.0011	0.0010	0.0029	0.0002	0.0004	0.0065	0.0014	0.0015	0.0008	0.0014	0.0041
0015	0.0010	0.0007	0.0001	0.0002	0.0003	0.0011	0.0033	0.0004	0.0008	0.0015	0.0006
0016	0.0000	0.0000	0.0000	0.0000	0.0000	0.0004	0.0001	0.0002	0.0002	0.0009	0.0002
0017	—	—	—	—	—	—	—	—	—	—	—
0018	0.0148	0.0190	0.0003	0.0003	0.0444	0.0023	0.0092	0.0009	0.0021	0.0055	0.0022
0019	0.0002	0.0002	0.0000	0.0001	0.0000	0.0003	0.0009	0.0009	0.0009	0.0020	0.0299
0020	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0010	0.0001	0.0008	0.0000	0.0003
0021	—	—	—	—	—	—	—	—	—	—	—
0022	0.0003	0.0002	0.0003	0.0001	0.0004	0.0002	0.0004	0.0003	0.0005	0.0040	0.0011
0023	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000
0024	0.0002	0.0002	0.0001	0.0001	0.0002	0.0001	0.0002	0.0004	0.0006	0.0011	0.0003
0025	0.0022	0.0019	0.0004	0.0027	0.0003	0.0002	0.0004	0.0004	0.0012	0.0008	0.0004
0026	0.0002	0.0002	0.0000	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0027	—	—	—	—	—	—	—	—	—	—	—
0028	0.0007	0.0010	0.0001	0.0001	0.0000	0.0002	0.0002	0.0003	0.0004	0.0002	0.0004
0029	0.0010	0.0011	0.0003	0.0002	0.0010	0.0015	0.0068	0.0430	0.0134	0.0058	0.0022
0030	0.0013	0.0015	0.0001	0.0005	0.0001	0.0002	0.0004	0.0004	0.0006	0.0010	0.0005
0031	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0032	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0005	0.0000	0.0007	0.0002
0033	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0034	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0035	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0036	—	—	—	—	—	—	—	—	—	—	—
0037	0.0006	0.0006	0.0001	0.0006	0.0001	0.0006	0.0027	0.0003	0.0004	0.0013	0.0010
0038	0.0001	0.0001	0.0000	0.0000	0.0000	0.0003	0.0003	0.0018	0.0012	0.0011	0.0003
0039	—	—	—	—	—	—	—	—	—	—	—
0040	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0041	0.0002	0.0002	0.0000	0.0000	0.0000	0.0016	0.0099	0.0004	0.0007	0.0033	0.0010
0042	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0001	0.0001	0.0006	0.0001
0043	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0005	0.0004	0.0006	0.0002
0044	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0045	—	—	—	—	—	—	—	—	—	—	—
0046	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000
0047	0.0001	0.0001	0.0000	0.0001	0.0000	0.0021	0.0001	0.0003	0.0005	0.0004	0.0001
0048	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000
0049	0.0001	0.0001	0.0000	0.0001	0.0000	0.0000	0.0001	0.0000	0.0001	0.0002	0.0001
0050	0.0003	0.0002	0.0004	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
0051	0.0004	0.0004	0.0001	0.0001	0.0001	0.0007	0.0016	0.0004	0.0023	0.0020	0.0012
0052	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000
0053	—	—	—	—	—	—	—	—	—	—	—
0054	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000	0.0000
0055	0.0002	0.0003	0.0001	0.0000	0.0001	0.0001	0.0018	0.0019	0.0037	0.0017	0.0005
0056	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0005	0.0001	0.0001	0.0003	0.0001
0057	0.0004	0.0004	0.0002	0.0001	0.0001	0.0018	0.0028	0.0006	0.0009	0.0013	0.0005
0058	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0001	0.0004	0.0001
0059	0.0002	0.0002	0.0001	0.0000	0.0001	0.0001	0.0002	0.0010	0.0005	0.0005	0.0003
0060	0.0118	0.0098	0.0018	0.0152	0.0014	0.0012	0.0016	0.0018	0.0019	0.0023	0.0017
0061	0.0074	0.0098	0.0007	0.0001	0.0003	0.0009	0.0005	0.0022	0.0045	0.0011	0.0026
0062	0.0142	0.0193	0.0005	0.0001	0.0006	0.0009	0.0070	0.0040	0.0026	0.0037	0.0015
0063	0.0003	0.0002	0.0003	0.0001	0.0003	0.0002	0.0006	0.0007	0.0008	0.0005	0.0004
0064	0.0038	0.0029	0.0009	0.0000	0.0002	0.0003	0.0011	0.0106	0.0203	0.0037	0.0011
0065	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0006	0.0001

12	13	14	15	16	17	18	19	20	21	22	
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.001
0.0002	0.0002	0.0002	0.0001	0.0001	0.0002	0.0002	0.0001	0.0001	0.0002	0.0001	0.002
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.003
0.0068	0.0071	0.0065	0.0069	0.0028	0.0120	0.0056	0.0044	0.0037	0.0128	0.0074	0.004
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.005
0.0082	0.0442	0.0134	0.0212	0.0074	0.0177	0.0268	0.0013	0.0040	0.0019	0.0010	0.006
0.0073	0.0020	0.0006	0.0021	0.0129	0.0009	0.0012	0.0264	0.0064	0.0103	0.0163	0.007
0.1913	1.0232	0.3107	0.4922	0.1711	0.4118	0.6235	0.0313	0.0926	0.0433	0.0237	0.008
0.0063	0.0210	0.0057	0.0092	0.0120	0.0077	0.0129	0.0010	0.0021	0.0011	0.0008	0.009
0.0288	0.0029	0.0012	0.0069	0.0532	0.0019	0.0027	0.1108	0.0258	0.0426	0.0675	0.010
0.1389	0.0022	0.0036	0.0283	0.1053	0.0064	0.0031	0.0017	0.0627	0.2465	0.2199	0.011
1.0236	0.0005	0.0005	0.0023	0.0011	0.0015	0.0050	0.0055	0.0012	0.0046	0.0004	0.012
0.0647	1.0496	0.0405	0.1704	0.0167	0.0819	0.2209	0.0073	0.0639	0.0309	0.0092	0.013
0.0024	0.0072	1.0080	0.0051	0.0052	0.0035	0.0045	0.0089	0.0020	0.0115	0.0070	0.014
0.0009	0.0003	0.0017	1.0093	0.0027	0.0060	0.0049	0.0008	0.0067	0.0070	0.0004	0.015
0.0007	0.0003	0.0014	0.0002	1.0003	0.0001	0.0001	0.0009	0.0002	0.0004	0.0004	0.016
—	—	—	—	—	1.0000	—	—	—	—	—	0.017
0.0021	0.0066	0.0087	0.0036	0.0067	0.0225	1.0197	0.0260	0.0070	0.0019	0.0028	0.018
0.0043	0.0009	0.0007	0.0102	0.2383	0.0006	0.0007	1.0595	0.0633	0.0071	0.0058	0.019
0.0003	0.0002	0.0003	0.0003	0.0003	0.0000	0.0001	0.0013	1.0001	0.0001	0.0001	0.020
—	—	—	—	—	—	—	—	—	1.0000	—	0.021
0.0011	0.0003	0.0030	0.0015	0.0015	0.0046	0.0005	0.0011	0.0096	0.0045	1.0014	0.022
0.0000	0.0000	0.0000	0.0002	0.0000	0.0000	0.0000	0.0000	0.0001	0.0042	0.0056	0.023
0.1333	0.0003	0.0002	0.0026	0.0052	0.0023	0.0043	0.0003	0.0020	0.0009	0.0032	0.024
0.0007	0.0004	0.0011	0.0006	0.0004	0.0006	0.0007	0.0004	0.0005	0.0004	0.0004	0.025
0.0001	0.0000	0.0001	0.0001	0.0000	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000	0.026
—	—	—	—	—	—	—	—	—	—	—	0.027
0.0002	0.0002	0.0001	0.0002	0.0001	0.0002	0.0002	0.0001	0.0001	0.0002	0.0002	0.028
0.0321	0.0193	0.0280	0.0093	0.0428	0.0078	0.0227	0.0024	0.0376	0.0063	0.0015	0.029
0.0004	0.0003	0.0004	0.0004	0.0003	0.0004	0.0004	0.0002	0.0002	0.0004	0.0004	0.030
0.0000	0.0000	0.0000	0.0000	0.0004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.031
0.0001	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000	0.032
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.033
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.034
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.035
—	—	—	—	—	—	—	—	—	—	—	0.036
0.0004	0.0011	0.0018	0.0005	0.0004	0.0022	0.0009	0.0006	0.0007	0.0008	0.0006	0.037
0.0002	0.0008	0.0004	0.0011	0.0002	0.0003	0.0009	0.0002	0.0002	0.0001	0.0001	0.038
—	—	—	—	—	—	—	—	—	—	—	0.039
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.040
0.0002	0.0002	0.0002	0.0004	0.0007	0.0001	0.0005	0.0004	0.0003	0.0003	0.0005	0.041
0.0000	0.0000	0.0001	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000	0.0000	0.0001	0.042
0.0001	0.0002	0.0002	0.0006	0.0002	0.0001	0.0004	0.0001	0.0001	0.0001	0.0001	0.043
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.044
—	—	—	—	—	—	—	—	—	—	—	0.045
0.0001	0.0001	0.0001	0.0000	0.0001	0.0001	0.0000	0.0001	0.0000	0.0001	0.0001	0.046
0.0029	0.0002	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.047
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.048
0.0000	0.0003	0.0000	0.0001	0.0001	0.0000	0.0001	0.0004	0.0001	0.0000	0.0000	0.049
0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0001	0.0002	0.0001	0.0001	0.050
0.0005	0.0016	0.0013	0.0018	0.0030	0.0003	0.0010	0.0119	0.0634	0.0009	0.0041	0.051
0.0001	0.0000	0.0001	0.0000	0.0001	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.052
—	—	—	—	—	—	—	—	—	—	—	0.053
0.0001	0.0001	0.0001	0.0000	0.0002	0.0000	0.0001	0.0001	0.0002	0.0000	0.0000	0.054
0.0006	0.0013	0.0006	0.0011	0.0010	0.0011	0.0014	0.0010	0.0219	0.0003	0.0002	0.055
0.0006	0.0001	0.0001	0.0006	0.0001	0.0002	0.0001	0.0002	0.0002	0.0002	0.0001	0.056
0.0007	0.0014	0.0006	0.0009	0.0006	0.0009	0.0006	0.0017	0.0066	0.0006	0.0003	0.057
0.0000	0.0000	0.0001	0.0001	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0002	0.058
0.0007	0.0008	0.0011	0.0005	0.0008	0.0006	0.0005	0.0010	0.0004	0.0009	0.0008	0.059
0.0033	0.0018	0.0058	0.0027	0.0019	0.0027	0.0034	0.0017	0.0023	0.0019	0.0020	0.060
0.0011	0.0012	0.0008	0.0012	0.0011	0.0009	0.0013	0.0006	0.0008	0.0010	0.0014	0.061
0.0045	0.0028	0.0028	0.0060	0.0017	0.0067	0.0050	0.0010	0.0012	0.0052	0.0041	0.062
0.0014	0.0004	0.0010	0.0011	0.0047	0.0004	0.0012	0.0003	0.0012	0.0012	0.0004	0.063
0.0015	0.0055	0.0025	0.0023	0.0024	0.0020	0.0029	0.0027	0.0011	0.0007	0.0006	0.064
0.0001	0.0001	0.0001	0.0000	0.0001	0.0000	0.0000	0.0001	0.0000	0.0000	0.0001	0.065

Matrix C (*continued*)

	1	2	3	4	5	6	7	8	9	10	11
0066	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0067	0.0001	0.0001	0.0001	0.0000	0.0001	0.0001	0.0007	0.0092	0.0033	0.0033	0.0007
0068	0.0000	0.0000	0.0090	0.0000	0.0000	0.0000	0.0001	0.0001	0.0002	0.0001	0.0000
0069	0.0003	0.0002	0.0038	0.0000	0.0002	0.0001	0.0001	0.0001	0.0004	0.0002	0.0002
0070	0.0001	0.0001	0.0001	0.0000	0.0001	0.0002	0.0007	0.0017	0.0003	0.0003	0.0003
0071	0.0008	0.0008	0.0059	0.0002	0.0501	0.0034	0.0158	0.0041	0.0100	0.0096	0.0056
0072	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0073	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0074	0.0000	0.0001	0.0001	0.0000	0.0001	0.0001	0.0001	0.0001	0.0002	0.0001	0.0010
0075	0.0002	0.0002	0.0034	0.0000	0.0003	0.0001	0.0001	0.0002	0.0002	0.0001	0.0004
0076	0.0002	0.0001	0.0008	0.0001	0.0002	0.0001	0.0002	0.0002	0.0002	0.0003	0.0007
0077	0.0009	0.0007	0.0062	0.0003	0.0007	0.0009	0.0072	0.0010	0.0008	0.0028	0.0050
0078	0.0003	0.0002	0.0003	0.0001	0.0004	0.0001	0.0002	0.0004	0.0003	0.0005	0.0006
0079	0.0015	0.0009	0.0130	0.0006	0.0012	0.0010	0.0026	0.0018	0.0014	0.0029	0.0097
0080	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0004	0.0000	0.0000	0.0001	0.0001
0081	0.0024	0.0014	0.0136	0.0002	0.0015	0.0007	0.0034	0.0016	0.0015	0.0032	0.0026
0082	0.0010	0.0006	0.0035	0.0019	0.0008	0.0008	0.0011	0.0016	0.0016	0.0042	0.0022
0083	0.0012	0.0009	0.0015	0.0005	0.0016	0.0005	0.0010	0.0017	0.0015	0.0022	0.0026
0084	0.0115	0.0016	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0085	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0086	0.0091	0.0012	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0087	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0088	0.0298	0.0040	0.0002	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0089	0.0014	0.0002	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0090	0.0004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0091	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0092	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0093	0.0463	0.0063	0.0003	0.0001	0.0000	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000
0094	0.0007	0.0004	0.0001	0.0000	0.0001	0.0000	0.0001	0.0001	0.0001	0.0001	0.0000
0095	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0096	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0097	0.0002	0.0002	0.0001	0.0000	0.0011	0.0000	0.0009	0.0001	0.0001	0.0003	0.0002
0098	0.0003	0.0003	0.0001	0.0001	0.0016	0.0001	0.0011	0.0001	0.0003	0.0004	0.0002
0099	0.0006	0.0007	0.0004	0.0001	0.0020	0.0001	0.0003	0.0005	0.0006	0.0004	0.0002
0100	0.0001	0.0001	0.0000	0.0001	0.0006	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000
0101	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0102	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000
0103	0.0020	0.0026	0.0001	0.0001	0.0251	0.0001	0.0005	0.0001	0.0005	0.0002	0.0006
0104	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0105	0.0000	0.0000	0.0000	0.0000	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0106	—	—	—	—	—	—	—	—	—	—	—
0107	0.0001	0.0001	0.0000	0.0001	0.0004	0.0001	0.0011	0.0003	0.0002	0.0004	0.0002
0108	0.0019	0.0013	0.0001	0.0017	0.0002	0.0006	0.0036	0.0003	0.0012	0.0012	0.0004
0109	0.0300	0.0459	0.0144	0.0005	0.0017	0.0040	0.0063	0.0046	0.0098	0.0046	0.0023
0110	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0111	0.0001	0.0001	0.0001	0.0018	0.0001	0.0151	0.0146	0.0020	0.0003	0.0035	0.0022
0112	0.0229	0.0040	0.0009	0.0001	0.0027	0.0004	0.0008	0.0008	0.0005	0.0008	0.0006
0113	0.0004	0.0004	0.0005	0.0002	0.0003	0.0002	0.0016	0.0003	0.0005	0.0007	0.0008
0114	0.0006	0.0002	0.0001	0.0000	0.0002	0.0001	0.0007	0.0001	0.0002	0.0002	0.0002
0115	0.0006	0.0006	0.0008	0.0001	0.0015	0.0002	0.0014	0.0006	0.0005	0.0008	0.0005
0116	0.0087	0.0102	0.0075	0.0009	0.0270	0.0016	0.0046	0.0077	0.0038	0.0063	0.0035
0117	0.0002	0.0002	0.0000	0.0002	0.0000	0.0003	0.0001	0.0003	0.0010	0.0007	0.0002
0118	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0119	—	—	—	—	—	—	—	—	—	—	—
0120	0.0012	0.0009	0.0022	0.0027	0.0021	0.0003	0.0009	0.0010	0.0011	0.0012	0.0009
0121	0.0087	0.0061	0.0138	0.0030	0.0022	0.0009	0.0036	0.0017	0.0031	0.0033	0.0016
0122	0.0003	0.0002	0.0006	0.0000	0.0003	0.0001	0.0003	0.0005	0.0004	0.0007	0.0005
0123	0.0053	0.0063	0.0058	0.0008	0.0027	0.0075	0.0039	0.0175	0.0411	0.0079	0.0235
0124	0.0365	0.0126	0.0032	0.0096	0.0055	0.0011	0.0036	0.0021	0.0026	0.0033	0.0025
0125	0.0001	0.0001	0.0002	0.0000	0.0000	0.0001	0.0001	0.0002	0.0002	0.0003	0.0002
0126	0.0002	0.0001	0.0004	0.0001	0.0002	0.0001	0.0002	0.0003	0.0003	0.0005	0.0003
0127	0.0401	0.0309	0.0841	0.0039	0.0357	0.0201	0.0453	0.0826	0.0688	0.1124	0.0775
Total	2.1467	1.4853	1.2939	1.1515	1.2914	1.1891	1.4044	3.2097	1.3230	1.5601	1.7205

12	13	14	15	16	17	18	19	20	21	22		
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0066
0.0008	0.0036	0.0016	0.0018	0.0011	0.0014	0.0024	0.0006	0.0005	0.0003	0.0003	0.0003	0067
0.0000	0.0001	0.0002	0.0001	0.0002	0.0000	0.0001	0.0001	0.0011	0.0005	0.0001	0.0001	0068
0.0008	0.0002	0.0027	0.0002	0.0001	0.0004	0.0001	0.0002	0.0043	0.0033	0.0016	0.0016	0069
0.0040	0.0034	0.0074	0.0013	0.0030	0.0015	0.0016	0.0009	0.0014	0.0010	0.0013	0.0013	0070
0.0063	0.0094	0.0058	0.0084	0.0023	0.0147	0.0080	0.0041	0.0028	0.0184	0.0089	0.0089	0071
0.0000	0.0000	0.0000	0.0000	0.0000	0.0147	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0072
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0073
0.0008	0.0004	0.0091	0.0006	0.0017	0.0049	0.0003	0.0068	0.0026	0.0006	0.0007	0.0007	0074
0.0003	0.0002	0.0026	0.0002	0.0005	0.0021	0.0001	0.0020	0.0008	0.0003	0.0003	0.0003	0075
0.0008	0.0004	0.0014	0.0006	0.0004	0.0011	0.0004	0.0006	0.0006	0.0006	0.0009	0.0009	0076
0.0057	0.0027	0.0034	0.0034	0.0020	0.0049	0.0013	0.0017	0.0031	0.0043	0.0038	0.0038	0077
0.0006	0.0004	0.0025	0.0007	0.0006	0.0014	0.0007	0.0012	0.0008	0.0005	0.0012	0.0012	0078
0.0116	0.0054	0.0066	0.0068	0.0039	0.0098	0.0026	0.0030	0.0058	0.0088	0.0075	0.0075	0079
0.0006	0.0003	0.0002	0.0006	0.0002	0.0005	0.0005	0.0007	0.0001	0.0001	0.0000	0.0000	0080
0.0144	0.0032	0.0088	0.0081	0.0024	0.0090	0.0022	0.0020	0.0032	0.0130	0.0041	0.0041	0081
0.0061	0.0018	0.0043	0.0043	0.0020	0.0035	0.0017	0.0039	0.0053	0.0031	0.0044	0.0044	0082
0.0025	0.0017	0.0112	0.0033	0.0025	0.0064	0.0031	0.0052	0.0035	0.0021	0.0055	0.0055	0083
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0084
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0085
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0086
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0087
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0088
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0089
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0090
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0091
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0092
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0093
0.0003	0.0001	0.0001	0.0001	0.0001	0.0003	0.0001	0.0000	0.0003	0.0001	0.0001	0.0001	0094
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0095
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0096
0.0002	0.0005	0.0005	0.0002	0.0001	0.0005	0.0003	0.0001	0.0001	0.0002	0.0002	0.0002	0097
0.0002	0.0003	0.0003	0.0002	0.0008	0.0047	0.0002	0.0001	0.0004	0.0004	0.0004	0.0004	0098
0.0002	0.0004	0.0015	0.0005	0.0006	0.0005	0.0009	0.0003	0.0003	0.0004	0.0004	0.0004	0099
0.0000	0.0001	0.0001	0.0001	0.0002	0.0005	0.0001	0.0000	0.0001	0.0001	0.0001	0.0008	0100
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0101
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0102
0.0004	0.0015	0.0005	0.0007	0.0003	0.0005	0.0005	0.0001	0.0002	0.0004	0.0005	0.0005	0103
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0104
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0105
0.0006	0.0003	0.0008	0.0004	0.0018	0.0006	0.0007	0.0001	0.0001	0.0034	0.0009	0.0009	0106
0.0005	0.0005	0.0005	0.0006	0.0037	0.0012	0.0016	0.0003	0.0016	0.0004	0.0003	0.0003	0108
0.0106	0.0060	0.0044	0.0055	0.0044	0.0058	0.0040	0.0016	0.0078	0.0037	0.0079	0.0079	0109
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0110
0.0006	0.0008	0.0003	0.0005	0.0005	0.0005	0.0006	0.0004	0.0003	0.0005	0.0005	0.0005	0111
0.0012	0.0020	0.0007	0.0009	0.0006	0.0014	0.0010	0.0007	0.0007	0.0016	0.0004	0.0004	0112
0.0185	0.0004	0.0015	0.0010	0.0004	0.0187	0.0019	0.0005	0.0047	0.0012	0.0013	0.0013	0113
0.0003	0.0002	0.0004	0.0003	0.0002	0.0001	0.0003	0.0001	0.0001	0.0002	0.0002	0.0002	0114
0.0025	0.0006	0.0044	0.0016	0.0013	0.0012	0.0007	0.0006	0.0207	0.0020	0.0005	0.0005	0115
0.0028	0.0069	0.0033	0.0055	0.0042	0.0049	0.0037	0.0054	0.0037	0.0072	0.0029	0.0029	0116
0.0026	0.0006	0.0009	0.0002	0.0002	0.0008	0.0006	0.0003	0.0011	0.0001	0.0008	0.0008	0117
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0118
0.0016	0.0012	0.0040	0.0030	0.0013	0.0026	0.0017	0.0018	0.0022	0.0025	0.0053	0.0053	0119
0.0031	0.0028	0.0037	0.0031	0.0027	0.0039	0.0041	0.0049	0.0044	0.0022	0.0044	0.0044	0120
0.0006	0.0004	0.0004	0.0005	0.0005	0.0005	0.0006	0.0005	0.0005	0.0005	0.0005	0.0005	0122
0.0090	0.0090	0.0057	0.0082	0.0079	0.0070	0.0089	0.0050	0.0064	0.0087	0.0084	0.0084	0123
0.0027	0.0022	0.0022	0.0026	0.0019	0.0033	0.0025	0.0020	0.0019	0.0034	0.0026	0.0026	0124
0.0003	0.0002	0.0002	0.0002	0.0002	0.0002	0.0003	0.0002	0.0002	0.0002	0.0002	0.0002	0125
0.0004	0.0003	0.0003	0.0004	0.0003	0.0003	0.0004	0.0003	0.0003	0.0003	0.0004	0.0004	0126
0.0894	0.0596	0.0606	0.0813	0.0798	0.0731	0.0902	0.0712	0.0745	0.0701	0.0700	0.0700	0127
1.8785	2.3396	1.6216	1.9629	1.8441	1.8193	2.1329	1.4415	1.6620	1.6208	1.5516	1.5516	Total

Matrix C (continued)

	23	24	25	26	27	28	29	30	31	32	33
0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0002	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001	0.0002	0.0002	0.0001	0.0001	0.0001
0003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0004	0.0034	0.0023	0.0056	0.0046	0.0103	0.0054	0.0036	0.0036	0.0018	0.0101	0.0037
0005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0006	0.0014	0.0351	0.0104	0.0044	0.0131	0.0077	0.0127	0.0251	0.0053	0.0190	0.0190
0007	0.0170	0.0066	0.0014	0.0010	0.0010	0.0009	0.0019	0.0015	0.0011	0.0008	0.0008
0008	0.0313	0.8175	0.2416	0.1013	0.3058	0.1797	0.2963	0.5851	0.1234	0.4415	0.4415
0009	0.0039	0.0144	0.0058	0.0021	0.0065	0.0121	0.0062	0.0106	0.0040	0.0082	0.0082
0010	0.0707	0.0229	0.0043	0.0032	0.0030	0.0031	0.0071	0.0049	0.0043	0.0021	0.0021
0011	0.0194	0.0030	0.0105	0.0109	0.0089	0.0020	0.0065	0.0048	0.0041	0.0053	0.0053
0012	0.0005	0.0006	0.0133	0.0030	0.0090	0.0055	0.0220	0.0004	0.0015	0.0007	0.0007
0013	0.0148	0.0048	0.0931	0.0422	0.0158	0.0026	0.0112	0.0027	0.0055	0.0184	0.0184
0014	0.0007	0.0006	0.0094	0.0030	0.0020	0.0030	0.0105	0.0139	0.0177	0.0088	0.0088
0015	0.0004	0.0002	0.0097	0.0032	0.0080	0.0016	0.0127	0.0014	0.0042	0.0023	0.0023
0016	0.0001	0.0001	0.0012	0.0001	0.0002	0.0022	0.0007	0.0020	0.0011	0.0032	0.0032
0017	—	—	—	—	—	—	—	—	—	—	—
0018	0.0241	0.0006	0.0320	0.0261	0.0072	0.0020	0.0211	0.0016	0.0039	0.0074	0.0074
0019	0.0007	0.0004	0.0078	0.0046	0.0046	0.0069	0.0367	0.0096	0.0115	0.0050	0.0050
0020	0.0001	0.0000	0.0010	0.0001	0.0095	0.0007	0.0003	0.0002	0.0019	0.0001	0.0001
0021	—	—	—	—	—	—	—	—	—	—	—
0022	0.0011	0.0037	0.0025	0.0070	0.0068	0.0010	0.0042	0.0016	0.0036	0.0014	0.0014
0023	1.2215	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0024	0.0002	1.0002	0.0071	0.0012	0.0040	0.0008	0.0039	0.0008	0.0020	0.0002	0.0002
0025	0.0006	0.0008	1.0901	0.0005	0.0026	0.0019	0.0006	0.0003	0.0006	0.0006	0.0006
0026	0.0000	0.0001	0.0000	1.1970	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0027	—	—	—	—	0.3400	—	—	—	—	—	—
0028	0.0001	0.0002	0.0003	0.0002	0.7239	0.0005	0.0002	0.0001	0.0001	0.0007	0.0007
0029	0.0014	0.0128	0.0436	0.0228	0.0691	2.2666	0.2175	0.0218	0.1903	0.1089	0.1089
0030	0.0003	0.0004	0.0563	0.1050	0.0239	0.0012	1.1122	0.0003	0.0165	0.0019	0.0019
0031	0.0000	0.0000	0.0002	0.0000	0.0001	0.0000	0.0000	1.0004	0.0000	0.0000	0.0000
0032	0.0001	0.0002	0.0000	0.0000	0.0001	0.0000	0.0001	0.0001	1.0003	0.0001	0.0001
0033	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000	1.0000
0034	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0035	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0036	—	—	—	—	—	—	—	—	—	—	—
0037	0.0006	0.0002	0.0155	0.0041	0.0095	0.0011	0.0192	0.0021	0.0199	0.0211	0.0211
0038	0.0001	0.0006	0.0021	0.0002	0.0003	0.0010	0.0010	0.0004	0.0004	0.0041	0.0041
0039	—	—	—	—	—	—	—	—	—	—	—
0040	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0041	0.0003	0.0002	0.0033	0.0010	0.0002	0.0018	0.0012	0.0002	0.0013	0.0008	0.0008
0042	0.0001	0.0000	0.0027	0.0001	0.0000	0.0001	0.0005	0.0034	0.0010	0.0034	0.0034
0043	0.0001	0.0002	0.0017	0.0002	0.0005	0.0005	0.0001	0.0001	0.0003	0.0003	0.0003
0044	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0045	—	—	—	—	—	—	—	—	—	—	—
0046	0.0000	0.0000	0.0001	0.0000	0.0000	0.0002	0.0001	0.0000	0.0001	0.0000	0.0000
0047	0.0001	0.0001	0.0029	0.0003	0.0011	0.0001	0.0014	0.0011	0.0025	0.0045	0.0045
0048	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0049	0.0000	0.0000	0.0030	0.0000	0.0017	0.0000	0.0001	0.0000	0.0004	0.0013	0.0013
0050	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001
0051	0.0006	0.0003	0.0145	0.0037	0.0050	0.0008	0.0335	0.0084	0.0345	0.0055	0.0055
0052	0.0002	0.0000	0.0005	0.0000	0.0001	0.0000	0.0002	0.0001	0.0000	0.0000	0.0000
0053	—	—	—	—	—	—	—	—	—	—	—
0054	0.0000	0.0001	0.0002	0.0001	0.0004	0.0105	0.0011	0.0001	0.0001	0.0005	0.0005
0055	0.0003	0.0007	0.0036	0.0007	0.0086	0.0034	0.0031	0.0026	0.0022	0.0027	0.0027
0056	0.0001	0.0002	0.0024	0.0045	0.0002	0.0003	0.0001	0.0002	0.0002	0.0002	0.0002
0057	0.0003	0.0003	0.0040	0.0006	0.0016	0.0004	0.0007	0.0004	0.0017	0.0008	0.0008
0058	0.0000	0.0000	0.0039	0.0010	0.0024	0.0002	0.0004	0.0003	0.0001	0.0004	0.0004
0059	0.0002	0.0004	0.0006	0.0003	0.0003	0.0020	0.0010	0.0003	0.0008	0.0003	0.0003
0060	0.0033	0.0040	0.0027	0.0023	0.0028	0.0015	0.0022	0.0014	0.0025	0.0024	0.0024
0061	0.0010	0.0016	0.0012	0.0010	0.0009	0.0008	0.0015	0.0010	0.0009	0.0010	0.0010
0062	0.0012	0.0033	0.0026	0.0015	0.0020	0.0043	0.0057	0.0043	0.0015	0.0072	0.0072
0063	0.0005	0.0008	0.0007	0.0006	0.0009	0.0007	0.0004	0.0008	0.0010	0.0008	0.0008
0064	0.0021	0.0039	0.0019	0.0010	0.0021	0.0067	0.0028	0.0024	0.0014	0.0022	0.0022
0065	0.0004	0.0002	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000

34	35	36	37	38	39	40	41	42	43	44	
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0001
0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0004	0.0001	0.0001	0.0001
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0039	0.0102	0.0055	0.0045	0.0028	0.0048	0.0107	0.0067	0.0039	0.0040	0.0026	0.004
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0005
0.0081	0.0128	0.0086	0.0110	0.0252	0.0032	0.0048	0.0078	0.0062	0.0133	0.0105	0.006
0.0014	0.0008	0.0023	0.0010	0.0042	0.0020	0.0020	0.0016	0.0043	0.0025	0.0026	0.007
0.1871	0.2969	0.1987	0.2568	0.5855	0.0744	0.1106	0.1805	0.1445	0.3100	0.2439	0.008
0.0065	0.0059	0.0068	0.0051	0.0107	0.0016	0.0023	0.0036	0.0034	0.0059	0.0044	0.009
0.0051	0.0021	0.0086	0.0035	0.0161	0.0077	0.0064	0.0060	0.0177	0.0097	0.0101	0.010
0.0186	0.0040	0.0208	0.0187	0.0328	0.0125	0.0270	0.0196	0.0085	0.0131	0.0245	0.011
0.0023	0.0042	0.0150	0.0004	0.0007	0.0068	0.0018	0.0147	0.0008	0.0009	0.0004	0.012
0.0176	0.0492	0.0664	0.0319	0.0318	0.0455	0.0895	0.0234	0.0098	0.0126	0.0068	0.013
0.0059	0.0045	0.0135	0.0131	0.0081	0.0152	0.0024	0.0074	0.0073	0.0131	0.0066	0.014
0.0030	0.0092	0.0016	0.0020	0.0064	0.0066	0.0059	0.0046	0.0072	0.0032	0.0007	0.015
0.0002	0.0012	0.0099	0.0001	0.0001	0.0002	0.0003	0.0037	0.0004	0.0035	0.0003	0.016
0.0207	0.0546	0.0042	0.0020	0.0041	0.0091	0.0222	0.0079	0.0051	0.0100	0.0046	0.017
0.0100	0.0039	0.0230	0.0012	0.0189	0.0423	0.0048	0.0090	0.1395	0.0432	0.0060	0.018
0.0001	0.0003	0.0001	0.0000	0.0003	0.0002	0.0003	0.0013	0.0002	0.0004	0.0000	0.019
—	—	—	—	—	—	—	—	—	—	—	0.020
0.0018	0.0041	0.0009	0.0012	0.0008	0.0011	0.0018	0.0018	0.0296	0.0014	0.0194	0.021
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0000	0.0002	0.0001	0.022
0.0036	0.0102	0.0152	0.0009	0.0010	0.0046	0.0011	0.0039	0.0008	0.0016	0.0013	0.023
0.0004	0.0007	0.0005	0.0003	0.0045	0.0008	0.0004	0.0006	0.0006	0.0006	0.0004	0.024
0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.025
—	—	—	—	—	—	—	—	—	—	—	0.026
0.0005	0.0061	0.0001	0.0002	0.0054	0.0001	0.0001	0.0003	0.0002	0.0079	0.0002	0.027
0.0826	0.1296	0.0610	0.0327	0.0257	0.0211	0.0064	0.0738	0.1892	0.0874	0.0073	0.028
0.0093	0.0514	0.0003	0.0002	0.0006	0.0003	0.0004	0.0037	0.0004	0.0058	0.0002	0.029
0.0009	0.0000	0.0000	0.0000	0.0002	0.0000	0.0000	0.0000	0.0000	0.0023	0.0000	0.030
0.0001	0.0001	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0004	0.0000	0.0001	0.031
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.032
1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.033
0.0000	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.034
—	—	—	—	—	—	—	—	—	—	—	0.035
—	—	1.1017	—	—	—	—	—	—	—	—	0.036
0.0182	0.0173	0.0038	1.0033	0.0131	0.0013	0.0008	0.0108	0.0061	0.0275	0.0012	0.037
0.0007	0.0003	0.0039	0.0002	1.0046	0.0002	0.0008	0.0130	0.0003	0.0170	0.0002	0.038
—	—	—	—	—	1.0354	—	—	—	—	—	0.039
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0819	0.0000	0.0000	0.0000	0.0000	0.040
0.0009	0.0004	0.0003	0.0001	0.0004	0.0004	0.0515	1.0087	0.0010	0.0019	0.0002	0.041
0.0003	0.0052	0.0024	0.0000	0.0000	0.0000	0.0000	0.0005	1.0000	0.0047	0.0051	0.042
0.0002	0.0001	0.0002	0.0001	0.0007	0.0001	0.0001	0.0003	0.0004	1.0005	0.0001	0.043
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0427	0.044
—	—	—	—	—	—	—	—	—	—	—	0.045
0.0001	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000	0.0001	0.0001	0.0000	0.0000	0.046
0.0014	0.0022	0.0031	0.0003	0.0003	0.0011	0.0001	0.0016	0.0001	0.0036	0.0005	0.047
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.048
0.0003	0.0022	0.0001	0.0000	0.0002	0.0001	0.0001	0.0004	0.0001	0.0010	0.0000	0.049
0.0001	0.0001	0.0001	0.0002	0.0001	0.0002	0.0001	0.0003	0.0002	0.0005	0.0001	0.050
0.0093	0.0035	0.0172	0.0028	0.0178	0.0171	0.0043	0.0339	0.0479	0.0355	0.0076	0.051
0.0003	0.0000	0.0000	0.0000	0.0001	0.0001	0.0001	0.0000	0.0000	0.0001	0.0066	0.052
—	—	—	—	—	—	—	—	—	—	—	0.053
0.0004	0.0006	0.0003	0.0002	0.0001	0.0001	0.0000	0.0003	0.0009	0.0004	0.0001	0.054
0.0023	0.0049	0.0019	0.0015	0.0025	0.0022	0.0015	0.0073	0.0007	0.0015	0.0028	0.055
0.0001	0.0001	0.0002	0.0002	0.0003	0.0001	0.0005	0.0001	0.0002	0.0020	0.0002	0.056
0.0012	0.0007	0.0011	0.0002	0.0005	0.0014	0.0029	0.0012	0.0007	0.0047	0.0010	0.057
0.0002	0.0020	0.0014	0.0000	0.0001	0.0001	0.0009	0.0010	0.0001	0.0001	0.0110	0.058
0.0007	0.0005	0.0005	0.0002	0.0006	0.0010	0.0004	0.0008	0.0006	0.0004	0.0005	0.059
0.0017	0.0030	0.0023	0.0011	0.0040	0.0041	0.0020	0.0023	0.0022	0.0021	0.0020	0.060
0.0016	0.0010	0.0010	0.0007	0.0014	0.0010	0.0008	0.0010	0.0008	0.0009	0.0009	0.061
0.0059	0.0021	0.0016	0.0016	0.0030	0.0010	0.0018	0.0049	0.0040	0.0016	0.0015	0.062
0.0004	0.0008	0.0009	0.0002	0.0041	0.0008	0.0020	0.0007	0.0005	0.0009	0.0004	0.063
0.0047	0.0022	0.0024	0.0020	0.0032	0.0007	0.0014	0.0015	0.0024	0.0018	0.0011	0.064
0.0001	0.0000	0.0000	0.0001	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.065

Matrix C (continued)

	23	24	25	26	27	28	29	30	31	32	33
0066	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0067	0.0003	0.0028	0.0010	0.0005	0.0013	0.0020	0.0020	0.0020	0.0006	0.0017	0.0017
0068	0.0000	0.0000	0.0002	0.0001	0.0003	0.0002	0.0003	0.0001	0.0004	0.0001	0.0001
0069	0.0002	0.0002	0.0058	0.0004	0.0010	0.0001	0.0003	0.0001	0.0008	0.0001	0.0001
0070	0.0469	0.0154	0.0029	0.0016	0.0017	0.0021	0.0033	0.0017	0.0041	0.0014	0.0014
0071	0.0015	0.0019	0.0047	0.0023	0.0159	0.0071	0.0040	0.0018	0.0157	0.0050	0.0050
0072	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0073	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0074	0.0001	0.0001	0.0014	0.0004	0.0015	0.0019	0.0024	0.0002	0.0021	0.0007	0.0007
0075	0.0001	0.0001	0.0005	0.0002	0.0006	0.0006	0.0008	0.0001	0.0006	0.0002	0.0002
0076	0.0015	0.0003	0.0009	0.0024	0.0005	0.0007	0.0005	0.0005	0.0005	0.0004	0.0004
0077	0.0034	0.0018	0.0045	0.0042	0.0015	0.0016	0.0017	0.0007	0.0018	0.0011	0.0011
0078	0.0029	0.0004	0.0011	0.0048	0.0008	0.0014	0.0007	0.0009	0.0007	0.0007	0.0007
0079	0.0064	0.0035	0.0088	0.0074	0.0026	0.0032	0.0033	0.0013	0.0035	0.0020	0.0020
0080	0.0001	0.0000	0.0002	0.0001	0.0015	0.0003	0.0001	0.0000	0.0008	0.0000	0.0000
0081	0.0070	0.0038	0.0055	0.0048	0.0022	0.0031	0.0024	0.0012	0.0019	0.0018	0.0018
0082	0.0038	0.0044	0.0063	0.0083	0.0027	0.0038	0.0031	0.0013	0.0031	0.0023	0.0023
0083	0.0130	0.0018	0.0050	0.0215	0.0037	0.0062	0.0032	0.0042	0.0031	0.0031	0.0031
0084	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0085	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0086	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0087	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0088	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0089	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0090	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0091	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0092	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0093	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0094	0.0001	0.0002	0.0002	0.0001	0.0001	0.0000	0.0001	0.0000	0.0001	0.0000	0.0000
0095	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0096	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0097	0.0001	0.0001	0.0022	0.0004	0.0002	0.0001	0.0003	0.0001	0.0001	0.0001	0.0001
0098	0.0008	0.0002	0.0078	0.0035	0.0013	0.0002	0.0006	0.0001	0.0002	0.0003	0.0003
0099	0.0002	0.0002	0.0007	0.0006	0.0005	0.0002	0.0004	0.0003	0.0003	0.0003	0.0003
0100	0.0001	0.0000	0.0017	0.0023	0.0010	0.0001	0.0002	0.0000	0.0001	0.0002	0.0002
0101	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0102	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0103	0.0002	0.0001	0.0022	0.0011	0.0003	0.0002	0.0045	0.0001	0.0005	0.0001	0.0001
0104	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0105	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000
0106	—	—	—	—	—	—	—	—	—	—	—
0107	0.0015	0.0001	0.0006	0.0002	0.0002	0.0008	0.0012	0.0004	0.0010	0.0006	0.0006
0108	0.0003	0.0002	0.0301	0.0568	0.0239	0.0008	0.0020	0.0002	0.0006	0.0056	0.0056
0109	0.0041	0.0313	0.0059	0.0039	0.0030	0.0020	0.0028	0.0014	0.0019	0.0016	0.0016
0110	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0111	0.0003	0.0007	0.0003	0.0002	0.0003	0.0002	0.0003	0.0005	0.0002	0.0004	0.0004
0112	0.0003	0.0004	0.0015	0.0008	0.0008	0.0017	0.0015	0.0004	0.0006	0.0005	0.0005
0113	0.0005	0.0004	0.0061	0.0085	0.0056	0.0007	0.0020	0.0004	0.0023	0.0010	0.0010
0114	0.0002	0.0001	0.0027	0.0002	0.0002	0.0003	0.0002	0.0003	0.0007	0.0002	0.0002
0115	0.0009	0.0005	0.0039	0.0010	0.0033	0.0005	0.0008	0.0005	0.0010	0.0008	0.0008
0116	0.0015	0.0030	0.0071	0.0022	0.0049	0.0033	0.0046	0.0036	0.0030	0.0034	0.0034
0117	0.0001	0.0002	0.0006	0.0003	0.0155	0.0004	0.0003	0.0015	0.0058	0.0010	0.0010
0118	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0119	—	—	—	—	—	—	—	—	—	—	—
0120	0.0050	0.0033	0.0020	0.0069	0.0020	0.0021	0.0017	0.0015	0.0022	0.0023	0.0023
0121	0.0031	0.0026	0.0037	0.0044	0.0027	0.0033	0.0036	0.0042	0.0036	0.0033	0.0033
0122	0.0007	0.0007	0.0008	0.0006	0.0005	0.0004	0.0007	0.0005	0.0004	0.0005	0.0005
0123	0.0082	0.0112	0.0091	0.0075	0.0073	0.0051	0.0082	0.0073	0.0052	0.0075	0.0075
0124	0.0026	0.0024	0.0029	0.0026	0.0033	0.0019	0.0024	0.0016	0.0029	0.0021	0.0021
0125	0.0003	0.0003	0.0003	0.0003	0.0002	0.0002	0.0003	0.0002	0.0002	0.0002	0.0002
0126	0.0006	0.0005	0.0005	0.0005	0.0004	0.0003	0.0004	0.0003	0.0003	0.0004	0.0004
0127	0.1107	0.1125	0.1167	0.0958	0.0868	0.0578	0.1022	0.0703	0.0661	0.0819	0.0819
Total	1.6552	2.1527	1.9766	1.8268	1.8183	2.6614	2.0346	1.8327	1.6260	1.8355	1.8355

34	35	36	37	38	39	40	41	42	43	44	
1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0066
1.0037	0.0016	0.0008	0.0009	0.0021	0.0003	0.0004	0.0007	0.0007	0.0012	0.0009	0067
1.0001	0.0002	0.0002	0.0001	0.0086	0.0002	0.0016	0.0008	0.0004	0.0006	0.0002	0068
1.0001	0.0002	0.0010	0.0001	0.0002	0.0002	0.0035	0.0002	0.0003	0.0005	0.0003	0069
1.0026	0.0014	0.0031	0.0103	0.0015	0.0012	0.0105	0.0011	0.0009	0.0009	0.0012	0070
1.0047	0.0166	0.0074	0.0060	0.0029	0.0051	0.0134	0.0085	0.0046	0.0043	0.0026	0071
1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0005	0.0005	0072
1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0073
1.0014	0.0004	0.0006	0.0004	0.0004	0.0015	0.0039	0.0004	0.0017	0.0008	0.0005	0074
1.0004	0.0002	0.0002	0.0002	0.0002	0.0005	0.0012	0.0002	0.0005	0.0003	0.0002	0075
1.0006	0.0004	0.0004	0.0003	0.0006	0.0006	0.0008	0.0010	0.0004	0.0004	0.0004	0076
1.0014	0.0013	0.0022	0.0018	0.0012	0.0030	0.0050	0.0028	0.0018	0.0021	0.0015	0077
1.0011	0.0007	0.0005	0.0003	0.0011	0.0008	0.0009	0.0017	0.0005	0.0005	0.0006	0078
1.0025	0.0024	0.0043	0.0037	0.0022	0.0060	0.0094	0.0054	0.0037	0.0041	0.0029	0079
1.0001	0.0002	0.0002	0.0000	0.0002	0.0001	0.0001	0.0001	0.0001	0.0011	0.0000	0080
1.0015	0.0022	0.0038	0.0042	0.0017	0.0076	0.0065	0.0029	0.0028	0.0023	0.0016	0081
1.0047	0.0033	0.0046	0.0046	0.0018	0.0055	0.0027	0.0099	0.0024	0.0054	0.0055	0082
1.0050	0.0030	0.0023	0.0012	0.0048	0.0035	0.0039	0.0078	0.0024	0.0022	0.0025	0083
1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0084
1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0085
1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0086
1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0087
1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0088
1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0089
1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0090
1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0091
1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0092
1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0093
1.0001	0.0001	0.0001	0.0000	0.0001	0.0001	0.0005	0.0001	0.0000	0.0001	0.0000	0094
1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0095
1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0096
1.0001	0.0002	0.0002	0.0001	0.0001	0.0002	0.0002	0.0002	0.0001	0.0001	0.0001	0097
1.0004	0.0024	0.0014	0.0004	0.0002	0.0003	0.0012	0.0005	0.0008	0.0004	0.0004	0098
1.0004	0.0004	0.0003	0.0003	0.0003	0.0002	0.0003	0.0002	0.0109	0.0004	0.0002	0099
1.0003	0.0013	0.0010	0.0001	0.0001	0.0002	0.0004	0.0002	0.0003	0.0002	0.0002	0100
1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0101
1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0102
1.0003	0.0006	0.0009	0.0002	0.0002	0.0002	0.0003	0.0007	0.0006	0.0005	0.0001	0103
1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0104
1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0105
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0.0002	0.0008	0.0013	0.0006	0.0006	0.0006	0.0002	0.0017	0.0018	0.0002	0.0017	0107
0.0059	0.0313	0.0250	0.0002	0.0007	0.0033	0.0070	0.0032	0.0062	0.0047	0.0034	0108
0.0025	0.0033	0.0044	0.0018	0.0040	0.0044	0.0141	0.0026	0.0017	0.0022	0.0030	0109
1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0110
1.0002	0.0003	0.0003	0.0003	0.0006	0.0001	0.0003	0.0013	0.0002	0.0003	0.0025	0111
1.0005	0.0009	0.0010	0.0008	0.0007	0.0005	0.0011	0.0006	0.0005	0.0008	0.0003	0112
1.0023	0.0077	0.0039	0.0010	0.0027	0.0025	0.0109	0.0032	0.0009	0.0032	0.0008	0113
1.0002	0.0004	0.0004	0.0008	0.0001	0.0003	0.0003	0.0002	0.0003	0.0001	0.0001	0114
1.0010	0.0012	0.0021	0.0006	0.0006	0.0065	0.0409	0.0019	0.0006	0.0008	0.0009	0115
1.0028	0.0039	0.0033	0.0046	0.0045	0.0025	0.0047	0.0029	0.0030	0.0052	0.0018	0116
1.0007	0.0004	0.0004	0.0002	0.0014	0.0009	0.0002	0.0008	0.0005	0.0004	0.0021	0117
1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0118
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1.0023	0.0015	0.0013	0.0012	0.0013	0.0024	0.0016	0.0033	0.0015	0.0017	0.0012	0120
1.0037	0.0032	0.0030	0.0030	0.0042	0.0047	0.0031	0.0088	0.0047	0.0050	0.0031	0121
1.0004	0.0006	0.0006	0.0003	0.0006	0.0003	0.0005	0.0005	0.0005	0.0006	0.0005	0122
1.0053	0.0074	0.0078	0.0048	0.0096	0.0039	0.0060	0.0058	0.0059	0.0074	0.0066	0123
1.0017	0.0033	0.0026	0.0016	0.0022	0.0017	0.0030	0.0023	0.0020	0.0022	0.0018	0124
1.0002	0.0003	0.0003	0.0001	0.0003	0.0001	0.0002	0.0002	0.0002	0.0003	0.0002	0125
1.0003	0.0004	0.0004	0.0002	0.0004	0.0002	0.0003	0.0003	0.0003	0.0004	0.0003	0126
1.0601	0.0895	0.0978	0.0506	0.0991	0.0485	0.0748	0.0673	0.0763	0.0875	0.0780	0127
1.5626	1.9068	1.9016	1.5103	2.0079	1.4497	1.6920	1.6254	1.7930	1.8132	1.5760	Total

56	57	58	59	60	61	62	63	64	65	66	
0.0000	0.0001	0.0001	0.0000	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001
0.0001	0.0003	0.0001	0.0001	0.0003	0.0005	0.0002	0.0001	0.0001	0.0001	0.0001	0.0002
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0097	0.0102	0.0117	0.0035	0.0041	0.0094	0.0028	0.0019	0.0097	0.0083	0.0049	0.0004
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0005
0.0025	0.0013	0.0012	0.0081	0.0030	0.0044	0.0083	0.0043	0.0007	0.0005	0.0041	0.0006
0.0046	0.0276	0.0044	0.0026	0.0007	0.0018	0.0011	0.0011	0.0002	0.0006	0.0007	0.0007
0.0574	0.0298	0.0286	0.1876	0.0708	0.1021	0.1922	0.0999	0.0164	0.0110	0.0950	0.0008
0.0024	0.0010	0.0008	0.0047	0.0016	0.0021	0.0036	0.0021	0.0003	0.0002	0.0017	0.0009
0.0179	0.1098	0.0167	0.0100	0.0022	0.0065	0.0036	0.0042	0.0006	0.0002	0.0021	0.0010
0.0733	0.0181	0.0840	0.0332	0.0060	0.0084	0.0040	0.0082	0.0009	0.0003	0.0030	0.0011
0.0162	0.0008	0.0006	0.0098	0.0059	0.0026	0.0013	0.0006	0.0010	0.0003	0.0006	0.0012
0.0314	0.0137	0.0088	0.0268	0.0217	0.0138	0.0096	0.0171	0.0023	0.0004	0.0011	0.0013
0.0010	0.0017	0.0062	0.0037	0.0061	0.0058	0.0067	0.0044	0.0041	0.0003	0.0021	0.0014
0.0003	0.0009	0.0018	0.0023	0.0110	0.0099	0.0151	0.0080	0.0005	0.0003	0.0003	0.0015
0.0001	0.0002	0.0006	0.0456	0.0005	0.0007	0.0001	0.0011	0.0000	0.0001	0.0001	0.0016
—	—	—	—	—	—	—	—	—	—	—	0.0017
0.0171	0.0012	0.0029	0.0632	0.0132	0.0165	0.0085	0.0046	0.0079	0.0005	0.0029	0.0018
0.0046	0.0012	0.0150	0.0168	0.0029	0.0062	0.0023	0.0071	0.0012	0.0001	0.0003	0.0019
0.0000	0.0001	0.0004	0.0001	0.0014	0.0014	0.0002	0.0004	0.0000	0.0000	0.0000	0.0020
—	—	—	—	—	—	—	—	—	—	—	0.0021
0.0409	0.0007	0.0041	0.0009	0.0018	0.0021	0.0012	0.0009	0.0003	0.0002	0.0002	0.0022
0.0002	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0001	0.0000	0.0000	0.0000	0.0023
0.0025	0.0003	0.0061	0.0019	0.0036	0.0018	0.0006	0.0091	0.0002	0.0001	0.0002	0.0024
0.0007	0.0006	0.0003	0.0010	0.1819	0.0021	0.0078	0.0043	0.0012	0.0007	0.0016	0.0025
0.0001	0.0001	0.0000	0.0001	0.0149	0.0000	0.0021	0.0001	0.0001	0.0001	0.0001	0.0026
—	—	—	—	—	—	—	—	—	—	—	0.0027
0.0001	0.0002	0.0001	0.0002	0.0036	0.0685	0.0127	0.0011	0.0002	0.0002	0.0002	0.0028
0.0021	0.0018	0.0047	0.1991	0.0143	0.0170	0.0170	0.0092	0.0016	0.0007	0.0022	0.0029
0.0003	0.0005	0.0002	0.0004	0.0349	0.0445	0.0394	0.0004	0.0007	0.0005	0.0007	0.0030
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0012	0.0001	0.0000	0.0000	0.0000	0.0031
0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0023	0.0000	0.0000	0.0000	0.0000	0.0032
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0048	0.0000	0.0001	0.0000	0.0000	0.0033
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0021	0.0000	0.0000	0.0000	0.0000	0.0034
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0027	0.0000	0.0000	0.0000	0.0000	0.0035
—	—	—	—	—	—	—	—	—	—	—	0.0036
0.0002	0.0004	0.0006	0.0004	0.0081	0.0172	0.0138	0.0026	0.0005	0.0002	0.0003	0.0037
0.0001	0.0002	0.0001	0.0052	0.0005	0.0089	0.0004	0.0002	0.0001	0.0000	0.0001	0.0038
—	—	—	—	—	—	—	—	—	—	—	0.0039
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0040
0.0001	0.0004	0.0004	0.0020	0.0032	0.0184	0.0009	0.0002	0.0005	0.0000	0.0001	0.0041
0.0000	0.0001	0.0000	0.0067	0.0005	0.0001	0.0003	0.0000	0.0000	0.0000	0.0000	0.0042
0.0000	0.0001	0.0002	0.0001	0.0007	0.0005	0.0003	0.0001	0.0000	0.0000	0.0000	0.0043
0.0000	0.0000	0.0000	0.0000	0.0000	0.0018	0.0029	0.0000	0.0000	0.0000	0.0000	0.0044
—	—	—	—	—	—	—	—	—	—	—	0.0045
0.0000	0.0001	0.0001	0.0893	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0002	0.0046
0.0001	0.0001	0.0000	0.0005	0.0035	0.0010	0.0003	0.0002	0.0000	0.0000	0.0000	0.0047
0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0048
0.0000	0.0000	0.0000	0.0000	0.0040	0.0008	0.0002	0.0003	0.0000	0.0000	0.0000	0.0049
0.0001	0.0001	0.0001	0.0028	0.0004	0.0006	0.0021	0.0001	0.0001	0.0001	0.0001	0.0050
0.0004	0.0005	0.0005	0.0013	0.0069	0.0274	0.0032	0.0298	0.0003	0.0002	0.0002	0.0051
0.0000	0.0001	0.0001	0.0000	0.0008	0.0015	0.0009	0.0265	0.0001	0.0001	0.0001	0.0052
—	—	—	—	—	—	—	—	—	—	—	0.0053
0.0000	0.0000	0.0000	0.0009	0.0001	0.0001	0.0001	0.0002	0.0000	0.0000	0.0000	0.0054
0.0003	0.0006	0.0003	0.0010	0.0015	0.0098	0.0013	0.0191	0.0003	0.0004	0.0003	0.0055
1.0002	0.0002	0.0002	0.0002	0.0017	0.0007	0.0007	0.0003	0.0002	0.0000	0.0001	0.0056
0.0353	1.0078	0.0009	0.0004	0.0017	0.0058	0.0128	0.0112	0.0013	0.0003	0.0008	0.0057
0.0000	0.0001	1.0154	0.0014	0.0009	0.0032	0.0025	0.0004	0.0000	0.0000	0.0000	0.0058
0.0003	0.0011	0.0010	1.0009	0.0004	0.0003	0.0002	0.0002	0.0005	0.0012	0.0017	0.0059
0.0036	0.0025	0.0016	0.0045	1.0360	0.0018	0.0022	0.0036	0.0059	0.0032	0.0085	0.0060
0.0010	0.0009	0.0006	0.0012	0.0009	1.0064	0.0006	0.0006	0.0004	0.0004	0.0010	0.0061
0.0035	0.0074	0.0028	0.0014	0.0042	0.0066	1.0096	0.0010	0.0120	0.0102	0.0094	0.0062
0.0012	0.0026	0.0017	0.0007	0.0026	0.0037	0.0007	1.0010	0.0019	0.0030	0.0014	0.0063
0.0019	0.0016	0.0007	0.0033	0.0008	0.0016	0.0011	0.0007	1.0349	0.0185	0.0495	0.0064
0.0000	0.0001	0.0000	0.0008	0.0000	0.0000	0.0000	0.0000	0.0005	1.0002	0.1452	0.0065

Matrix C (continued)

	45	46	47	48	49	50	51	52	53	54	55
0066	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0067	0.0003	0.0028	0.0103	0.0017	0.0003	0.0002	0.0008	0.0003	0.0003	0.0022	0.0004
0068	0.0004	0.0001	0.0001	0.0009	0.0002	0.0002	0.0067	0.0005	0.0001	0.0097	0.0195
0069	0.0005	0.0010	0.0004	0.0007	0.0002	0.0001	0.0022	0.0038	0.0050	0.0029	0.0009
0070	0.0004	0.0006	0.0011	0.0007	0.0001	0.0001	0.0012	0.0005	0.0018	0.0020	0.0006
0071	0.0021	0.0117	0.0039	0.0099	0.0039	0.0059	0.0068	0.0066	0.0046	0.0070	0.0021
0072	0.0001	0.0000	0.0000	0.0023	0.0000	0.0000	0.0001	0.0775	0.0000	0.0000	0.0001
0073	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0074	0.0014	0.0005	0.0004	0.0020	0.0012	0.0023	0.0005	0.0004	0.0013	0.0003	0.0014
0075	0.0005	0.0002	0.0002	0.0008	0.0002	0.0007	0.0002	0.0038	0.0004	0.0002	0.0005
0076	0.0036	0.0004	0.0007	0.0007	0.0011	0.0008	0.0006	0.0010	0.0007	0.0014	0.0009
0077	0.0032	0.0018	0.0012	0.0016	0.0096	0.0064	0.0045	0.0032	0.0055	0.0045	0.0044
0078	0.0080	0.0007	0.0014	0.0013	0.0004	0.0003	0.0003	0.0016	0.0004	0.0022	0.0013
0079	0.0049	0.0034	0.0022	0.0030	0.0197	0.0130	0.0093	0.0059	0.0109	0.0089	0.0084
0080	0.0003	0.0001	0.0002	0.0007	0.0001	0.0001	0.0000	0.0009	0.0001	0.0001	0.0001
0081	0.0047	0.0026	0.0023	0.0026	0.0212	0.0046	0.0022	0.0075	0.0156	0.0155	0.0074
0082	0.0064	0.0062	0.0020	0.0029	0.0055	0.0040	0.0065	0.0047	0.0021	0.0024	0.0083
0083	0.0358	0.0030	0.0064	0.0057	0.0017	0.0015	0.0014	0.0073	0.0016	0.0099	0.0056
0084	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0085	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0086	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0087	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0088	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0089	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0003	0.0000	0.0000
0090	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0091	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0092	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0093	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0094	0.0001	0.0001	0.0001	0.0001	0.0004	0.0002	0.0001	0.0003	0.0003	0.0001	0.0003
0095	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0096	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0097	0.0003	0.0001	0.0002	0.0002	0.0003	0.0002	0.0003	0.0020	0.0014	0.0002	0.0002
0098	0.0007	0.0001	0.0002	0.0004	0.0035	0.0023	0.0015	0.0018	0.0040	0.0003	0.0005
0099	0.0004	0.0006	0.0011	0.0007	0.0005	0.0003	0.0003	0.0006	0.0006	0.0002	0.0003
0100	0.0002	0.0002	0.0001	0.0001	0.0016	0.0013	0.0006	0.0004	0.0015	0.0001	0.0001
0101	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0102	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0103	0.0004	0.0002	0.0002	0.0015	0.0003	0.0002	0.0004	0.0018	0.0063	0.0007	0.0001
0104	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0004	0.0000	0.0001
0105	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0003	0.0000	0.0000
0106	—	—	—	—	—	—	—	—	—	—	—
0107	0.0010	0.0003	0.0021	0.0010	0.0001	0.0000	0.0001	0.0006	0.0170	0.0001	0.0018
0108	0.0033	0.0003	0.0008	0.0009	0.0382	0.0008	0.0011	0.0042	0.0310	0.0012	0.0010
0109	0.0031	0.0100	0.0027	0.0034	0.0461	0.0069	0.0055	0.0312	0.0296	0.0082	0.0114
0110	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0111	0.0001	0.0005	0.0007	0.0005	0.0003	0.0001	0.0003	0.0002	0.0002	0.0003	0.0003
0112	0.0006	0.0010	0.0011	0.0010	0.0008	0.0004	0.0010	0.0007	0.0007	0.0006	0.0007
0113	0.0009	0.0024	0.0013	0.0070	0.0029	0.0012	0.0032	0.0029	0.0020	0.0049	0.0037
0114	0.0002	0.0002	0.0001	0.0002	0.0002	0.0001	0.0001	0.0005	0.0005	0.0002	0.0001
0115	0.0030	0.0007	0.0009	0.0016	0.0013	0.0139	0.0028	0.0042	0.0117	0.0011	0.0230
0116	0.0042	0.0074	0.0097	0.0055	0.0056	0.0020	0.0044	0.0040	0.0035	0.0021	0.0033
0117	0.0005	0.0002	0.0002	0.0302	0.0001	0.0008	0.0022	0.0008	0.0001	0.0004	0.0001
0118	0.0000	0.0000	0.0000	0.0040	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0119	—	—	—	—	—	—	—	—	—	—	—
0120	0.0098	0.0017	0.0016	0.0020	0.0013	0.0020	0.0019	0.0032	0.0013	0.0036	0.0037
0121	0.0070	0.0046	0.0035	0.0137	0.0121	0.0040	0.0062	0.0047	0.0019	0.0046	0.0055
0122	0.0004	0.0006	0.0007	0.0007	0.0005	0.0003	0.0004	0.0006	0.0004	0.0005	0.0005
0123	0.0051	0.0090	0.0109	0.0094	0.0063	0.0037	0.0049	0.0065	0.0045	0.0061	0.0054
0124	0.0021	0.0030	0.0025	0.0030	0.0024	0.0019	0.0020	0.0029	0.0019	0.0024	0.0019
0125	0.0002	0.0003	0.0003	0.0003	0.0002	0.0001	0.0002	0.0003	0.0002	0.0002	0.0002
0126	0.0005	0.0004	0.0005	0.0005	0.0003	0.0002	0.0003	0.0004	0.0003	0.0004	0.0004
0127	0.0591	0.0950	0.1077	0.1050	0.0705	0.0431	0.0529	0.0801	0.0587	0.0689	0.0687
Total	1.4633	1.9122	2.2166	2.0093	1.5249	1.3826	1.5186	1.5453	1.5004	1.6774	1.5987

56	57	58	59	60	61	62	63	64	65	66	
0.0000	0.0000	0.0000	0.0049	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000	0066
0.0004	0.0004	0.0002	0.0010	0.0003	0.0005	0.0007	0.0004	0.0002	0.0000	0.0003	0067
0.0000	0.0008	0.0001	0.0239	0.0001	0.0005	0.0001	0.0006	0.0000	0.0000	0.0001	0068
0.0642	0.0002	0.0066	0.0020	0.0028	0.0012	0.0003	0.0003	0.0001	0.0001	0.0002	0069
0.0004	0.0001	0.0006	0.0035	0.0012	0.0013	0.0010	0.0008	0.0034	0.0001	0.0004	0070
0.0046	0.0065	0.0154	0.0032	0.0032	0.0143	0.0030	0.0016	0.0023	0.0010	0.0046	0071
0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0001	0.0019	0.0000	0.0000	0.0000	0072
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0073
0.0003	0.0034	0.0007	0.0004	0.0006	0.0009	0.0005	0.0004	0.0001	0.0000	0.0001	0074
0.0004	0.0011	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0002	0.0000	0.0003	0075
0.0014	0.0013	0.0014	0.0005	0.0007	0.0004	0.0003	0.0004	0.0006	0.0018	0.0007	0076
0.0123	0.0119	0.0049	0.0023	0.0027	0.0018	0.0010	0.0011	0.0033	0.0147	0.0034	0077
0.0004	0.0004	0.0024	0.0006	0.0010	0.0005	0.0006	0.0006	0.0006	0.0007	0.0008	0078
0.0260	0.0243	0.0096	0.0047	0.0051	0.0036	0.0019	0.0022	0.0065	0.0309	0.0070	0079
0.0001	0.0001	0.0001	0.0001	0.0003	0.0010	0.0002	0.0002	0.0000	0.0000	0.0001	0080
0.0485	0.0020	0.0089	0.0057	0.0034	0.0023	0.0015	0.0013	0.0117	0.0645	0.0124	0081
0.0063	0.0015	0.0148	0.0055	0.0046	0.0034	0.0014	0.0016	0.0034	0.0086	0.0046	0082
0.0018	0.0016	0.0105	0.0028	0.0046	0.0022	0.0027	0.0028	0.0026	0.0031	0.0037	0083
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0084
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0085
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0004	0086
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0087
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0088
0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0089
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0090
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0091
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0092
0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000	0093
0.0001	0.0005	0.0003	0.0001	0.0002	0.0002	0.0001	0.0001	0.0000	0.0001	0.0001	0094
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0095
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0096
0.0003	0.0003	0.0001	0.0002	0.0008	0.0025	0.0002	0.0003	0.0001	0.0003	0.0001	0097
0.0007	0.0050	0.0002	0.0003	0.0025	0.0023	0.0006	0.0006	0.0002	0.0002	0.0001	0098
0.0003	0.0030	0.0002	0.0005	0.0011	0.0081	0.0009	0.0002	0.0002	0.0001	0.0002	0099
0.0001	0.0018	0.0000	0.0001	0.0012	0.0005	0.0003	0.0001	0.0001	0.0000	0.0002	0100
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0101
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0102
0.0002	0.0003	0.0002	0.0016	0.0038	0.0026	0.0013	0.0002	0.0001	0.0001	0.0001	0103
0.0000	0.0000	0.0001	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0001	0104
0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0105
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0.0001	0.0001	0.0026	0.0003	0.0011	0.0024	0.0015	0.0002	0.0001	0.0000	0.0001	0107
0.0005	0.0070	0.0003	0.0006	0.0240	0.0049	0.0053	0.0005	0.0018	0.0002	0.0011	0108
0.0103	0.0565	0.0164	0.0027	0.0050	0.0052	0.0031	0.0032	0.0023	0.0048	0.0026	0109
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0110
0.0003	0.0005	0.0003	0.0003	0.0002	0.0002	0.0002	0.0001	0.0073	0.0002	0.0010	0111
0.0005	0.0009	0.0006	0.0009	0.0022	0.0018	0.0013	0.0008	0.0005	0.0003	0.0006	0112
0.0018	0.0039	0.0049	0.0014	0.0099	0.0067	0.0022	0.0033	0.0007	0.0016	0.0009	0113
0.0003	0.0002	0.0004	0.0001	0.0015	0.0034	0.0005	0.0004	0.0002	0.0003	0.0001	0114
0.0015	0.0026	0.0101	0.0008	0.0019	0.0018	0.0011	0.0016	0.0005	0.0017	0.0011	0115
0.0026	0.0033	0.0025	0.0064	0.0157	0.0056	0.0101	0.0032	0.0027	0.0011	0.0024	0116
0.0002	0.0003	0.0013	0.0002	0.0145	0.0016	0.0004	0.0003	0.0002	0.0001	0.0001	0117
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0118
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0.0029	0.0011	0.0036	0.0022	0.0025	0.0015	0.0014	0.0011	0.0019	0.0024	0.0020	0120
0.0043	0.0028	0.0042	0.0056	0.0046	0.0025	0.0036	0.0036	0.0031	0.0027	0.0034	0121
0.0005	0.0006	0.0004	0.0008	0.0006	0.0005	0.0004	0.0004	0.0003	0.0003	0.0008	0122
0.0063	0.0061	0.0051	0.0095	0.0071	0.0058	0.0049	0.0045	0.0032	0.0037	0.0084	0123
0.0028	0.0030	0.0029	0.0027	0.0024	0.0029	0.0015	0.0013	0.0023	0.0022	0.0029	0124
0.0002	0.0002	0.0001	0.0003	0.0003	0.0002	0.0002	0.0002	0.0001	0.0001	0.0003	0125
0.0003	0.0004	0.0003	0.0005	0.0004	0.0003	0.0003	0.0003	0.0002	0.0003	0.0005	0126
0.0709	0.0853	0.0514	0.1213	0.0994	0.0775	0.0600	0.0588	0.0453	0.0508	0.1190	0127
1.6095	1.4905	1.4123	1.9675	1.7198	1.6223	1.5280	1.3902	1.2191	1.2637	1.5311	Total

Matrix C (continued)

	67	68	69	70	71	72	73	74	75	76	77
0001	0.0000	0.0004	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0007
0002	0.0002	0.0003	0.0002	0.0004	0.0001	0.0004	0.0002	0.0005	0.0005	0.0001	0.0005
0003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0004	0.0070	0.0068	0.0393	0.0147	0.5909	0.0621	0.2982	0.1538	0.3030	0.4693	0.4246
0005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0006	0.0003	0.0002	0.0007	0.0018	0.0001	0.0023	0.0008	0.0011	0.0004	0.0004	0.0006
0007	0.0001	0.0017	0.0005	0.0016	0.0000	0.0005	0.0003	0.0011	0.0007	0.0003	0.0071
0008	0.0061	0.0042	0.0173	0.0261	0.0034	0.0531	0.0181	0.0246	0.0104	0.0097	0.0138
0009	0.0001	0.0001	0.0003	0.0005	0.0001	0.0010	0.0004	0.0005	0.0002	0.0002	0.0003
0010	0.0002	0.0057	0.0003	0.0007	0.0001	0.0012	0.0007	0.0007	0.0023	0.0008	0.0004
0011	0.0003	0.0097	0.0004	0.0009	0.0002	0.0056	0.0019	0.0016	0.0007	0.0021	0.0009
0012	0.0002	0.0006	0.0004	0.0007	0.0001	0.0012	0.0041	0.0012	0.0009	0.0002	0.0005
0013	0.0005	0.0005	0.0008	0.0018	0.0006	0.0052	0.0051	0.0080	0.0028	0.0021	0.0050
0014	0.0011	0.0011	0.0005	0.0004	0.0023	0.0004	0.0013	0.0009	0.0005	0.0007	0.0008
0015	0.0002	0.0002	0.0002	0.0003	0.0002	0.0105	0.0168	0.0385	0.0099	0.0008	0.0009
0016	0.0001	0.0000	0.0001	0.0001	0.0000	0.0000	0.0027	0.0001	0.0000	0.0003	0.0004
0017	—	—	—	—	—	—	—	—	—	—	—
0018	0.0009	0.0007	0.0022	0.0041	0.0009	0.0148	0.0043	0.0053	0.0040	0.0027	0.0026
0019	0.0002	0.0004	0.0002	0.0002	0.0001	0.0004	0.0010	0.0016	0.0022	0.0003	0.0003
0020	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0021	—	—	—	—	—	—	—	—	—	—	—
0022	0.0001	0.0112	0.0005	0.0005	0.0002	0.0007	0.0006	0.0005	0.0005	0.0077	0.0015
0023	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0024	0.0001	0.0002	0.0001	0.0002	0.0001	0.0003	0.0007	0.0003	0.0002	0.0001	0.0001
0025	0.0013	0.0006	0.0006	0.0007	0.0022	0.0007	0.0017	0.0010	0.0016	0.0021	0.0018
0026	0.0001	0.0001	0.0001	0.0001	0.0002	0.0001	0.0002	0.0001	0.0001	0.0002	0.0002
0027	—	—	—	—	—	—	—	—	—	—	—
0028	0.0001	0.0001	0.0001	0.0002	0.0001	0.0002	0.0002	0.0002	0.0002	0.0004	0.0004
0029	0.0007	0.0004	0.0023	0.0009	0.0003	0.0014	0.0013	0.0008	0.0026	0.0014	0.0017
0030	0.0005	0.0002	0.0004	0.0004	0.0005	0.0004	0.0007	0.0004	0.0006	0.0014	0.0014
0031	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0032	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001
0033	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0005	0.0001
0034	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001
0035	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001
0036	—	—	—	—	—	—	—	—	—	—	—
0037	0.0002	0.0001	0.0002	0.0002	0.0006	0.0002	0.0005	0.0003	0.0004	0.0008	0.0008
0038	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0001	0.0000	0.0000	0.0001
0039	—	—	—	—	—	—	—	—	—	—	—
0040	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0017	0.0000	0.0000	0.0000	0.0000
0041	0.0001	0.0001	0.0000	0.0001	0.0000	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001
0042	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0043	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0044	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001
0045	—	—	—	—	—	—	—	—	—	—	—
0046	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0003	0.0004
0047	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0015	0.0000	0.0000	0.0001	0.0000
0048	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001
0049	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0050	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
0051	0.0001	0.0002	0.0001	0.0002	0.0001	0.0001	0.0004	0.0004	0.0002	0.0003	0.0003
0052	0.0001	0.0001	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0000	0.0001	0.0001
0053	—	—	—	—	—	—	—	—	—	—	—
0054	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0046	0.0000	0.0000	0.0000	0.0000
0055	0.0002	0.0005	0.0008	0.0004	0.0000	0.0002	0.0002	0.0008	0.0002	0.0005	0.0004
0056	0.0001	0.0001	0.0002	0.0001	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0001
0057	0.0008	0.0007	0.0010	0.0005	0.0001	0.0002	0.0010	0.0002	0.0004	0.0005	0.0005
0058	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001
0059	0.0017	0.0006	0.0011	0.0011	0.0000	0.0002	0.0002	0.0002	0.0003	0.0029	0.0044
0060	0.0071	0.0034	0.0029	0.0038	0.0126	0.0037	0.0093	0.0053	0.0085	0.0102	0.0090
0061	0.0002	0.0005	0.0005	0.0007	0.0003	0.0007	0.0014	0.0014	0.0007	0.0007	0.0007
0062	0.0052	0.0014	0.0063	0.0066	0.0014	0.0071	0.0087	0.0031	0.0066	0.0253	0.0276
0063	0.0016	0.0038	0.0014	0.0022	0.0001	0.0007	0.0010	0.0060	0.0011	0.0038	0.0015
0064	0.0518	0.0546	0.0199	0.0342	0.0001	0.0006	0.0007	0.0006	0.0005	0.0020	0.0046
0065	0.0074	0.0004	0.0001	0.0087	0.0000	0.0003	0.0007	0.0001	0.0067	0.0000	0.0000

Matrix C (continued)

	67	68	69	70	71	72	73	74	75	76	77
0066	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0039	0.0001	0.0000	0.0000	0.0000
0067	1.0002	0.0031	0.0022	0.0001	0.0008	0.0002	0.0005	0.0003	0.0001	0.0000	0.0001
0068	0.0000	1.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0001	0.0001
0069	0.0001	0.0007	1.0646	0.0002	0.0000	0.0010	0.0008	0.0004	0.0005	0.0001	0.0001
0070	0.0002	0.0027	0.0021	1.0281	0.0001	0.0013	0.0070	0.0016	0.0007	0.0001	0.0001
0071	0.0055	0.0067	0.0410	0.0022	1.0785	0.0573	0.4470	0.2198	0.1258	0.0006	0.0326
0072	0.0000	0.0000	0.0000	0.0000	0.0000	1.0683	0.0050	0.0000	0.0000	0.0000	0.0000
0073	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000	0.0000	0.0000	0.0000	0.0000
0074	0.0000	0.0000	0.0000	0.0000	0.0000	0.0003	0.0734	1.0593	0.0001	0.0000	0.0000
0075	0.0001	0.0021	0.0038	0.0003	0.0000	0.0494	0.0050	0.0164	1.0192	0.0000	0.0001
0076	0.0004	0.0007	0.0016	0.0029	0.0001	0.0009	0.0015	0.0011	0.0007	1.0001	0.0002
0077	0.0017	0.0038	0.0109	0.0240	0.0003	0.0047	0.0063	0.0043	0.0033	0.0005	1.0104
0078	0.0005	0.0008	0.0012	0.0010	0.0001	0.0009	0.0009	0.0008	0.0008	0.0001	0.0002
0079	0.0034	0.0077	0.0229	0.0502	0.0006	0.0090	0.0107	0.0082	0.0066	0.0008	0.0034
0080	0.0000	0.0002	0.0002	0.0000	0.0009	0.0068	0.0324	0.0206	0.0001	0.0000	0.0000
0081	0.0017	0.0082	0.0205	0.0380	0.0005	0.0137	0.0021	0.0059	0.0076	0.0004	0.0022
0082	0.0015	0.0112	0.0051	0.0077	0.0014	0.0076	0.0077	0.0071	0.0059	0.0013	0.0014
0083	0.0024	0.0035	0.0055	0.0045	0.0004	0.0041	0.0040	0.0035	0.0036	0.0006	0.0008
0084	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0085	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0086	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0087	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0088	0.0000	0.0000	0.0001	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001
0089	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0090	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0091	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0092	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0093	0.0000	0.0000	0.0014	0.0011	0.0001	0.0001	0.0001	0.0000	0.0001	0.0001	0.0001
0094	0.0000	0.0001	0.0001	0.0005	0.0000	0.0003	0.0001	0.0004	0.0002	0.0000	0.0003
0095	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0096	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0097	0.0000	0.0001	0.0002	0.0006	0.0000	0.0201	0.0003	0.0012	0.0013	0.0001	0.0011
0098	0.0001	0.0002	0.0004	0.0093	0.0001	0.0196	0.0004	0.0007	0.0008	0.0002	0.0007
0099	0.0002	0.0001	0.0006	0.0010	0.0001	0.0048	0.0004	0.0008	0.0025	0.0001	0.0001
0100	0.0000	0.0005	0.0001	0.0012	0.0001	0.0037	0.0001	0.0007	0.0006	0.0002	0.0002
0101	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0102	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000
0103	0.0001	0.0001	0.0001	0.0021	0.0001	0.0148	0.0002	0.0002	0.0003	0.0001	0.0002
0104	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000
0105	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000
0106	—	—	—	—	—	—	—	—	—	—	—
0107	0.0000	0.0000	0.0000	0.0001	0.0001	0.0009	0.0001	0.0002	0.0002	0.0006	0.0002
0108	0.0008	0.0005	0.0004	0.0003	0.0019	0.0340	0.0013	0.0006	0.0010	0.0015	0.0017
0109	0.0005	0.0070	0.0108	0.0510	0.0003	0.0050	0.0046	0.0370	0.0032	0.0036	0.0460
0110	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0111	0.0004	0.0005	0.0003	0.0004	0.0010	0.0003	0.0006	0.0004	0.0007	0.0009	0.0009
0112	0.0003	0.0004	0.0007	0.0014	0.0001	0.0014	0.0009	0.0013	0.0033	0.0002	0.0003
0113	0.0005	0.0058	0.0015	0.0028	0.0002	0.0145	0.0026	0.0114	0.0064	0.0003	0.0004
0114	0.0001	0.0001	0.0002	0.0002	0.0000	0.0003	0.0001	0.0001	0.0001	0.0001	0.0002
0115	0.0002	0.0004	0.0008	0.0086	0.0001	0.0067	0.0021	0.0014	0.0020	0.0012	0.0002
0116	0.0020	0.0008	0.0039	0.0100	0.0009	0.0065	0.0050	0.0068	0.0304	0.0015	0.0020
0117	0.0001	0.0001	0.0001	0.0001	0.0002	0.0001	0.0002	0.0001	0.0001	0.0002	0.0001
0118	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0119	—	—	—	—	—	—	—	—	—	—	—
0120	0.0014	0.0028	0.0023	0.0026	0.0018	0.0035	0.0037	0.0031	0.0031	0.0017	0.0015
0121	0.0037	0.0045	0.0032	0.0035	0.0025	0.0034	0.0040	0.0034	0.0038	0.0028	0.0023
0122	0.0002	0.0004	0.0004	0.0006	0.0006	0.0005	0.0007	0.0005	0.0005	0.0007	0.0007
0123	0.0019	0.0043	0.0044	0.0060	0.0023	0.0053	0.0056	0.0050	0.0063	0.0062	0.0066
0124	0.0015	0.0022	0.0070	0.0037	0.0993	0.0116	0.0513	0.0269	0.0448	0.0685	0.0627
0125	0.0001	0.0002	0.0002	0.0002	0.0000	0.0002	0.0002	0.0002	0.0002	0.0000	0.0001
0126	0.0001	0.0003	0.0003	0.0004	0.0001	0.0004	0.0003	0.0003	0.0003	0.0001	0.0001
0127	0.0271	0.0589	0.0609	0.0842	0.0063	0.0691	0.0662	0.0626	0.0674	0.0114	0.0266
Total	1.1565	1.2541	1.3846	1.4673	1.8207	1.6300	2.1536	1.7768	1.7256	1.6596	1.7254

78	79	80	81	82	83	84	85	86	87	88	
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0066
0.0001	0.0001	0.0002	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0067
0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0068
0.0001	0.0001	0.0001	0.0004	0.0002	0.0001	0.0002	0.0003	0.0001	0.0002	0.0020	0069
0.0001	0.0003	0.0003	0.0002	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0000	0070
0.0070	0.0246	0.1725	0.0099	0.0068	0.0021	0.0009	0.0021	0.0009	0.0015	0.0020	0071
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0072
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0073
0.0001	0.0001	0.0001	0.0002	0.0002	0.0001	0.0000	0.0000	0.0000	0.0000	0.0001	0074
0.0000	0.0001	0.0001	0.0003	0.0001	0.0001	0.0001	0.0004	0.0003	0.0010	0.0006	0075
0.4129	0.0520	0.0182	0.0184	0.0128	0.0932	0.0010	0.0013	0.0008	0.0016	0.0005	0076
0.1012	0.4960	0.0081	0.1728	0.1122	0.0266	0.0078	0.0096	0.0062	0.0083	0.0020	0077
1.0002	0.0006	0.0006	0.0011	0.0028	0.2249	0.0006	0.0009	0.0003	0.0018	0.0008	0078
0.0079	1.0577	0.0037	0.3672	0.2383	0.0100	0.0162	0.0201	0.0129	0.0172	0.0037	0079
0.0000	0.0000	1.0004	0.0003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0080
0.0007	0.0035	0.0041	1.0695	0.0035	0.0015	0.0345	0.0358	0.0273	0.0245	0.0055	0081
0.0016	0.0031	0.0016	0.0484	1.0498	0.0284	0.0024	0.0110	0.0023	0.0064	0.0024	0082
0.0007	0.0025	0.0025	0.0050	0.0125	1.0033	0.0025	0.0038	0.0013	0.0081	0.0038	0083
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0258	0.2631	0.0007	0.0011	0.0109	0084
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000	0.0000	0.0009	0.0000	0085
0.0000	0.0003	0.0000	0.0001	0.0001	0.0000	0.0007	0.0630	1.3903	0.0501	0.0092	0086
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0043	0.0000	1.0512	0.0000	0087
0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0045	0.0183	0.0018	0.0385	1.0272	0088
0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0001	0.0005	0.0007	0.0002	0.0019	0089
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0000	0.0002	0.0007	0090
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0026	0.0000	0.0011	0.0000	0091
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0394	0.0000	0.0071	0.0026	0092
0.0003	0.0012	0.0000	0.0009	0.0003	0.0001	0.0035	0.0305	0.0030	0.0189	0.0428	0093
0.0001	0.0002	0.0001	0.0015	0.0004	0.0001	0.0003	0.0002	0.0002	0.0006	0.0006	0094
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0004	0.0000	0.0004	0.0002	0095
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0096
0.0055	0.0077	0.0005	0.0029	0.0018	0.0016	0.0003	0.0002	0.0002	0.0002	0.0002	0097
0.0034	0.0038	0.0003	0.0091	0.0017	0.0010	0.0006	0.0003	0.0004	0.0002	0.0004	0098
0.0002	0.0010	0.0003	0.0013	0.0005	0.0002	0.0009	0.0004	0.0009	0.0005	0.0006	0099
0.0009	0.0004	0.0001	0.0005	0.0004	0.0003	0.0004	0.0002	0.0002	0.0000	0.0002	0100
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0101
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0102
0.0003	0.0004	0.0002	0.0005	0.0007	0.0002	0.0014	0.0006	0.0012	0.0002	0.0019	0103
0.0000	0.0000	0.0000	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0104
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0105
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0.0003	0.0002	0.0003	0.0002	0.0001	0.0001	0.0004	0.0002	0.0001	0.0001	0.0003	0107
0.0010	0.0011	0.0021	0.0009	0.0010	0.0011	0.0011	0.0013	0.0007	0.0004	0.0023	0108
0.0088	0.0246	0.0081	0.0299	0.0088	0.0035	0.0254	0.0130	0.0226	0.0045	0.0285	0109
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0003	0110
0.0006	0.0006	0.0005	0.0008	0.0003	0.0002	0.0001	0.0001	0.0001	0.0000	0.0001	0111
0.0002	0.0036	0.0083	0.0039	0.0021	0.0005	0.0023	0.0391	0.0020	0.0189	0.0241	0112
0.0004	0.0006	0.0023	0.0240	0.0178	0.0066	0.0010	0.0013	0.0009	0.0009	0.0007	0113
0.0001	0.0006	0.0013	0.0044	0.0002	0.0002	0.0003	0.0004	0.0002	0.0003	0.0014	0114
0.0006	0.0005	0.0005	0.0266	0.0017	0.0005	0.0016	0.0024	0.0010	0.0011	0.0022	0115
0.0014	0.0051	0.0042	0.0136	0.0052	0.0015	0.0061	0.0035	0.0056	0.0063	0.0085	0116
0.0001	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001	0.0002	0.0001	0.0001	0.0003	0117
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0118
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0.0012	0.0017	0.0017	0.0032	0.0065	0.0660	0.0011	0.0015	0.0011	0.0020	0.0018	0120
0.0019	0.0031	0.0034	0.0060	0.0050	0.0103	0.0045	0.0070	0.0037	0.0023	0.0093	0121
0.0005	0.0007	0.0004	0.0007	0.0005	0.0007	0.0004	0.0005	0.0004	0.0003	0.0003	0122
0.0047	0.0067	0.0052	0.0072	0.0051	0.0087	0.0065	0.0062	0.0065	0.0039	0.0064	0123
0.0414	0.0399	0.0472	0.0154	0.0103	0.0127	0.0082	0.0060	0.0071	0.0048	0.0748	0124
0.0001	0.0002	0.0001	0.0003	0.0002	0.0001	0.0002	0.0002	0.0002	0.0001	0.0001	0125
0.0001	0.0003	0.0002	0.0004	0.0004	0.0016	0.0003	0.0004	0.0003	0.0003	0.0002	0126
0.0215	0.0557	0.0449	0.0901	0.0595	0.0366	0.0636	0.0801	0.0689	0.0520	0.0443	0127
2.0165	2.1560	1.7665	2.0888	1.6803	1.6532	1.9452	1.9982	2.1911	1.4699	3.0678	Total

Matrix C (*continued*)

	89	90	91	92	93	94	95	96	97	98	99
0001	0.8219	0.0040	0.0706	0.0385	0.0529	0.0289	0.0045	0.0003	0.0001	0.0002	0.0059
0002	0.4957	0.0108	0.0924	0.0989	0.0925	0.2079	0.0287	0.0023	0.0005	0.0011	0.0424
0003	0.0007	0.0018	0.0633	0.0000	0.0001	0.0019	0.0073	0.0000	0.0000	0.0000	0.0000
0004	0.0020	0.0254	0.0108	0.0038	0.0033	0.0255	0.0133	0.0011	0.0033	0.0023	0.0067
0005	0.0017	0.1928	0.0108	0.0001	0.0014	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0006	0.0005	0.0011	0.0006	0.0002	0.0003	0.0003	0.0003	0.0000	0.0001	0.0001	0.0009
0007	0.0007	0.0011	0.0008	0.0016	0.0006	0.0010	0.0007	0.0001	0.0004	0.0005	0.0003
0008	0.0115	0.0266	0.0145	0.0048	0.0060	0.0081	0.0068	0.0004	0.0028	0.0033	0.0200
0009	0.0002	0.0008	0.0004	0.0001	0.0001	0.0002	0.0002	0.0000	0.0001	0.0001	0.0004
0010	0.0004	0.0040	0.0020	0.0007	0.0008	0.0020	0.0023	0.0002	0.0002	0.0003	0.0004
0011	0.0008	0.0170	0.0082	0.0022	0.0035	0.0062	0.0117	0.0005	0.0004	0.0007	0.0006
0012	0.0020	0.0997	0.0458	0.0056	0.0075	0.0014	0.0031	0.0002	0.0012	0.0016	0.0005
0013	0.0031	0.0088	0.0040	0.0011	0.0013	0.0018	0.0014	0.0001	0.0004	0.0006	0.0013
0014	0.0009	0.0007	0.0008	0.0003	0.0003	0.0006	0.0007	0.0000	0.0002	0.0007	0.0008
0015	0.0008	0.0005	0.0004	0.0002	0.0003	0.0007	0.0006	0.0000	0.0002	0.0002	0.0016
0016	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0000	0.0001	0.0000	0.0000
0017	—	—	—	—	—	—	—	—	—	—	—
0018	0.0111	0.0099	0.0033	0.0023	0.0024	0.0045	0.0037	0.0001	0.0004	0.0012	0.0018
0019	0.0002	0.0006	0.0003	0.0002	0.0002	0.0004	0.0005	0.0000	0.0001	0.0001	0.0003
0020	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0021	—	—	—	—	—	—	—	—	—	—	—
0022	0.0007	0.0148	0.0073	0.0053	0.0014	0.0261	0.0029	0.0019	0.0005	0.0016	0.0003
0023	0.0000	0.0001	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000
0024	0.0004	0.0131	0.0061	0.0008	0.0010	0.0003	0.0005	0.0000	0.0002	0.0002	0.0001
0025	0.0021	0.0011	0.0015	0.0007	0.0009	0.0020	0.0015	0.0001	0.0006	0.0006	0.0015
0026	0.0002	0.0001	0.0001	0.0001	0.0001	0.0002	0.0001	0.0000	0.0001	0.0001	0.0003
0027	—	—	—	—	—	—	—	—	—	—	—
0028	0.0006	0.0002	0.0003	0.0002	0.0003	0.0004	0.0002	0.0000	0.0002	0.0002	0.0013
0029	0.0009	0.0037	0.0019	0.0006	0.0008	0.0010	0.0011	0.0001	0.0005	0.0003	0.0018
0030	0.0011	0.0004	0.0006	0.0004	0.0006	0.0009	0.0007	0.0000	0.0004	0.0004	0.0040
0031	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001
0032	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002
0033	0.0001	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0005
0034	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002
0035	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0003
0036	—	—	—	—	—	—	—	—	—	—	—
0037	0.0005	0.0002	0.0003	0.0002	0.0002	0.0003	0.0002	0.0000	0.0002	0.0002	0.0014
0038	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001
0039	—	—	—	—	—	—	—	—	—	—	—
0040	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0041	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000	0.0001
0042	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0043	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0044	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0003
0045	—	—	—	—	—	—	—	—	—	—	—
0046	0.0000	0.0001	0.0000	0.0001	0.0001	0.0001	0.0002	0.0000	0.0001	0.0000	0.0000
0047	0.0001	0.0003	0.0002	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000
0048	0.0000	0.0001	0.0001	0.0001	0.0000	0.0000	0.0003	0.0000	0.0001	0.0001	0.0001
0049	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0050	0.0002	0.0003	0.0002	0.0001	0.0001	0.0001	0.0001	0.0000	0.0001	0.0001	0.0002
0051	0.0003	0.0002	0.0002	0.0002	0.0002	0.0003	0.0002	0.0000	0.0001	0.0001	0.0004
0052	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000	0.0001	0.0001
0053	—	—	—	—	—	—	—	—	—	—	—
0054	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0055	0.0002	0.0002	0.0003	0.0004	0.0003	0.0003	0.0002	0.0000	0.0001	0.0003	0.0003
0056	0.0001	0.0001	0.0001	0.0001	0.0000	0.0001	0.0001	0.0000	0.0000	0.0000	0.0001
0057	0.0004	0.0003	0.0006	0.0003	0.0003	0.0004	0.0007	0.0000	0.0002	0.0002	0.0013
0058	0.0001	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0002
0059	0.0004	0.0006	0.0004	0.0011	0.0011	0.0012	0.0027	0.0001	0.0014	0.0003	0.0004
0060	0.0110	0.0061	0.0083	0.0039	0.0047	0.0106	0.0080	0.0003	0.0029	0.0030	0.0044
0061	0.0056	0.0014	0.0022	0.0020	0.0017	0.0027	0.0007	0.0001	0.0010	0.0012	0.0014
0062	0.0115	0.0029	0.0067	0.0038	0.0095	0.0110	0.0100	0.0006	0.0075	0.0062	0.0971
0063	0.0009	0.0010	0.0011	0.0013	0.0023	0.0016	0.0016	0.0002	0.0008	0.0019	0.0009
0064	0.0028	0.0005	0.0016	0.0008	0.0006	0.0036	0.0006	0.0000	0.0003	0.0003	0.0005
0065	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000	0.0000	0.0000	0.0000

Matrix C (continued)

	89	90	91	92	93	94	95	96	97	98	99
0066	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0067	0.0000	0.0001	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000	0.0000	0.0000	0.0001
0068	0.0000	0.0000	0.0006	0.0000	0.0000	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000
0069	0.0003	0.0003	0.0220	0.0004	0.0006	0.0469	0.0102	0.0001	0.0002	0.0002	0.0002
0070	0.0001	0.0005	0.0003	0.0001	0.0001	0.0002	0.0001	0.0000	0.0000	0.0000	0.0001
0071	0.0011	0.0260	0.0039	0.0010	0.0009	0.0123	0.0107	0.0002	0.0018	0.0012	0.0012
0072	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0073	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0074	0.0000	0.0001	0.0001	0.0000	0.0000	0.0001	0.0000	0.0000	0.0003	0.0001	0.0001
0075	0.0002	0.0140	0.0023	0.0001	0.0004	0.0279	0.0189	0.0000	0.0001	0.0001	0.0001
0076	0.0004	0.0009	0.0027	0.0009	0.0008	0.0006	0.0009	0.0003	0.0005	0.0004	0.0014
0077	0.0019	0.0049	0.0131	0.0054	0.0044	0.0224	0.0029	0.0019	0.0046	0.0015	0.0112
0078	0.0004	0.0010	0.0034	0.0009	0.0009	0.0006	0.0015	0.0002	0.0007	0.0007	0.0006
0079	0.0038	0.0101	0.0270	0.0108	0.0090	0.0060	0.0054	0.0040	0.0035	0.0024	0.0229
0080	0.0000	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0081	0.0043	0.0160	0.0513	0.0151	0.0165	0.0071	0.0041	0.0023	0.0029	0.0027	0.0019
0082	0.0023	0.0088	0.0107	0.0056	0.0060	0.0082	0.0125	0.0016	0.0045	0.0023	0.0022
0083	0.0020	0.0044	0.0152	0.0040	0.0039	0.0029	0.0066	0.0007	0.0032	0.0032	0.0025
0084	0.0108	0.0008	0.0080	0.0005	0.0134	0.0003	0.0002	0.0000	0.0000	0.0000	0.0001
0085	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0086	0.0079	0.0183	0.1300	0.0015	0.0121	0.0097	0.0441	0.0004	0.0000	0.0000	0.0001
0087	0.0001	0.0000	0.0018	0.0008	0.0003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0088	0.0268	0.0018	0.0111	0.0259	0.0375	0.0008	0.0005	0.0000	0.0000	0.0000	0.0002
0089	1.2607	0.0001	0.0426	0.0006	0.0026	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000
0090	0.0013	1.1019	0.0037	0.0001	0.0077	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000
0091	0.0010	0.0016	1.0068	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0092	0.0012	0.0021	0.0011	1.1040	0.0006	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0093	0.0374	0.0225	0.0272	0.0056	1.0101	0.0021	0.0119	0.0002	0.0001	0.0005	0.0003
0094	0.0005	0.0001	0.0002	0.0006	0.0002	1.3059	0.0001	0.0001	0.0005	0.0003	0.0001
0095	0.0002	0.0000	0.0000	0.0000	0.0000	0.0008	1.0543	0.0000	0.0000	0.0000	0.0000
0096	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000	0.0000	0.0000	0.0000
0097	0.0002	0.0003	0.0003	0.0001	0.0002	0.0002	0.0003	0.0000	1.4856	0.0017	0.0005
0098	0.0003	0.0005	0.0004	0.0003	0.0001	0.0004	0.0006	0.0000	0.0415	1.3680	0.0052
0099	0.0005	0.0006	0.0004	0.0002	0.0003	0.0003	0.0014	0.0000	0.0017	0.0259	1.3133
0100	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0000	0.0439	0.0025	0.0001
0101	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000
0102	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0047	0.0000	0.0000
0103	0.0015	0.0050	0.0006	0.0003	0.0003	0.0006	0.0002	0.0000	0.0405	0.0233	0.0004
0104	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0001	0.0001	0.0000
0105	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0003	0.0002	0.0000
0106	—	—	—	—	—	—	—	—	—	—	—
0107	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001	0.0003	0.0000	0.0006	0.0003	0.0002
0108	0.0015	0.0004	0.0005	0.0003	0.0004	0.0007	0.0009	0.0000	0.0002	0.0002	0.0007
0109	0.0231	0.0034	0.0103	0.0533	0.0154	0.0132	0.0042	0.0008	0.0109	0.0148	0.0065
0110	0.0002	0.0000	0.0001	0.0003	0.0015	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000
0111	0.0001	0.0001	0.0001	0.0001	0.0000	0.0001	0.0001	0.0000	0.0002	0.0002	0.0000
0112	0.0187	0.0102	0.0207	0.7620	0.0887	0.0011	0.0036	0.0001	0.0029	0.0018	0.0009
0113	0.0005	0.0025	0.0024	0.0008	0.0008	0.0009	0.0013	0.0001	0.0141	0.0188	0.0005
0114	0.0005	0.0002	0.0006	0.0006	0.0002	0.0002	0.0007	0.0001	0.0024	0.0006	0.0001
0115	0.0034	0.0011	0.0084	0.0007	0.0011	0.0005	0.0014	0.0009	0.0005	0.0006	0.0005
0116	0.0071	0.0072	0.0046	0.0021	0.0040	0.0039	0.0238	0.0002	0.0030	0.0068	0.0069
0117	0.0002	0.0004	0.0002	0.0001	0.0001	0.0002	0.0001	0.0000	0.0001	0.0001	0.0001
0118	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0119	—	—	—	—	—	—	—	—	—	—	—
0120	0.0018	0.0033	0.0033	0.0016	0.0029	0.0022	0.0017	0.0003	0.0031	0.0022	0.0015
0121	0.0079	0.0098	0.0062	0.0027	0.0037	0.0040	0.0031	0.0003	0.0036	0.0029	0.0020
0122	0.0003	0.0010	0.0010	0.0009	0.0007	0.0007	0.0003	0.0001	0.0008	0.0010	0.0009
0123	0.0050	0.0105	0.0111	0.0095	0.0075	0.0080	0.0038	0.0008	0.0081	0.0102	0.0091
0124	0.0275	0.0066	0.0073	0.0057	0.0059	0.0078	0.0032	0.0004	0.0027	0.0030	0.0037
0125	0.0001	0.0004	0.0004	0.0004	0.0003	0.0003	0.0001	0.0000	0.0003	0.0004	0.0004
0126	0.0002	0.0007	0.0007	0.0006	0.0005	0.0005	0.0002	0.0001	0.0005	0.0007	0.0006
0127	0.0438	0.1498	0.1558	0.1359	0.1044	0.1039	0.0496	0.0108	0.1204	0.1533	0.1330
Total	2.9040	1.9053	1.9905	2.3457	1.5678	1.9609	1.4060	1.0359	1.8438	1.6863	1.7360

100	101	102	103	104	105	106	107	108	109	110	
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0066
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0067
0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0068
0.0002	0.0001	0.0001	0.0001	0.0002	0.0001	0.0002	0.0002	0.0001	0.0020	0.0246	0069
0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0002	0.0001	0.0001	0070
0.0041	0.0011	0.0015	0.0011	0.0008	0.0007	0.0047	0.0073	0.0017	0.0065	0.0022	0071
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0072
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0073
0.0001	0.0003	0.0004	0.0017	0.0000	0.0001	0.0184	0.0069	0.0000	0.0000	0.0000	0074
0.0001	0.0001	0.0001	0.0001	0.0002	0.0001	0.0012	0.0005	0.0001	0.0008	0.0004	0075
0.0004	0.0014	0.0012	0.0011	0.0003	0.0006	0.0022	0.0016	0.0009	0.0005	0.0020	0076
0.0707	0.0103	0.0053	0.0051	0.0014	0.0019	0.0054	0.0094	0.0050	0.0079	0.0043	0077
0.0004	0.0028	0.0024	0.0019	0.0005	0.0010	0.0040	0.0017	0.0016	0.0004	0.0040	0078
0.0043	0.0055	0.0048	0.0071	0.0025	0.0033	0.0102	0.0182	0.0048	0.0059	0.0072	0079
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0004	0.0002	0.0000	0.0000	0.0000	0080
0.0072	0.0078	0.0044	0.0075	0.0025	0.0043	0.0106	0.0171	0.0059	0.0147	0.0122	0081
0.0031	0.0046	0.0086	0.0048	0.0022	0.0033	0.0071	0.0082	0.0062	0.0021	0.0050	0082
0.0019	0.0123	0.0105	0.0083	0.0024	0.0043	0.0180	0.0076	0.0072	0.0019	0.0180	0083
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0000	0.0000	0.0000	0084
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0085
0.0000	0.0000	0.0000	0.0000	0.0006	0.0003	0.0001	0.0001	0.0000	0.0001	0.0011	0086
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0087
0.0000	0.0000	0.0000	0.0000	0.0019	0.0009	0.0004	0.0004	0.0000	0.0000	0.0007	0088
0.0000	0.0000	0.0003	0.0005	0.0873	0.0216	0.0186	0.0187	0.0000	0.0000	0.0068	0089
0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0090
0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0025	0091
0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0092
0.0000	0.0001	0.0004	0.0002	0.0026	0.0013	0.0006	0.0006	0.0000	0.0001	0.0135	0093
0.0004	0.0002	0.0001	0.0002	0.0003	0.0001	0.0002	0.0007	0.0004	0.0097	0.0039	0094
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0095
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0096
0.0516	0.0894	0.1657	0.0394	0.0002	0.0020	0.0005	0.0004	0.0034	0.0002	0.0002	0097
0.0096	0.0805	0.1138	0.0627	0.0005	0.0019	0.0018	0.0008	0.0457	0.0001	0.0001	0098
0.0013	0.0026	0.0051	0.0215	0.0010	0.0004	0.0008	0.0010	0.0012	0.0008	0.0010	0099
1.0877	0.1178	0.0440	0.0236	0.0003	0.0025	0.0014	0.0002	0.0387	0.0002	0.0000	0100
0.0001	1.0066	0.0006	0.0017	0.0000	0.0203	0.0005	0.0003	0.0001	0.0000	0.0000	0101
0.0002	0.0009	1.0474	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0102
0.0464	0.0506	0.0120	1.0396	0.0028	0.0037	0.0033	0.0041	0.0030	0.0001	0.0001	0103
0.0001	0.0001	0.0016	0.0022	1.0407	0.2466	0.2195	0.0244	0.0000	0.0000	0.0000	0104
0.0004	0.0004	0.0060	0.0080	0.0000	1.0404	0.0253	0.0139	0.0000	0.0000	0.0000	0105
—	—	—	—	—	—	1.0029	—	—	—	—	0106
0.0010	0.0007	0.0001	0.0131	0.0002	0.0113	0.0088	0.0374	1.0001	0.0001	0.0000	0107
0.0004	0.0002	0.0005	0.0013	0.0055	0.0017	0.0322	0.0004	1.0097	0.0003	0.0001	0108
0.0476	0.0090	0.0050	0.0108	0.0201	0.0063	0.0075	0.0198	0.0099	1.4069	0.1204	0109
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000	0110
0.0001	0.0001	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001	0.0003	0.0007	0.0001	0111
0.0012	0.0025	0.0007	0.0018	0.0126	0.0037	0.0038	0.0056	0.0018	0.0016	0.0031	0112
0.0027	0.0040	0.0035	0.0030	0.0117	0.0053	0.0070	0.0035	0.0230	0.0029	0.0010	0113
0.0003	0.0010	0.0004	0.0044	0.0001	0.0001	0.0002	0.0006	0.0022	0.0001	0.0001	0114
0.0007	0.0031	0.0024	0.0041	0.0012	0.0013	0.0025	0.0601	0.0044	0.0012	0.0047	0115
0.0041	0.0018	0.0017	0.0036	0.0174	0.0058	0.0122	0.0163	0.0018	0.0144	0.0174	0116
0.0001	0.0000	0.0001	0.0001	0.0000	0.0001	0.0001	0.0001	0.0000	0.0001	0.0001	0117
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0118
—	—	—	—	—	—	—	—	—	—	—	0119
0.0031	0.0042	0.0046	0.0369	0.0019	0.0033	0.0037	0.0045	0.0027	0.0011	0.0048	0120
0.0039	0.0033	0.0044	0.0072	0.0035	0.0038	0.0046	0.0043	0.0043	0.0018	0.0044	0121
0.0006	0.0007	0.0008	0.0006	0.0004	0.0008	0.0008	0.0005	0.0004	0.0006	0.0003	0122
0.0058	0.0074	0.0084	0.0074	0.0040	0.0088	0.0081	0.0053	0.0043	0.0066	0.0038	0123
0.0060	0.0028	0.0028	0.0030	0.0033	0.0036	0.0037	0.0033	0.0017	0.0030	0.0021	0124
0.0002	0.0003	0.0003	0.0002	0.0002	0.0004	0.0003	0.0002	0.0002	0.0003	0.0001	0125
0.0004	0.0005	0.0006	0.0011	0.0003	0.0006	0.0006	0.0004	0.0003	0.0004	0.0003	0126
0.0791	0.1063	0.1213	0.0644	0.0557	0.1298	0.1182	0.0697	0.0607	0.0980	0.0493	0127
1.5344	1.5799	1.6381	1.4407	1.4075	1.6256	1.6375	1.5527	1.3213	1.6946	1.3922	Total

Matrix C (*continued*)

	111	112	113	114	115	116	117	118	119	120	121
0001	0.0007	0.0224	0.0010	0.0013	0.0004	0.0019	0.0002	0.0000	0.0001	0.0000	0.0000
0002	0.0026	0.1618	0.0072	0.0094	0.0022	0.0133	0.0010	0.0001	0.0004	0.0001	0.0001
0003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0004	0.0538	0.0013	0.0076	0.0185	0.0317	0.0481	0.0043	0.0037	0.0457	0.0031	0.0028
0005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0006	0.0015	0.0003	0.0006	0.0003	0.0018	0.0004	0.0001	0.0008	0.0036	0.0003	0.0003
0007	0.0067	0.0027	0.0046	0.0039	0.0080	0.0019	0.0006	0.0065	0.0006	0.0001	0.0004
0008	0.0358	0.0061	0.0146	0.0071	0.0414	0.0082	0.0025	0.0188	0.0829	0.0060	0.0061
0009	0.0007	0.0001	0.0004	0.0002	0.0008	0.0002	0.0001	0.0005	0.0016	0.0001	0.0001
0010	0.0164	0.0006	0.0038	0.0014	0.0086	0.0024	0.0005	0.0256	0.0018	0.0004	0.0015
0011	0.0537	0.0017	0.0110	0.0039	0.0273	0.0059	0.0015	0.0103	0.0053	0.0005	0.0014
0012	0.0011	0.0102	0.0621	0.0078	0.0018	0.0089	0.0076	0.0009	0.0154	0.0002	0.0002
0013	0.0023	0.0015	0.0043	0.0012	0.0012	0.0012	0.0006	0.0079	0.0126	0.0006	0.0019
0014	0.0019	0.0002	0.0004	0.0004	0.0005	0.0004	0.0001	0.0009	0.0031	0.0005	0.0064
0015	0.0012	0.0002	0.0002	0.0003	0.0004	0.0004	0.0001	0.0014	0.0097	0.0005	0.0002
0016	0.0001	0.0001	0.0001	0.0002	0.0002	0.0001	0.0000	0.0001	0.0015	0.0000	0.0000
0017	—	—	—	—	—	—	—	—	0.0023	—	—
0018	0.0068	0.0030	0.0007	0.0009	0.0009	0.0008	0.0003	0.0016	0.0192	0.0008	0.0032
0019	0.0016	0.0002	0.0005	0.0004	0.0011	0.0003	0.0001	0.0132	0.0013	0.0001	0.0005
0020	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0573	0.0004	0.0000	0.0000
0021	—	—	—	—	—	—	—	—	—	—	—
0022	0.0099	0.0002	0.0007	0.0099	0.0221	0.0107	0.0003	0.0036	0.0013	0.0010	0.0002
0023	0.0001	0.0000	0.0000	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000
0024	0.0003	0.0014	0.0081	0.0012	0.0020	0.0016	0.0010	0.0005	0.0026	0.0001	0.0001
0025	0.0007	0.0007	0.0007	0.0006	0.0007	0.0010	0.0003	0.0005	0.0030	0.0012	0.0034
0026	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000	0.0003	0.0001	0.0000
0027	—	—	—	—	—	—	—	—	—	—	—
0028	0.0001	0.0002	0.0001	0.0001	0.0002	0.0002	0.0001	0.0001	0.0004	0.0012	0.0000
0029	0.0013	0.0008	0.0024	0.0013	0.0015	0.0009	0.0003	0.0061	0.0098	0.0005	0.0006
0030	0.0003	0.0004	0.0003	0.0003	0.0005	0.0005	0.0001	0.0002	0.0012	0.0011	0.0002
0031	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0032	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000
0033	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000
0034	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0035	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0036	—	—	—	—	—	—	—	—	—	—	—
0037	0.0003	0.0002	0.0001	0.0002	0.0003	0.0002	0.0001	0.0004	0.0008	0.0006	0.0001
0038	0.0001	0.0000	0.0000	0.0000	0.0001	0.0003	0.0000	0.0001	0.0073	0.0001	0.0000
0039	—	—	—	—	—	—	—	—	—	—	—
0040	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0008	0.0000	0.0000
0041	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0000	0.0002	0.0018	0.0003	0.0000
0042	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000
0043	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0020	0.0000	0.0000
0044	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0045	—	—	—	—	—	—	—	—	0.0009	—	—
0046	0.0002	0.0001	0.0001	0.0003	0.0002	0.0001	0.0000	0.0000	0.0015	0.0000	0.0000
0047	0.0002	0.0000	0.0002	0.0001	0.0001	0.0001	0.0000	0.0001	0.0002	0.0000	0.0000
0048	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0004	0.0000
0049	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0003
0050	0.0001	0.0001	0.0002	0.0001	0.0002	0.0003	0.0001	0.0002	0.0002	0.0001	0.0281
0051	0.0002	0.0002	0.0001	0.0002	0.0006	0.0003	0.0000	0.0151	0.0008	0.0005	0.0006
0052	0.0001	0.0001	0.0001	0.0001	0.0004	0.0001	0.0000	0.0000	0.0001	0.0001	0.0009
0053	—	—	—	—	—	—	—	—	—	—	—
0054	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000
0055	0.0013	0.0005	0.0007	0.0012	0.0019	0.0007	0.0001	0.0716	0.0014	0.0002	0.0023
0056	0.0000	0.0000	0.0001	0.0001	0.0000	0.0000	0.0000	0.0169	0.0002	0.0001	0.0000
0057	0.0002	0.0002	0.0002	0.0002	0.0004	0.0003	0.0001	0.1948	0.0021	0.0007	0.0084
0058	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000
0059	0.0018	0.0010	0.0011	0.0035	0.0020	0.0010	0.0002	0.0003	0.0166	0.0001	0.0001
0060	0.0038	0.0036	0.0037	0.0032	0.0033	0.0052	0.0014	0.0025	0.0160	0.0062	0.0006
0061	0.0008	0.0022	0.0009	0.0008	0.0009	0.0011	0.0005	0.0010	0.0011	0.0135	0.0003
0062	0.0032	0.0037	0.0031	0.0051	0.0076	0.0079	0.0009	0.0018	0.0162	0.0068	0.0004
0063	0.0015	0.0014	0.0014	0.0035	0.0136	0.0034	0.0004	0.0009	0.0037	0.0004	0.0002
0064	0.0013	0.0010	0.0068	0.0025	0.0022	0.0035	0.0028	0.0007	0.0146	0.0008	0.0001
0065	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0202	0.0000	0.0000

Matrix C (continued)

	111	112	113	114	115	116	117	118	119	120	121
0066	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0451	0.0000	0.0002
0067	0.0002	0.0000	0.0001	0.0000	0.0002	0.0001	0.0000	0.0002	0.0139	0.0000	0.0000
0068	0.0001	0.0000	0.0001	0.0001	0.0001	0.0001	0.0000	0.0017	0.0019	0.0000	0.0002
0069	0.0004	0.0005	0.0014	0.0072	0.0010	0.0056	0.0002	0.0015	0.0035	0.0001	0.0001
0070	0.0021	0.0001	0.0004	0.0001	0.0002	0.0001	0.0001	0.0002	0.0079	0.0001	0.0001
0071	0.0116	0.0008	0.0049	0.0035	0.0042	0.0030	0.0010	0.0020	0.0594	0.0022	0.0018
0072	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0000	0.0023
0073	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0204	0.0000	0.0002
0074	0.0001	0.0000	0.0001	0.0000	0.0001	0.0001	0.0000	0.0009	0.0575	0.0001	0.0011
0075	0.0003	0.0001	0.0005	0.0003	0.0014	0.0099	0.0003	0.0003	0.0179	0.0003	0.0003
0076	0.0017	0.0002	0.0014	0.0065	0.0061	0.0045	0.0010	0.0007	0.0007	0.0004	0.0004
0077	0.0415	0.0011	0.0075	0.0285	0.0544	0.0155	0.0063	0.0044	0.0027	0.0034	0.0029
0078	0.0006	0.0003	0.0025	0.0101	0.0039	0.0078	0.0009	0.0005	0.0007	0.0001	0.0002
0079	0.0289	0.0014	0.0081	0.0484	0.0910	0.0272	0.0122	0.0087	0.0049	0.0071	0.0060
0080	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0101	0.0000	0.0000
0081	0.0221	0.0023	0.0082	0.0825	0.0091	0.0351	0.0243	0.0029	0.0052	0.0026	0.0007
0082	0.0099	0.0011	0.0149	0.0111	0.0029	0.0092	0.0045	0.0062	0.0048	0.0194	0.0137
0083	0.0026	0.0014	0.0112	0.0449	0.0174	0.0347	0.0040	0.0024	0.0031	0.0006	0.0010
0084	0.0001	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0085	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0086	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000
0087	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0088	0.0002	0.0006	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000
0089	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0090	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0091	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0092	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0093	0.0064	0.0009	0.0004	0.0002	0.0002	0.0012	0.0001	0.0000	0.0001	0.0000	0.0000
0094	0.0008	0.0011	0.0120	0.0075	0.0095	0.0031	0.0015	0.0002	0.0002	0.0000	0.0000
0095	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0096	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0097	0.0004	0.0001	0.0002	0.0005	0.0010	0.0049	0.0001	0.0001	0.0003	0.0003	0.0002
0098	0.0035	0.0004	0.0002	0.0004	0.0045	0.0017	0.0001	0.0011	0.0004	0.0007	0.0003
0099	0.0014	0.0002	0.0007	0.0003	0.0029	0.0549	0.0021	0.0007	0.0012	0.0006	0.0003
0100	0.0003	0.0001	0.0000	0.0001	0.0004	0.0002	0.0000	0.0004	0.0002	0.0001	0.0001
0101	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0102	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0004	0.0007
0103	0.0002	0.0004	0.0001	0.0001	0.0002	0.0003	0.0000	0.0001	0.0003	0.0004	0.0001
0104	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0105	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0106	—	—	—	—	—	—	—	—	—	—	—
0107	0.0009	0.0000	0.0001	0.0001	0.0001	0.0001	0.0010	0.0002	0.0002	0.0001	0.0000
0108	0.0013	0.0003	0.0002	0.0003	0.0003	0.0004	0.0001	0.0016	0.0020	0.0006	0.0003
0109	0.0999	0.1017	0.1438	0.1327	0.2209	0.0474	0.0187	0.0149	0.0055	0.0006	0.0012
0110	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000
0111	1.0450	0.0001	0.0109	0.0002	0.0003	0.0014	0.0013	0.0001	0.0036	0.0000	0.0000
0112	0.0142	1.5002	0.0427	0.0762	0.0054	0.1010	0.0058	0.0004	0.0024	0.0002	0.0006
0113	0.0015	0.0007	1.0303	0.0027	0.0029	0.0049	0.1232	0.0015	0.0059	0.0006	0.0004
0114	0.0055	0.0002	0.0004	1.0160	0.0002	0.0012	0.0010	0.0001	0.0004	0.0005	0.0000
0115	0.0030	0.0003	0.0010	0.0079	1.0515	0.0499	0.0034	0.0155	0.0020	0.0003	0.0008
0116	0.0246	0.0028	0.0119	0.0045	0.0502	1.0174	0.0070	0.0019	0.0201	0.0012	0.0053
0117	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001	1.0000	0.0002	0.0234	0.0001	0.0000
0118	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000	0.0000	0.0061	0.0000	0.0000
0119	—	—	—	—	—	—	—	1.0259	—	—	—
0120	0.0017	0.0012	0.0036	0.0055	0.0040	0.0082	0.0021	0.0026	0.0022	1.0006	0.0087
0121	0.0031	0.0021	0.0055	0.0037	0.0059	0.0085	0.0035	0.0054	0.0046	0.0043	1.0010
0122	0.0004	0.0006	0.0006	0.0006	0.0006	0.0007	0.0004	0.0008	0.0008	0.0055	0.0002
0123	0.0067	0.0068	0.0068	0.0062	0.0073	0.0080	0.0041	0.0084	0.0084	0.0857	0.0022
0124	0.0094	0.0036	0.0030	0.0044	0.0064	0.0082	0.0017	0.0027	0.0337	0.0385	0.0013
0125	0.0002	0.0003	0.0003	0.0002	0.0003	0.0003	0.0002	0.0003	0.0003	0.0000	0.0001
0126	0.0003	0.0004	0.0005	0.0005	0.0005	0.0006	0.0003	0.0005	0.0005	0.0223	0.0003
0127	0.0635	0.0924	0.0941	0.0833	0.0927	0.0989	0.0592	0.1216	0.1150	0.0129	0.0178
Total	1.6321	1.9579	1.5814	1.6900	1.8499	1.7108	1.3204	1.6815	1.8608	1.2626	1.1454

122	123	124	125	126	127	
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0066
0.0001	0.0002	0.0000	0.0001	0.0001	0.0000	0067
0.0002	0.0001	0.0000	0.0001	0.0001	0.0000	0068
0.0002	0.0002	0.0002	0.0004	0.0003	0.0006	0069
0.0001	0.0003	0.0001	0.0005	0.0003	0.0001	0070
0.0008	0.0222	0.0009	0.0013	0.0030	0.0022	0071
0.0002	0.0004	0.0000	0.0000	0.0001	0.0000	0072
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0073
0.0002	0.0009	0.0001	0.0001	0.0002	0.0001	0074
0.0001	0.0030	0.0000	0.0001	0.0001	0.0002	0075
0.0001	0.0002	0.0001	0.0002	0.0002	0.0016	0076
0.0004	0.0008	0.0005	0.0012	0.0008	0.0037	0077
0.0002	0.0002	0.0002	0.0003	0.0004	0.0030	0078
0.0009	0.0017	0.0008	0.0024	0.0016	0.0073	0079
0.0001	0.0001	0.0000	0.0001	0.0002	0.0000	0080
0.0011	0.0008	0.0005	0.0010	0.0007	0.0092	0081
0.0011	0.0040	0.0017	0.0063	0.0039	0.0084	0082
0.0008	0.0007	0.0010	0.0014	0.0016	0.0135	0083
0.0003	0.0000	0.0000	0.0000	0.0000	0.0000	0084
0.0006	0.0000	0.0000	0.0000	0.0000	0.0000	0085
0.0003	0.0000	0.0000	0.0000	0.0000	0.0000	0086
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0087
0.0015	0.0000	0.0000	0.0000	0.0000	0.0000	0088
0.0013	0.0000	0.0000	0.0000	0.0000	0.0000	0089
0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0090
0.0003	0.0000	0.0000	0.0000	0.0000	0.0000	0091
0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0092
0.0003	0.0000	0.0000	0.0000	0.0000	0.0000	0093
0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0094
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0095
0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0096
0.0001	0.0008	0.0001	0.0007	0.0005	0.0002	0097
0.0001	0.0005	0.0006	0.0011	0.0005	0.0002	0098
0.0004	0.0010	0.0001	0.0032	0.0018	0.0001	0099
0.0000	0.0001	0.0004	0.0005	0.0001	0.0001	0100
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0101
0.0001	0.0012	0.0001	0.0031	0.0000	0.0001	0102
0.0013	0.0005	0.0003	0.0006	0.0005	0.0003	0103
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0104
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0105
—	—	—	—	—	—	0106
0.0003	0.0004	0.0006	0.0007	0.0005	0.0001	0107
0.0001	0.0008	0.0108	0.0093	0.0010	0.0007	0108
0.0011	0.0014	0.0005	0.0016	0.0012	0.0008	0109
0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0110
0.0001	0.0001	0.0000	0.0001	0.0001	0.0000	0111
0.0007	0.0003	0.0002	0.0006	0.0007	0.0001	0112
0.0035	0.0010	0.0009	0.0018	0.0014	0.0007	0113
0.0002	0.0004	0.0001	0.0004	0.0007	0.0001	0114
0.0003	0.0004	0.0002	0.0005	0.0005	0.0011	0115
0.0024	0.0017	0.0013	0.0046	0.0041	0.0007	0116
0.0022	0.0002	0.0009	0.0019	0.0003	0.0003	0117
0.0003	0.0000	0.0000	0.0000	0.0000	0.0000	0118
0.0008	0.0026	0.0011	0.0012	0.0030	0.0060	0119
0.0027	0.0022	0.0070	0.0035	0.0119	0.0088	0120
1.0001	0.0002	0.0001	0.0002	0.0002	0.0065	0121
0.0011	1.0022	0.0011	0.0024	0.0020	0.0670	0122
0.0005	0.0129	1.0004	0.0008	0.0009	0.0180	0123
0.0000	0.0001	0.0000	1.0001	0.0001	0.0029	0124
0.0001	0.0002	0.0001	0.0002	1.0351	0.0042	0125
0.0127	0.0268	0.0143	0.0326	0.0241	1.0208	0126
1.1784	1.3222	1.1563	1.3767	1.4047	1.2400	Total

12	13	14	15	16	17	18	19	20	21	22	
0.0168	0.0230	0.0129	0.0136	0.0259	0.0104	0.0147	0.0504	0.0140	0.0394	0.0212	0198
0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001	0.0002	0.0001	1001-1005
0.0033	0.0011	0.0003	0.0011	0.0057	0.0005	0.0007	0.0117	0.0029	0.0046	0.0072	1006-1007
0.1153	0.0569	0.0538	0.0908	0.1346	0.0738	0.0924	0.1966	0.0694	0.1427	0.1778	1008-1011, 1198
0.0571	0.0272	0.0262	0.0706	0.0181	0.0422	0.0910	0.0240	0.0855	0.0253	0.0219	1012-1063
0.0039	0.0039	0.0077	0.0017	0.0030	0.0018	0.0020	0.0012	0.0035	0.0024	0.0018	1064-1070
0.0004	0.0006	0.0009	0.0005	0.0003	0.0016	0.0005	0.0007	0.0003	0.0011	0.0006	1071-1075
0.0019	0.0006	0.0013	0.0011	0.0005	0.0014	0.0004	0.0005	0.0008	0.0015	0.0009	1076-1083
0.0001	0.0000	0.0001	0.0001	0.0002	0.0001	0.0001	0.0000	0.0001	0.0003	0.0001	1084-1096
0.0004	0.0011	0.0012	0.0006	0.0009	0.0029	0.0008	0.0003	0.0005	0.0006	0.0044	1097-1103
0.0003	0.0002	0.0003	0.0002	0.0014	0.0005	0.0006	0.0001	0.0004	0.0010	0.0003	1104-1108
0.0135	0.0069	0.0059	0.0062	0.0047	0.0117	0.0048	0.0036	0.0147	0.0065	0.0058	1109-1116
0.0183	0.0344	0.0222	0.0243	0.0296	0.0171	0.0390	0.0373	0.0184	0.0201	0.0189	0201
0.0014	0.0053	0.0021	0.0027	0.0020	0.0022	0.0035	0.0024	0.0015	0.0007	0.0003	0202
0.0022	0.0041	0.0026	0.0028	0.0017	0.0027	0.0035	0.0028	0.0018	0.0017	0.0014	0203
0.0001	0.0002	0.0001	0.0001	0.0002	0.0001	0.0002	0.0002	0.0001	0.0001	0.0001	1201
0.0059	0.0229	0.0091	0.0119	0.0088	0.0097	0.0153	0.0106	0.0066	0.0029	0.0014	1202
0.0083	0.0158	0.0100	0.0109	0.0064	0.0103	0.0134	0.0108	0.0069	0.0064	0.0052	1203
0.0009	0.0026	0.0020	0.0010	0.0007	0.0017	0.0017	0.0006	0.0019	0.0007	0.0006	1301
0.0005	0.0004	0.0002	0.0002	0.0001	0.0005	0.0002	0.0002	0.0002	0.0003	0.0001	1302
0.0001	0.0001	0.0001	0.0001	0.0007	0.0002	0.0003	0.0001	0.0003	0.0001	0.0001	1303
0.0001	0.0002	0.0005	0.0002	0.0003	0.0010	0.0003	0.0001	0.0002	0.0003	0.0016	1304
0.0020	0.0095	0.0018	0.0033	0.0033	0.0026	0.0045	0.0003	0.0008	0.0004	0.0003	1305
0.0022	0.0117	0.0058	0.0095	0.0073	0.0065	0.0069	0.0017	0.0016	0.0010	0.0007	1306
0.0014	0.0014	0.0008	0.0007	0.0011	0.0018	0.0006	0.0010	0.0012	0.0016	0.0013	1307
0.0084	0.0026	0.0010	0.0018	0.0034	0.0023	0.0015	0.0054	0.0033	0.0037	0.0039	1309
0.0857	0.1095	0.1629	0.0948	0.1295	0.1415	0.0807	0.1262	0.1399	0.1290	0.1580	0401
0.3126	0.2854	0.3920	0.2812	0.2845	0.3258	0.2821	0.3128	0.3171	0.2814	0.2900	0402
0.0001	0.0001	0.0028	0.0007	0.0004	0.0002	0.0023	0.0003	0.0002	0.0016	0.0011	0403
0.0001	-0.0002	-0.0001	-0.0002	-0.0001	-0.0001	-0.0001	-0.0002	-0.0001	-0.0002	-0.0001	0404
0.0054	0.0091	0.0074	0.0069	0.0055	0.0052	0.0155	0.0088	0.0042	0.0048	0.0037	0405
0.0073	0.0035	0.0039	0.0070	0.0026	0.0056	0.0082	0.0017	0.0091	0.0037	0.0044	0406
0.2685	0.3193	0.2207	0.3022	0.2699	0.2660	0.2576	0.1445	0.2468	0.2651	0.2158	199, 407
0.4146	1.1225	0.5463	0.5607	0.5345	0.3867	0.7855	0.7970	0.3458	0.4206	0.4335	2201.1
0.0388	0.1812	0.0706	0.0907	0.0499	0.0731	0.1199	0.0108	0.0444	0.0109	0.0059	2202.1
0.0041	0.0048	0.0037	0.0034	0.0027	0.0038	0.0062	0.0037	0.0031	0.0046	0.0022	2203.1
0.0618	0.1375	0.0869	0.0937	0.0528	0.0754	0.1439	0.1019	0.0495	0.0502	0.0419	2203.2
0.0068	0.0240	0.0175	0.0088	0.0058	0.0145	0.0148	0.0052	0.0155	0.0052	0.0039	2301.1
0.0025	0.0031	0.0040	0.0026	0.0034	0.0041	0.0024	0.0039	0.0045	0.0032	0.0035	2401.1
0.0025	0.0029	0.0041	0.0032	0.0039	0.0035	0.0031	0.0030	0.0049	0.0038	0.0038	2401.2
0.0009	0.0007	0.0015	0.0013	0.0012	0.0020	0.0010	0.0013	0.0017	0.0012	0.0019	2401.3
0.0252	0.0234	0.0320	0.0305	0.0245	0.0254	0.0266	0.0270	0.0300	0.0197	0.0221	2402.1
0.0024	0.0007	0.0039	0.0060	0.0027	0.0018	0.0019	0.0013	0.0067	0.0068	0.0062	2402.2
0.0575	0.0501	0.0676	0.0552	0.0513	0.0587	0.0624	0.0577	0.0689	0.0551	0.0593	2402.3
0.2105	0.1378	0.1171	0.1959	0.1849	0.1566	0.2222	0.2605	0.1919	0.1957	0.2279	1001-1127, 1201-1203 = competitive imports
0.0156	0.0285	0.0122	0.0168	0.0170	0.0167	0.0160	0.0095	0.0095	0.0081	0.0085	1301-1309 = non- competitive imports
0.2260	0.1663	0.1293	0.2127	0.2019	0.1732	0.2382	0.2700	0.2014	0.2037	0.2364	1001-1127, 1201- 1309 = imports
0.0370	0.0855	0.0481	0.0537	0.0494	0.0438	0.0766	0.0647	0.0373	0.0326	0.0280	201-301 = electric power, fuels
0.4544	0.4352	0.5990	0.4280	0.4610	0.5177	0.4200	0.4824	0.5023	0.4610	0.4980	0401-0403 = labour
0.7354	0.7669	0.8309	0.7439	0.7389	0.7944	0.7011	0.6371	0.7628	0.7344	0.7218	199, 401-407 = value added
0.7228	0.7545	0.8197	0.7302	0.7309	0.7837	0.6775	0.6268	0.7497	0.7260	0.7138	199, 401-403, 407 = lab., cap. serv., etc.
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0198-0407, 1001-1407 all primary comm.

34	35	36	37	38	39	40	41	42	43	44	
0.0208	0.0150	0.0116	0.0100	0.0260	0.0056	0.0050	0.0094	0.0189	0.0142	0.0083	0198
0.0001	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001	1001-1005
0.0007	0.0004	0.0011	0.0005	0.0020	0.0009	0.0009	0.0008	0.0020	0.0012	0.0012	1006-1007
0.0361	0.0532	0.0499	0.0530	0.1470	0.0243	0.0265	0.0433	0.0531	0.0711	0.0675	1008-1011, 1198
0.0522	0.1088	0.0975	0.0242	0.0346	0.0556	0.0892	0.0698	0.0581	0.0892	0.1286	1012-1063
0.0033	0.0017	0.0033	0.0088	0.0052	0.0013	0.0109	0.0015	0.0013	0.0015	0.0014	1064-1070
0.0004	0.0010	0.0005	0.0004	0.0002	0.0004	0.0011	0.0005	0.0004	0.0003	0.0002	1071-1075
0.0005	0.0004	0.0007	0.0007	0.0004	0.0011	0.0011	0.0010	0.0005	0.0006	0.0005	1076-1083
0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0002	0.0000	0.0002	1084-1096
0.0006	0.0024	0.0019	0.0004	0.0003	0.0005	0.0011	0.0007	0.0044	0.0007	0.0005	1097-1103
0.0014	0.0075	0.0062	0.0002	0.0004	0.0009	0.0017	0.0012	0.0019	0.0012	0.0012	1104-1108
0.0036	0.0065	0.0059	0.0038	0.0051	0.0066	0.0277	0.0046	0.0029	0.0048	0.0032	1109-1116
0.0178	0.0171	0.0150	0.0174	0.0242	0.0112	0.0189	0.0149	0.0167	0.0170	0.0117	0201
0.0017	0.0026	0.0016	0.0018	0.0036	0.0006	0.0008	0.0012	0.0016	0.0020	0.0014	0202
0.0015	0.0029	0.0021	0.0022	0.0023	0.0011	0.0021	0.0017	0.0019	0.0024	0.0018	0203
0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	1201
0.0075	0.0113	0.0071	0.0078	0.0157	0.0026	0.0036	0.0054	0.0070	0.0087	0.0060	1202
0.0058	0.0113	0.0080	0.0085	0.0088	0.0040	0.0080	0.0066	0.0075	0.0092	0.0067	1203
0.0007	0.0014	0.0011	0.0006	0.0025	0.0005	0.0018	0.0008	0.0009	0.0008	0.0032	1301
0.0001	0.0003	0.0002	0.0002	0.0002	0.0001	0.0004	0.0002	0.0001	0.0002	0.0001	1302
0.0011	0.0058	0.0046	0.0000	0.0001	0.0006	0.0013	0.0006	0.0011	0.0009	0.0006	1303
0.0002	0.0005	0.0004	0.0002	0.0001	0.0001	0.0003	0.0002	0.0030	0.0002	0.0002	1304
0.0019	0.0019	0.0021	0.0016	0.0033	0.0006	0.0010	0.0011	0.0010	0.0018	0.0013	1305
0.0054	0.0035	0.0049	0.0033	0.0074	0.0047	0.0015	0.0021	0.0049	0.0038	0.0028	1306
0.0026	0.0007	0.0007	0.0009	0.0011	0.0006	0.0015	0.0005	0.0005	0.0005	0.0004	1307
0.0011	0.0021	0.0024	0.0008	0.0031	0.0015	0.0046	0.0013	0.0019	0.0015	0.0011	1309
0.1945	0.1593	0.1211	0.1443	0.0873	0.1446	0.0913	0.2320	0.1263	0.1626	0.1654	0401
0.2672	0.2934	0.2442	0.2903	0.3166	0.3062	0.2352	0.2728	0.2377	0.3063	0.2171	0402
0.0003	0.0002	0.0001	0.0001	0.0001	0.0002	0.0003	0.0004	0.0003	0.0001	0.0008	0403
-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0003	-0.0001	-0.0001	0404
0.0050	0.0068	0.0033	0.0060	0.0031	0.0027	0.0040	0.0049	0.0055	0.0050	0.0025	0405
0.0053	0.0113	0.0098	0.0033	0.0064	0.0054	0.0111	0.0073	0.0051	0.0099	0.0105	0406
0.3228	0.2144	0.3356	0.3797	0.2318	0.3825	0.3987	0.2667	0.3877	0.2301	0.3076	199, 407
0.2783	0.3506	0.3190	0.4100	0.6204	0.2193	0.3875	0.3179	0.2998	0.3131	0.4028	2201.1
0.0541	0.0640	0.0399	0.0481	0.1099	0.0152	0.0216	0.0363	0.0355	0.0597	0.0447	2202.1
0.0069	0.0085	0.0019	0.0014	0.0062	0.0017	0.0026	0.0048	0.0032	0.0034	0.0016	2203.1
0.0407	0.0793	0.0583	0.0641	0.0636	0.0309	0.0607	0.0503	0.0573	0.0706	0.0396	2203.2
0.0084	0.0121	0.0086	0.0048	0.0222	0.0040	0.0150	0.0063	0.0077	0.0069	0.0268	2301.1
0.0054	0.0043	0.0046	0.0036	0.0035	0.0049	0.0031	0.0077	0.0037	0.0063	0.0064	2401.1
0.0049	0.0050	0.0035	0.0042	0.0015	0.0040	0.0028	0.0050	0.0030	0.0037	0.0032	2401.2
0.0015	0.0014	0.0008	0.0009	0.0007	0.0016	0.0008	0.0013	0.0010	0.0019	0.0007	2401.3
0.0227	0.0250	0.0197	0.0186	0.0234	0.0243	0.0192	0.0212	0.0183	0.0279	0.0151	2402.1
0.0013	0.0009	0.0019	0.0036	0.0006	0.0041	0.0017	0.0007	0.0011	0.0006	0.0019	2402.2
0.0515	0.0591	0.0462	0.0483	0.0481	0.0611	0.0452	0.0470	0.0446	0.0633	0.0361	2402.3
0.1122	0.2049	0.1823	0.1085	0.2200	0.0985	0.1723	0.1358	0.1394	0.1888	0.2174	1001-1127, 1201-1203 = competitive imports
0.0132	0.0162	0.0163	0.0075	0.0178	0.0089	0.0124	0.0068	0.0133	0.0097	0.0097	1301-1309 = non-competitive imports
0.1254	0.2211	0.1987	0.1160	0.2378	0.1074	0.1847	0.1426	0.1527	0.1985	0.2271	1001-1127, 1201-1309 = imports
0.0352	0.0467	0.0350	0.0384	0.0573	0.0201	0.0353	0.0307	0.0358	0.0403	0.0308	201-301 = electric power, fuels
0.4997	0.5088	0.4224	0.4666	0.4619	0.4836	0.3750	0.5514	0.4101	0.5211	0.4292	0401-0403 = labour
0.8327	0.7412	0.7710	0.8526	0.7060	0.8741	0.7886	0.8302	0.8081	0.7659	0.7498	199, 401-407 = value added
0.8225	0.7232	0.7580	0.8463	0.6937	0.8661	0.7736	0.8181	0.7978	0.7512	0.7369	199, 401-403, 407 = lab., cap. serv., etc.
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0198-0407, 1001-1407 = all primary comm.

56	57	58	59	60	61	62	63	64	65	66	
0.0075	0.0185	0.0079	0.0165	0.0033	0.0059	0.0067	0.0132	0.0006	0.0003	0.0026	0198
0.0002	0.0002	0.0002	0.0001	0.0001	0.0002	0.0001	0.0000	0.0002	0.0001	0.0001	1001-1005
0.0021	0.0123	0.0020	0.0012	0.0003	0.0008	0.0005	0.0005	0.0001	0.0003	0.0003	1006-1007
0.0574	0.1982	0.0554	0.0576	0.0150	0.0306	0.0430	0.0280	0.0042	0.0020	0.0226	1008, 1011-1198
0.0529	0.0109	0.0391	0.0756	0.1592	0.1015	0.0662	0.0881	0.0065	0.0024	0.0045	1012-1063
0.0261	0.0007	0.0033	0.0135	0.0022	0.0019	0.0012	0.0011	0.0109	0.0018	0.0071	1064-1070
0.0003	0.0006	0.0010	0.0002	0.0003	0.0009	0.0002	0.0002	0.0002	0.0001	0.0003	1071-1075
0.0048	0.0018	0.0018	0.0009	0.0007	0.0005	0.0003	0.0003	0.0013	0.0062	0.0014	1076-1083
0.0000	0.0001	0.0003	0.0000	0.0001	0.0002	0.0002	0.0000	0.0000	0.0000	0.0001	1084-1096
0.0007	0.0047	0.0003	0.0009	0.0039	0.0067	0.0013	0.0006	0.0003	0.0004	0.0004	1097-1103
0.0001	0.0017	0.0008	0.0002	0.0059	0.0018	0.0017	0.0002	0.0004	0.0001	0.0003	1104-1108
0.0074	0.0313	0.0146	0.0051	0.0137	0.0089	0.0073	0.0049	0.0037	0.0041	0.0033	1109-1116
0.0247	0.0181	0.0117	0.0130	0.0143	0.0146	0.0128	0.0108	0.0317	0.0683	0.0252	0201
0.0017	0.0007	0.0004	0.0017	0.0005	0.0008	0.0014	0.0006	0.0023	0.0013	0.0009	0202
0.0030	0.0020	0.0011	0.0019	0.0022	0.0028	0.0018	0.0007	0.0059	0.0508	0.0102	0203
0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0004	0.0002	1201
0.0076	0.0031	0.0016	0.0075	0.0023	0.0034	0.0062	0.0027	0.0099	0.0055	0.0040	1202
0.0113	0.0077	0.0040	0.0074	0.0083	0.0106	0.0067	0.0026	0.0226	0.1944	0.0391	1203
0.0008	0.0020	0.0005	0.0011	0.0024	0.0051	0.0012	0.0003	0.0178	0.0411	0.0071	1301
0.0002	0.0002	0.0002	0.0002	0.0006	0.0004	0.0003	0.0002	0.0002	0.0001	0.0001	1302
0.0001	0.0013	0.0001	0.0001	0.0044	0.0009	0.0010	0.0001	0.0003	0.0000	0.0002	1303
0.0002	0.0016	0.0002	0.0002	0.0008	0.0028	0.0004	0.0002	0.0001	0.0001	0.0001	1304
0.0008	0.0003	0.0003	0.0014	0.0005	0.0007	0.0011	0.0007	0.0001	0.0001	0.0005	1305
0.0028	0.0591	0.0008	0.0024	0.0010	0.0018	0.0032	0.0021	0.0003	0.0001	0.0011	1306
0.0013	0.0060	0.0017	0.0007	0.0020	0.0013	0.0005	0.0010	0.0003	0.0257	0.0236	1307
0.0049	0.0110	0.0024	0.0020	0.0027	0.0018	0.0012	0.0010	0.0006	0.0011	0.0018	1309
0.1735	0.0760	0.1159	0.1001	0.1252	0.1306	0.1387	0.1560	0.0715	0.0481	0.0705	0401
0.3153	0.1576	0.3347	0.3677	0.3553	0.4618	0.4326	0.4333	0.3869	0.1452	0.2839	0402
0.0002	0.0003	0.0054	0.0003	0.0002	0.0003	0.0005	0.0004	0.0001	0.0001	0.0001	0403
-0.0001	-0.0001	-0.0001	-0.0002	-0.0005	-0.0004	-0.0003	-0.0001	-0.0001	-0.0000	-0.0001	0404
0.0039	0.0026	0.0032	0.0058	0.0054	0.0058	0.0047	0.0024	0.0037	0.0090	0.0064	0405
0.0076	0.0039	0.0051	0.0076	0.0196	0.0107	0.0074	0.0109	0.0010	0.0012	0.0014	0406
0.2333	0.3131	0.3446	0.2376	0.1812	0.1352	0.2139	0.2029	0.3842	0.3554	0.4132	199, 407
0.4571	0.6005	0.2213	0.2656	0.3170	0.2993	0.3000	0.2045	0.4132	1.6281	0.4582	2201.1
0.0115	0.0117	0.0071	0.0453	0.0144	0.0227	0.0460	0.0186	0.0472	0.0427	0.0273	2202.1
0.0036	0.0019	0.0030	0.0065	0.0092	0.0055	0.0046	0.0008	0.0246	0.0100	0.0237	2203.1
0.0811	0.0525	0.0264	0.0492	0.0488	0.0753	0.0529	0.0223	0.1250	1.8001	0.3426	2203.2
0.0065	0.0157	0.0038	0.0110	0.0194	0.0431	0.0097	0.0026	0.2087	0.3509	0.0639	2301.1
0.0040	0.0022	0.0036	0.0027	0.0047	0.0046	0.0057	0.0042	0.0025	0.0015	0.0021	2401.1
0.0056	0.0021	0.0036	0.0029	0.0051	0.0028	0.0033	0.0048	0.0019	0.0011	0.0019	2401.2
0.0020	0.0006	0.0010	0.0015	0.0014	0.0008	0.0010	0.0014	0.0060	0.0032	0.0052	2401.3
0.0152	0.0110	0.0277	0.0268	0.0401	0.0387	0.0368	0.0348	0.0408	0.0125	0.0241	2402.1
0.0170	0.0017	0.0063	0.0009	0.0006	0.0009	0.0008	0.0023	0.0008	0.0009	0.0005	2402.2
0.0648	0.0272	0.0706	0.0626	0.0856	0.0833	0.0791	0.0767	0.0808	0.0295	0.0527	2402.3
0.1711	0.2732	0.1244	0.1703	0.2123	0.1682	0.1349	0.1292	0.0604	0.2176	0.0835	1001-1127, 1201-1203 = competitive imports
0.0110	0.0816	0.0061	0.0082	0.0146	0.0147	0.0089	0.0055	0.0197	0.0684	0.0344	1301-1309=non- competitive imports
0.1821	0.3548	0.1304	0.1785	0.2269	0.1828	0.1438	0.1347	0.0801	0.2860	0.1179	1001-1127, 1201- 1309=imports
0.0492	0.0338	0.0194	0.0328	0.0301	0.0373	0.0301	0.0177	0.0905	0.3618	0.0868	201-301=electric power, fuels
0.5362	0.2864	0.4957	0.5375	0.5470	0.6419	0.6079	0.6240	0.4906	0.2276	0.4222	0401-0403=labour
0.7810	0.6058	0.8485	0.7884	0.7528	0.7932	0.8336	0.8401	0.8793	0.5932	0.8431	199, 401-407= value added
0.7696	0.5995	0.8403	0.7752	0.7282	0.7771	0.8218	0.8269	0.8747	0.5830	0.8353	199, 401-403, 407= lab., cap. serv., etc.
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0198-0407, 1001-1407 = all primary comm.

78	79	80	81	82	83	84	85	86	87	88	
0.0007	0.0006	0.0011	0.0006	0.0006	0.0004	0.0004	0.0003	0.0003	0.0003	0.0007	0198
0.0046	0.0044	0.0045	0.0016	0.0010	0.0011	0.1522	0.0416	0.0168	0.0013	0.0028	1001-1005
0.0004	0.0016	0.0002	0.0009	0.0005	0.0002	0.0003	0.0002	0.0003	0.0001	0.0004	1006-1007
0.0044	0.0030	0.0064	0.0040	0.0042	0.0026	0.0022	0.0019	0.0020	0.0022	0.0042	1008-1011, 1198
0.0137	0.0105	0.0194	0.0067	0.0049	0.0049	0.0043	0.0057	0.0039	0.0061	0.0083	1012-1063
0.0005	0.0009	0.0004	0.0006	0.0004	0.0002	0.0003	0.0003	0.0006	0.0002	0.0012	1064-1070
0.0004	0.0014	0.0100	0.0006	0.0004	0.0001	0.0001	0.0002	0.0001	0.0003	0.0002	1071-1075
0.0006	0.0051	0.0006	0.0242	0.0162	0.0013	0.0032	0.0039	0.0026	0.0029	0.0007	1076-1083
0.0001	0.0001	0.0000	0.0003	0.0005	0.0000	0.0012	0.0151	0.0150	0.0066	0.0034	1084-1096
0.0064	0.0030	0.0007	0.0039	0.0027	0.0020	0.0014	0.0008	0.0011	0.0005	0.0012	1097-1103
0.0003	0.0003	0.0006	0.0003	0.0006	0.0003	0.0004	0.0004	0.0002	0.0001	0.0006	1104-1108
0.0054	0.0159	0.0100	0.0397	0.0134	0.0048	0.0166	0.0241	0.0147	0.0128	0.0279	1109-1116
0.0652	0.0486	0.0557	0.0247	0.0201	0.0211	0.0154	0.0223	0.0156	0.0093	0.0280	0201
0.0001	0.0002	0.0002	0.0003	0.0002	0.0002	0.0002	0.0003	0.0007	0.0001	0.0002	0202
0.0127	0.0112	0.0162	0.0053	0.0034	0.0038	0.0037	0.0047	0.0105	0.0019	0.0065	0203
0.0004	0.0003	0.0003	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	1201
0.0006	0.0008	0.0009	0.0013	0.0010	0.0008	0.0007	0.0015	0.0030	0.0005	0.0009	1202
0.0487	0.0427	0.0621	0.0204	0.0128	0.0144	0.0141	0.0178	0.0403	0.0072	0.0250	1203
0.0068	0.0130	0.0062	0.0053	0.0031	0.0019	0.0005	0.0007	0.0007	0.0006	0.0014	1301
0.0002	0.0011	0.0011	0.0014	0.0007	0.0002	0.0021	0.0258	0.0019	0.1039	0.0247	1302
0.0002	0.0002	0.0004	0.0002	0.0002	0.0002	0.0002	0.0002	0.0001	0.0001	0.0004	1303
0.0011	0.0016	0.0002	0.0010	0.0011	0.0022	0.0004	0.0002	0.0003	0.0002	0.0003	1304
0.0001	0.0001	0.0002	0.0001	0.0000	0.0000	0.0001	0.0000	0.0001	0.0000	0.0001	1305
0.0002	0.0002	0.0004	0.0002	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001	0.0002	1306
0.0010	0.0030	0.0008	0.0031	0.0011	0.0004	0.0082	0.0040	0.0071	0.0010	0.0096	1307
0.0016	0.0054	0.0020	0.0094	0.0046	0.0015	0.0133	0.0060	0.0115	0.0021	0.0149	1309
0.0350	0.0547	0.0552	0.1123	0.1416	0.2184	0.0285	0.0556	0.0426	0.0708	0.0322	0401
0.1506	0.2208	0.2492	0.2735	0.3658	0.2223	0.0607	0.2416	0.0934	0.1110	0.0859	0402
0.0001	0.0001	0.0001	0.0019	0.0011	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0403
0.0000	0.0002	0.0001	0.0005	0.0002	0.0000	0.0023	0.0046	0.0015	0.0088	0.2292	0404
0.0085	0.0037	0.0111	0.0059	0.0046	0.0034	0.0880	0.0371	0.0115	0.3574	0.1517	0405
0.0022	0.0030	0.0024	0.0054	0.0022	0.0010	0.0233	0.0125	0.0146	0.0060	0.0065	0406
0.4481	0.3444	0.2912	0.3380	0.3161	0.3733	0.2457	0.3230	0.4199	0.2365	0.1207	199, 407
2.2275	1.5285	1.9672	0.6594	0.4377	0.5793	0.2604	0.3784	0.2985	0.1459	0.1817	2201.1
0.0037	0.0032	0.0054	0.0031	0.0029	0.0021	0.0025	0.0042	0.0224	0.0020	0.0039	2202.1
0.0017	0.0034	0.0058	0.0036	0.0024	0.0031	0.0024	0.0099	0.0025	0.0026	0.0052	2203.1
0.3539	0.3042	0.4351	0.1383	0.0849	0.0933	0.0279	0.0598	0.3021	0.0505	0.0496	2203.2
0.0590	0.1095	0.0519	0.0436	0.0255	0.0155	0.0050	0.0092	0.0142	0.0105	0.0093	2301.1
0.0010	0.0016	0.0017	0.0022	0.0046	0.0012	0.0008	0.0013	0.0011	0.0012	0.0007	2401.1
0.0007	0.0016	0.0013	0.0033	0.0043	0.0113	0.0007	0.0016	0.0010	0.0019	0.0013	2401.2
0.0016	0.0033	0.0031	0.0081	0.0099	0.0170	0.0018	0.0044	0.0022	0.0060	0.0021	2401.3
0.0114	0.0187	0.0218	0.0200	0.0269	0.0156	0.0056	0.0175	0.0076	0.0057	0.0073	2402.1
0.0004	0.0024	0.0007	0.0079	0.0083	0.0009	0.0009	0.0065	0.0010	0.0071	0.0007	2402.2
0.0250	0.0461	0.0482	0.0603	0.0756	0.0352	0.0142	0.0523	0.0199	0.0257	0.0179	2402.3
0.0865	0.0951	0.1163	0.1047	0.0588	0.0329	0.1971	0.1135	0.1007	0.0408	0.0771	1001-1127, 1201-1203 = competitive imports
0.0112	0.0245	0.0113	0.0206	0.0110	0.0066	0.0249	0.0372	0.0219	0.1079	0.0516	1301-1309 = non- competitive imports
0.0977	0.1196	0.1276	0.1252	0.0698	0.0396	0.2220	0.1507	0.1226	0.1487	0.1286	1001-1127, 1201- 1309 = imports
0.1346	0.1168	0.1417	0.0575	0.0407	0.0423	0.0346	0.0475	0.0708	0.0195	0.0622	201-301 = electric power, fuels
0.3646	0.4638	0.4947	0.4950	0.5831	0.5573	0.4037	0.4537	0.4057	0.2487	0.7864	0401-0403 = labour
0.8235	0.8198	0.7992	0.8438	0.9059	0.9350	0.7584	0.8217	0.8503	0.8397	0.8360	199, 401-407 = value added
0.8127	0.8082	0.7858	0.8330	0.8992	0.9306	0.6494	0.7766	0.8257	0.4851	0.9070	199, 401-403, 407 = lab., cap. serv., etc.
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0198-0407, 1001-1407 = all primary comm.

100	101	102	103	104	105	106	107	108	109	110	
0.0003	0.0003	0.0002	0.0003	0.0002	0.0002	0.0003	0.0014	0.0006	0.0009	0.0040	0198
0.0006	0.0001	0.0005	0.0007	0.0007	0.0737	0.0021	0.0013	0.0001	0.0002	0.0010	1001-1005
0.0008	0.0002	0.0001	0.0002	0.0003	0.0001	0.0001	0.0005	0.0002	0.0162	0.0015	1006-1007
0.0019	0.0017	0.0016	0.0015	0.0009	0.0015	0.0020	0.0094	0.0035	0.0077	0.0030	1008, 1011-1198
0.0036	0.0050	0.0052	0.0049	0.0018	0.0046	0.0056	0.0280	0.0114	0.0056	0.0062	1012-1063
0.0002	0.0001	0.0001	0.0001	0.0002	0.0001	0.0002	0.0003	0.0003	0.0017	0.0100	1064-1070
0.0003	0.0001	0.0001	0.0001	0.0001	0.0001	0.0007	0.0006	0.0001	0.0005	0.0002	1071-1075
0.0014	0.0012	0.0010	0.0012	0.0004	0.0006	0.0018	0.0026	0.0010	0.0014	0.0016	1076-1083
0.0002	0.0002	0.0015	0.0127	0.4302	0.1062	0.0915	0.0922	0.0001	0.0016	0.0024	1084-1096
0.1256	0.2102	0.2130	0.0846	0.0017	0.0129	0.0035	0.0024	0.0528	0.0006	0.0006	1097-1103
0.0004	0.0003	0.0035	0.0051	0.0106	0.0833	0.0820	0.0172	0.0007	0.0001	0.0000	1104-1108
0.0263	0.0086	0.0055	0.0107	0.0257	0.0090	0.0132	0.0417	0.0155	0.0880	0.0685	1109-1116
0.0236	0.0111	0.0084	0.0103	0.0134	0.0097	0.0101	0.0115	0.0159	0.0771	0.0149	0201
0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0003	0.0003	0.0037	0.0004	0202
0.0114	0.0031	0.0020	0.0049	0.0037	0.0019	0.0018	0.0023	0.0037	0.0046	0.0023	0203
0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0005	0.0001	1201
0.0009	0.0006	0.0005	0.0005	0.0006	0.0005	0.0008	0.0014	0.0011	0.0159	0.0016	1202
0.0437	0.0120	0.0077	0.0187	0.0142	0.0073	0.0069	0.0087	0.0143	0.0176	0.0089	1203
0.0038	0.0016	0.0011	0.0013	0.0044	0.0015	0.0016	0.0032	0.0015	0.0046	0.0007	1301
0.0003	0.0004	0.0004	0.0004	0.0033	0.0013	0.0010	0.0013	0.0006	0.0005	0.0070	1302
0.0001	0.0000	0.0001	0.0002	0.0010	0.0003	0.0059	0.0001	0.1858	0.0000	0.0000	1303
0.0103	0.0268	0.0353	0.0325	0.0004	0.0009	0.0010	0.0150	0.0084	0.0002	0.0003	1304
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0001	0.0000	1305
0.0001	0.0001	0.0001	0.0001	0.0000	0.0001	0.0001	0.0004	0.0001	0.0001	0.0001	1306
0.0043	0.0008	0.0005	0.0010	0.0024	0.0008	0.0009	0.0020	0.0017	0.1251	0.0110	1307
0.0165	0.0028	0.0016	0.0021	0.0233	0.0066	0.0101	0.0038	0.0190	0.0452	0.0063	1309
0.0631	0.1012	0.1229	0.1304	0.0626	0.0949	0.0953	0.1256	0.1005	0.0511	0.1506	0401
0.1712	0.2710	0.3215	0.2841	0.1757	0.2514	0.3305	0.3272	0.2287	0.1466	0.1027	0402
0.0007	0.0116	0.0103	0.0111	0.0001	0.0279	0.0080	0.0274	0.0002	0.0000	0.0001	0403
-0.0001	-0.0001	-0.0002	-0.0006	-0.0010	-0.0004	-0.0005	-0.0006	-0.0001	-0.0004	-0.0007	0404
0.0048	0.0027	0.0022	0.0032	0.0061	0.0160	0.0033	0.0086	0.0032	0.0051	0.0026	0405
0.0167	0.0250	0.0233	0.0115	0.0039	0.0109	0.0099	0.0093	0.0086	0.0069	0.0074	0406
0.4031	0.2379	0.1590	0.3063	0.1441	0.1851	0.2316	0.1993	0.2823	0.3130	0.5451	199, 407
0.6810	0.1879	0.1207	0.1540	0.2056	0.1088	0.1329	0.1952	0.2814	3.4393	0.4247	2201.1
0.0019	0.0021	0.0014	0.0015	0.0008	0.0014	0.0033	0.0080	0.0031	0.0041	0.0012	2202.1
0.0015	0.0018	0.0020	0.0025	0.0020	0.0022	0.0021	0.0150	0.0026	0.0026	0.0013	2203.1
0.3175	0.0783	0.0480	0.0760	0.0930	0.0422	0.0408	0.0358	0.0971	0.1199	0.0609	2203.2
0.0304	0.0125	0.0078	0.0096	0.0369	0.0115	0.0127	0.0263	0.0123	0.0136	0.0037	2301.1
0.0024	0.0027	0.0026	0.0018	0.0015	0.0020	0.0025	0.0028	0.0025	0.0021	0.0046	2401.1
0.0017	0.0027	0.0032	0.0023	0.0016	0.0025	0.0027	0.0030	0.0035	0.0010	0.0039	2401.2
0.0037	0.0073	0.0087	0.0062	0.0039	0.0071	0.0072	0.0089	0.0013	0.0004	0.0018	2401.3
0.0148	0.0116	0.0107	0.0114	0.0163	0.0295	0.0236	0.0349	0.0172	0.0125	0.0068	2402.1
0.0401	0.1136	0.0086	0.0022	0.0002	0.0025	0.0142	0.0029	0.0065	0.0003	0.0043	2402.2
0.0416	0.0713	0.0819	0.0455	0.0383	0.0614	0.0775	0.0746	0.0475	0.0276	0.0228	2402.3
0.2061	0.2403	0.2404	0.1311	0.4874	0.3000	0.2105	0.2063	0.1012	0.1575	0.1057	1001-1127, 1201-1203 = competitive imports
0.0353	0.0326	0.0390	0.0376	0.0348	0.0115	0.0208	0.0260	0.2172	0.1759	0.0256	1301-1309 = non- competitive imports
0.2414	0.2729	0.2794	0.1687	0.5222	0.3115	0.2312	0.2323	0.3184	0.3334	0.1313	1001-1127, 1201- 1309 = imports
0.0838	0.0286	0.0199	0.0359	0.0366	0.0211	0.0215	0.0275	0.0370	0.1241	0.0290	201-301 = electric power, fuels
0.2986	0.4470	0.5255	0.4952	0.3072	0.4649	0.5121	0.5356	0.3671	0.2556	0.2963	0401-0403 = labour
0.7231	0.7125	0.7098	0.8157	0.4603	0.6765	0.7564	0.7522	0.6611	0.5802	0.8507	199, 401-407 = value added
0.7016	0.6849	0.6846	0.8015	0.4513	0.6500	0.7436	0.7349	0.6494	0.5686	0.8414	199, 401-403, 407 = lab., cap. serv., etc.
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0198-0407, 1001-1407 = all primary comm.

122	123	124	125	126	127	
0.0011	0.0016	0.0003	0.0010	0.0013	0.0002	0198
0.0002	0.0002	0.0000	0.0000	0.0000	0.0000	1001-1005
0.0001	0.0003	0.0000	0.0001	0.0002	0.0001	1006-1007
0.0076	0.0123	0.0015	0.0052	0.0065	0.0015	1008, 1011-1198
0.0076	0.0158	0.0136	0.0337	0.0222	0.0045	1012-1063
0.0003	0.0011	0.0002	0.0006	0.0004	0.0004	1064-1070
0.0001	0.0018	0.0001	0.0001	0.0002	0.0002	1071-1075
0.0002	0.0003	0.0002	0.0004	0.0003	0.0015	1076-1083
0.0003	0.0000	0.0001	0.0001	0.0001	0.0000	1084-1096
0.0007	0.0015	0.0008	0.0028	0.0014	0.0004	1097-1103
0.0001	0.0003	0.0027	0.0024	0.0004	0.0002	1104-1108
0.0031	0.0020	0.0012	0.0037	0.0033	0.0014	1109-1116
0.0019	0.0323	0.0023	0.0490	0.0041	0.0133	0201
0.0002	0.0012	0.0001	0.0002	0.0002	0.0003	0202
0.0029	0.0021	0.0119	0.0113	0.0316	0.0014	0203
0.0000	0.0002	0.0000	0.0003	0.0000	0.0001	1201
0.0010	0.0054	0.0002	0.0009	0.0009	0.0012	1202
0.0112	0.0079	0.0455	0.0433	0.1208	0.0053	1203
0.0010	0.0167	0.0002	0.0006	0.0011	0.0013	1301
0.0005	0.0001	0.0001	0.0002	0.0002	0.0000	1302
0.0000	0.0002	0.0020	0.0017	0.0002	0.0001	1303
0.0001	0.0004	0.0002	0.0011	0.0006	0.0001	1304
0.0002	0.0002	0.0000	0.0001	0.0001	0.0000	1305
0.0004	0.0008	0.0001	0.0003	0.0004	0.0001	1306
0.0002	0.0002	0.0002	0.0004	0.0003	0.0001	1307
0.0005	0.0004	0.0004	0.0007	0.0005	0.0003	1309
0.0090	0.0187	0.0106	0.0278	0.0279	0.0088	0401
0.0233	0.0647	0.0284	0.0772	0.0962	0.0202	0402
0.0000	0.0001	0.0000	0.0001	0.0001	0.0000	0403
-0.0004	-0.0001	-0.0000	-0.0002	-0.0002	-0.0000	0404
0.0010	0.0026	0.0482	0.0027	0.0013	0.0040	0405
0.0012	0.0019	0.0018	0.0043	0.0026	0.0007	0406
0.7944	0.2417	0.3561	0.2348	0.3402	0.3958	199, 407
0.0345	0.0677	0.0277	0.0725	0.0656	0.0318	2201.1
0.0066	0.0080	0.0013	0.0043	0.0048	0.0010	2202.1
0.0004	0.0011	0.0007	0.0015	0.0011	0.0003	2203.1
0.0053	0.0130	0.0048	0.0127	0.0160	0.0058	2203.2
0.0009	0.0070	0.0015	0.0046	0.0090	0.0019	2301.1
0.0003	0.0006	0.0004	0.0009	0.0010	0.0002	2401.1
0.0002	0.0004	0.0004	0.0010	0.0006	0.0003	2401.2
0.0001	0.0003	0.0001	0.0004	0.0002	0.0004	2401.3
0.0017	0.0055	0.0030	0.0075	0.0080	0.0018	2402.1
0.0001	0.0002	0.0001	0.0004	0.0002	0.0002	2402.2
0.0038	0.0120	0.0066	0.0167	0.0174	0.0041	2402.3
0.0323	0.0492	0.0660	0.0937	0.1567	0.0166	1001-1127, 1201-1203 = competitive imports
0.0030	0.0191	0.0031	0.0051	0.0034	0.0021	1301-1309 = non- competitive imports
0.0352	0.0683	0.0691	0.0989	0.1600	0.0187	1001-1127, 1201- 1309 = imports
0.0183	0.0658	0.0602	0.1057	0.1586	0.0228	201-301 = electric power, fuels
0.1623	0.6483	0.5102	0.5979	0.4589	0.5656	0401-0403 = labour
0.9585	0.8945	0.9164	0.8396	0.8029	0.9661	199, 401-407 = value added
0.9567	0.8900	0.8663	0.8327	0.7991	0.9613	199, 401-403, 407 = lab., cap. serv., etc.
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0198-0407, 1001-1407 = all primary comm.

E. MATRIX $(I-A)^{-1}Z$. Total production for different types of final demand 1957.

	199, 201-203	501	502	503	504	505	506	507	508	509	510
0001	0.2	385.1	3342.1	0.2	7.7	5.4	3.1	14.7	0.0	0.0	0.0
0002	0.8	383.5	2619.7	0.2	6.5	4.0	2.4	11.6	0.0	0.3	0.0
0003	1.2	8.4	342.6	0.0	0.1	0.4	0.2	0.5	0.0	0.0	0.0
0004	25.8	1824.9	425.6	3.6	9.4	2.7	4.8	2.8	3.6	31.1	3.9
0005	0.0	29.4	125.3	0.0	0.7	0.2	0.2	0.5	0.0	0.0	0.0
0006	0.6	1045.6	17.6	0.4	2.4	2.9	6.2	0.1	0.2	2.7	0.4
0007	0.8	108.5	16.1	0.1	1.5	0.8	1.4	0.1	0.0	0.5	0.2
0008	13.1	2556.9	408.8	9.0	55.1	68.0	144.4	2.1	5.4	61.6	10.4
0009	0.3	85.6	9.1	0.2	1.1	1.3	2.7	0.1	0.1	1.2	0.2
0010	1.9	159.9	32.7	0.2	4.8	3.1	5.1	0.2	0.1	1.4	0.6
0011	2.9	253.3	78.5	0.6	12.4	5.9	11.2	0.4	0.2	4.1	1.3
0012	1.7	90.9	98.5	1.1	3.1	3.5	4.0	0.4	0.1	10.5	2.5
0013	1.4	288.7	109.0	1.2	6.6	3.1	6.4	0.4	0.3	9.2	1.6
0014	1.3	161.9	58.7	0.3	3.4	1.4	6.3	0.4	0.1	2.5	0.3
0015	0.5	56.2	30.0	0.7	2.4	1.8	6.1	0.2	0.1	6.6	0.8
0016	0.1	34.8	4.4	0.1	0.4	1.0	0.3	0.0	0.1	1.1	1.0
0017	—	1.9	5.2	0.2	1.0	0.5	0.3	—	0.0	1.5	0.2
0018	1.8	128.9	166.4	1.8	8.1	4.2	6.6	1.0	0.3	14.8	2.6
0019	0.3	57.2	19.2	0.2	2.2	2.8	7.5	0.1	0.1	1.2	0.5
0020	0.0	5.5	33.0	0.0	0.2	0.2	0.1	0.0	0.0	0.5	0.5
0021	—	30.5	2.7	—	0.0	0.0	0.0	—	—	—	—
0022	6.6	75.6	107.4	0.1	15.8	3.7	6.6	0.3	0.1	1.3	0.2
0023	8.3	4.9	87.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
0024	9.1	22.0	19.6	0.2	1.1	1.0	1.4	0.1	0.1	1.8	0.4
0025	3.0	342.6	447.1	0.3	27.2	1.2	5.0	0.5	2.0	2.7	0.3
0026	0.2	10.2	123.1	0.0	1.6	0.0	0.3	0.0	0.0	0.2	0.0
0027	—	23.3	—	—	1.3	0.1	—	—	1.7	—	—
0028	0.3	41.0	27.6	0.1	0.3	0.1	1.7	0.1	0.0	0.3	0.0
0029	0.8	228.8	74.8	0.9	4.9	6.5	33.6	0.2	0.8	7.5	4.0
0030	0.8	147.1	65.1	0.1	3.4	8.0	148.3	0.2	0.5	1.8	0.1
0031	0.0	35.0	0.6	0.0	0.0	1.0	9.1	0.0	0.0	0.0	0.0
0032	0.0	93.1	0.4	0.1	2.4	1.7	1.7	0.0	0.0	0.5	0.0
0033	0.0	64.0	0.6	0.0	0.0	0.0	0.3	0.0	0.0	0.9	0.0
0034	0.0	197.2	0.2	0.0	0.1	0.0	0.1	0.0	2.7	0.0	0.0
0035	0.0	35.2	0.3	0.0	0.0	0.0	0.2	0.0	0.0	0.2	0.0
0036	—	64.0	—	—	—	—	—	—	—	0.1	0.0
0037	0.3	199.4	33.2	0.1	3.4	0.9	4.7	0.1	0.1	0.6	0.1
0038	0.1	37.9	5.3	5.0	2.3	1.4	1.1	0.0	0.3	5.0	0.7
0039	—	126.8	0.4	0.4	0.2	0.1	0.0	—	—	2.1	—
0040	0.0	43.5	31.7	0.1	0.1	0.2	0.1	0.0	0.0	0.6	0.1
0041	0.1	108.4	10.6	0.1	0.9	1.3	0.5	0.0	0.1	1.3	0.2
0042	0.0	29.4	1.8	0.0	1.4	1.7	1.6	0.0	0.0	0.2	0.1
0043	0.0	34.4	2.0	0.1	0.5	1.4	0.2	0.0	0.0	1.4	0.2
0044	0.0	81.4	2.8	0.0	114.1	61.2	292.8	0.0	0.0	0.3	0.0
0045	—	26.6	59.0	0.1	0.1	0.0	—	0.0	0.0	0.7	0.1
0046	0.1	6.9	5.3	0.1	0.2	1.3	0.1	0.0	0.0	1.1	1.6
0047	0.1	157.3	4.0	0.0	3.5	1.9	1.4	0.0	0.1	0.3	0.0
0048	0.1	1028.4	25.8	0.0	1.0	84.8	0.1	0.1	0.0	7.2	0.0
0049	0.1	18.1	17.8	0.0	1.1	0.9	0.2	0.0	0.0	0.1	0.0
0050	3.9	151.9	15.9	0.1	4.1	2.5	10.1	0.6	0.0	0.7	0.1
0051	0.4	137.1	25.1	0.2	6.9	18.1	7.5	0.1	0.1	1.5	0.2
0052	0.2	28.9	85.5	3.5	6.7	7.1	37.5	0.0	0.0	0.8	0.0
0053	—	26.3	20.4	—	0.2	0.1	0.1	—	—	0.4	0.0
0054	0.0	17.0	44.8	0.0	0.3	0.1	0.4	0.0	0.0	0.3	0.1
0055	0.6	50.3	18.2	0.1	4.7	4.1	2.5	0.2	0.1	1.3	0.8
0056	2.0	5.2	25.6	0.0	0.4	0.5	0.3	0.0	0.0	0.1	0.2
0057	1.5	40.5	24.9	0.2	4.5	3.4	2.9	0.3	0.1	1.7	1.9
0058	0.0	65.7	56.9	0.6	4.5	13.2	21.8	0.0	0.0	2.1	0.0
0059	0.6	27.4	59.0	1.2	1.2	1.5	1.0	0.1	0.2	11.8	17.2
0060	14.4	71.9	578.2	1.3	3.3	1.6	2.5	2.4	0.7	10.8	1.4
0061	3.0	66.5	155.7	0.1	2.3	0.9	1.7	1.5	0.1	0.8	0.1
0062	3.5	98.1	115.1	1.3	4.2	2.6	67.7	1.2	0.7	10.9	1.4
0063	1.7	22.0	33.2	0.3	3.9	0.5	0.5	0.3	0.1	2.5	0.3
0064	4.8	51.7	71.3	1.0	1.3	0.7	1.6	0.4	7.2	9.8	1.3
0065	0.0	13.7	5.9	1.4	1.0	0.3	0.8	0.2	2.4	13.4	1.7

511	512	513	514	515	516	517	518	519	520	521	
0.0	0.0	0.0	14.5	6.9	7.2	0.0	0.0	0.1	0.1	16.6	0001
0.0	0.0	0.0	11.3	5.4	5.6	0.0	0.0	0.0	0.4	12.9	0002
0.0	0.0	0.0	0.4	0.2	0.6	0.0	0.0	0.0	1.0	0.4	0003
0.6	6.0	4.9	2.1	0.4	1.2	0.6	0.1	0.3	34.5	5.6	0004
0.0	0.0	0.0	0.5	0.2	0.3	0.0	0.0	0.0	0.0	0.6	0005
0.2	2.4	0.5	0.1	0.0	0.0	0.1	0.0	0.1	4.8	0.1	0006
0.0	0.4	1.1	0.1	0.0	0.1	0.0	0.0	0.0	1.4	0.1	0007
4.5	54.8	11.8	1.6	0.4	1.1	2.0	0.5	2.7	111.2	1.2	0008
0.1	1.1	0.3	0.0	0.0	0.0	0.0	0.0	0.1	2.2	0.0	0009
0.1	1.5	4.5	0.1	0.0	0.1	0.1	0.0	0.1	5.0	0.1	0010
0.2	3.3	9.8	0.2	0.1	0.2	0.2	0.2	0.2	14.2	0.2	0011
0.2	0.8	0.4	0.3	0.2	0.2	0.2	0.1	0.1	13.9	0.3	0012
0.3	3.9	4.6	0.3	0.1	0.3	0.4	0.1	0.5	11.6	0.3	0013
0.1	1.3	1.7	1.0	0.1	0.3	1.0	0.1	0.2	3.6	0.4	0014
0.1	3.9	1.2	0.5	0.0	0.1	0.1	0.0	0.1	8.0	0.2	0015
0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6	0.0	0016
0.0	0.0	0.1	—	—	—	1.7	0.5	1.1	2.4	—	0017
0.5	3.7	8.3	0.4	0.2	0.7	0.2	0.1	0.5	16.8	0.5	0018
0.1	2.0	1.5	0.0	0.0	0.0	0.1	0.0	0.2	3.7	0.0	0019
0.1	1.9	0.0	0.0	0.0	0.0	0.6	0.2	0.4	3.7	0.0	0020
—	—	—	—	—	0.0	—	—	0.0	—	—	0021
0.0	0.3	0.8	0.1	0.1	0.2	0.1	0.0	0.2	3.4	0.1	0022
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0023
0.0	0.8	0.1	0.1	0.0	0.1	0.0	0.0	0.0	2.3	0.1	0024
0.3	2.0	0.6	0.4	0.1	1.0	0.0	0.1	1.9	4.0	0.7	0025
0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.2	0.1	0026
0.3	1.6	0.0	—	—	—	0.0	—	0.6	0.8	—	0027
0.0	108.7	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.4	0.1	0028
1.0	11.9	1.2	0.1	0.0	0.1	0.3	0.0	0.4	19.1	0.1	0029
0.1	2.0	0.2	0.1	0.0	0.2	0.0	0.0	0.2	1.2	0.2	0030
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0031
0.0	1.3	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.1	0.0	0032
1.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.1	0.0	0033
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0034
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0035
—	—	—	—	—	—	—	—	—	—	—	0036
0.1	0.6	0.1	0.3	0.0	0.1	0.0	0.0	0.1	0.9	0.4	0037
0.1	2.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	6.5	0.0	0038
0.1	0.4	—	—	—	—	0.3	0.1	1.0	0.2	—	0039
0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	1.1	0.0	0040
0.0	0.4	0.1	0.0	0.0	0.0	0.2	0.0	0.0	3.8	0.0	0041
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0042
0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	1.2	2.0	0.0	0043
0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0044
0.0	0.1	0.0	—	—	—	0.8	—	0.0	0.6	—	0045
0.3	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.1	0.0	0046
0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.6	1.6	0.0	0047
0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.2	4.4	0.0	0048
0.0	0.3	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0049
0.0	2.9	101.9	0.1	0.0	0.2	0.0	0.1	1.8	1.0	0.1	0050
0.0	3.2	3.5	0.1	0.0	0.1	0.1	0.0	0.2	4.4	0.1	0051
0.0	1.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0052
0.	0.0	0.4	—	—	—	0.1	—	0.0	3.0	—	0053
0.0	0.1	0.0	0.0	0.0	0.0	0.3	0.0	0.0	1.3	0.0	0054
0.1	2.4	5.3	0.1	0.0	0.1	0.1	0.1	0.1	7.2	0.1	0055
0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.8	0.0	0056
0.2	5.2	21.9	0.1	0.0	0.1	0.1	0.0	0.2	13.1	0.1	0057
0.0	0.1	0.1	0.0	0.0	0.0	0.4	1.3	0.1	0.6	0.0	0058
3.5	0.4	0.4	0.1	0.0	0.0	0.0	0.0	0.0	59.8	0.1	0059
0.6	1.4	3.4	2.0	0.5	5.5	0.1	0.1	0.1	15.5	3.7	0060
0.0	8.9	0.5	0.7	0.2	0.3	0.0	0.0	0.1	1.3	0.8	0061
0.2	0.7	0.5	0.5	0.2	0.4	0.1	0.0	0.1	10.5	0.5	0062
0.1	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.0	2.5	0.1	0063
1.2	1.5	0.4	0.1	0.1	1.3	0.0	0.0	0.0	26.5	0.2	0064
1.1	0.9	0.3	0.0	0.0	0.0	0.0	0.0	0.0	15.6	0.0	0065

Matrix E (continued)

	199, 201-203	501	502	503	504	505	506	507	508	509	510
0066	0.0	1.8	12.1	3.0	2.2	0.7	1.8	0.0	0.0	29.9	3.7
0067	0.1	18.0	5.8	0.9	0.9	0.5	1.2	0.0	0.0	9.3	1.2
0068	3.1	22.9	55.1	0.2	0.4	0.3	0.3	0.1	0.0	1.3	0.6
0069	3.8	31.1	91.5	0.3	0.9	0.4	0.6	0.4	0.0	2.5	0.4
0070	1.0	22.4	10.6	0.5	1.1	0.3	1.4	0.2	0.1	5.3	0.7
0071	4.3	1357.0	168.7	4.2	7.0	3.1	5.0	0.7	5.6	40.3	5.0
0072	0.3	21.9	268.0	0.9	1.2	1.1	3.2	0.0	0.1	4.5	0.0
0073	0.0	2.3	5.4	1.4	4.9	0.3	0.8	0.0	2.8	14.4	1.6
0074	1.3	35.2	83.4	3.9	3.3	1.6	2.9	0.2	0.6	38.7	4.8
0075	1.2	28.8	71.9	1.3	1.1	0.5	1.1	0.1	0.0	12.1	1.4
0076	4.1	277.3	50.3	0.2	0.5	0.2	0.4	0.6	0.0	0.5	0.1
0077	29.4	1907.3	158.2	1.0	4.8	1.0	1.6	3.5	0.2	1.9	0.3
0078	2.6	195.5	87.5	0.2	0.5	0.4	0.6	0.6	0.1	0.5	0.1
0079	61.3	813.3	288.6	2.0	5.4	1.8	2.9	7.3	0.3	3.5	0.6
0080	0.0	135.0	6.5	0.7	0.7	0.3	0.5	0.0	0.2	6.8	0.9
0081	16.8	71.5	231.8	0.5	5.7	1.5	2.3	1.5	0.4	3.7	0.7
0082	166.9	50.2	407.5	7.2	3.3	1.9	3.8	27.6	0.2	3.4	0.6
0083	11.8	42.3	390.5	0.7	2.2	1.6	2.6	2.7	0.3	2.3	0.3
0084	0.0	6.6	417.9	0.0	1.4	0.5	0.2	1.9	0.0	0.0	0.0
0085	0.0	6.4	758.7	0.0	0.5	0.5	0.4	3.6	0.0	0.0	0.0
0086	0.0	7.9	440.6	0.0	1.7	0.4	0.3	1.8	0.0	0.0	0.0
0087	0.0	6.7	428.8	0.0	2.3	0.2	0.1	0.3	0.0	0.0	0.0
0088	0.0	209.6	1325.9	0.1	5.8	2.4	1.6	8.3	0.0	0.0	0.0
0089	0.1	93.4	2213.3	0.1	2.5	4.1	2.2	7.8	0.0	0.0	0.0
0090	0.0	11.8	116.0	0.0	0.4	0.3	0.1	0.5	0.0	0.0	0.0
0091	0.0	3.3	184.9	0.0	1.8	0.5	0.2	1.7	0.0	0.0	0.0
0092	0.0	1.9	295.9	0.0	1.3	0.2	0.1	1.4	0.0	0.0	0.0
0093	0.2	23.9	803.6	0.1	1.8	0.6	0.4	2.2	0.0	0.0	0.0
0094	0.3	4.4	126.0	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.0
0095	0.0	4.2	416.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0096	0.0	0.5	788.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0
0097	3.1	60.7	354.9	0.1	9.7	4.3	0.7	1.0	0.0	0.6	0.0
0098	6.5	48.5	476.3	0.1	5.3	3.2	1.6	0.8	0.0	0.7	0.0
0099	5.0	15.7	60.5	0.1	1.4	0.6	0.6	0.2	0.0	1.0	0.1
0100	1.6	60.6	122.1	0.0	1.0	0.7	0.4	0.6	0.0	0.4	0.0
0101	0.1	6.8	324.3	0.0	1.0	1.2	0.3	0.0	0.0	0.0	0.0
0102	0.2	19.2	1274.6	0.0	6.1	4.9	1.4	3.7	0.0	0.1	0.0
0103	64.4	38.0	512.9	0.4	3.8	3.5	1.5	1.4	0.0	0.5	0.0
0104	0.3	23.7	130.0	0.0	0.2	0.6	0.2	0.0	0.0	0.0	0.0
0105	0.5	7.4	197.8	0.0	0.1	0.2	0.3	0.0	0.0	0.0	0.0
0106	—	0.7	376.4	—	0.1	2.0	0.3	—	—	—	—
0107	0.9	13.8	116.7	0.0	1.2	0.5	1.0	0.1	0.0	0.1	0.0
0108	0.7	72.6	197.9	0.2	6.0	1.4	3.7	0.2	0.2	1.6	0.2
0109	8.6	309.2	281.6	1.1	10.9	2.3	3.9	3.0	0.2	3.8	0.8
0110	1.2	26.1	97.4	1.7	0.7	0.3	0.2	6.7	0.0	0.1	0.0
0111	0.2	80.3	18.0	0.3	79.0	2.4	3.4	0.1	1.1	2.4	0.3
0112	4.7	88.1	408.7	0.2	2.8	0.7	0.9	1.8	0.0	1.6	0.2
0113	3.8	48.8	105.1	0.6	1.6	1.4	1.5	0.7	0.1	4.1	1.1
0114	3.2	14.6	201.8	0.2	0.8	0.1	0.2	1.7	0.0	0.2	0.0
0115	15.0	56.4	186.4	0.2	2.5	1.5	1.4	0.4	0.0	1.4	0.4
0116	31.5	116.5	186.3	1.6	4.9	2.8	4.7	0.9	0.1	13.5	1.8
0117	0.2	35.6	27.6	1.6	1.7	3.1	1.7	0.0	0.1	15.9	5.1
0118	0.0	4.1	30.7	0.4	1.1	0.6	0.2	0.0	0.1	4.9	9.4
0119	—	—	264.9	68.9	50.6	15.2	41.3	—	0.2	680.7	81.9
0120	149.9	27.4	162.7	0.3	1.2	0.8	1.3	53.4	0.1	1.6	0.2
0121	137.8	73.9	544.9	2.2	4.5	3.7	4.8	20.2	0.2	3.3	0.5
0122	1.6	2406.9	93.8	0.1	0.6	2.2	0.7	2.1	0.1	0.6	0.1
0123	21.1	311.5	872.0	1.2	11.3	3.6	14.2	7.0	1.1	6.3	1.0
0124	11.8	330.3	640.9	2.9	5.2	2.1	3.7	5.1	0.9	22.6	2.8
0125	0.4	3.6	592.6	0.0	0.2	0.1	0.3	0.3	0.0	0.2	0.0
0126	3.8	146.9	80.6	0.1	0.4	2.2	0.4	1.5	0.1	0.4	0.1
0127	124.4	1254.7	7482.1	15.5	83.4	46.6	83.5	33.2	14.4	86.0	13.3
Total	1032.7	22970.8	37566.5	168.9	731.2	494.1	1108.5	266.0	61.6	1293.9	204.9

511	512	513	514	515	516	517	518	519	520	521	
1.6	3.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	39.4	0.0	0066
0.2	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	9.0	0.0	0067
0.1	0.3	0.4	0.1	0.1	0.1	0.1	0.1	0.1	2.8	0.1	0068
0.3	0.3	0.1	0.2	0.3	0.1	0.1	0.1	0.1	3.3	0.2	0069
0.3	0.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0	5.5	0.0	0070
0.8	9.3	2.5	1.4	0.1	0.3	0.6	0.1	0.3	45.0	1.5	0071
0.1	0.1	0.0	0.0	0.0	0.0	8.8	1.1	3.7	2.7	0.0	0072
0.2	0.4	0.7	0.0	0.0	0.0	0.0	0.0	0.0	12.2	0.0	0073
1.2	1.7	4.0	0.1	0.0	0.1	0.3	0.0	0.1	43.2	0.1	0074
0.2	0.6	0.7	0.4	0.0	0.1	0.4	0.1	0.2	11.4	0.2	0075
0.0	0.1	0.2	0.3	0.1	0.3	0.0	0.0	0.0	0.7	0.2	0076
0.1	0.4	1.0	2.2	0.3	1.3	0.1	0.0	0.1	3.0	1.8	0077
0.0	0.2	0.1	0.2	0.1	0.3	0.0	0.0	0.0	0.8	0.1	0078
0.2	0.9	2.1	4.6	0.6	2.7	0.2	0.1	0.1	5.6	3.8	0079
0.1	0.5	0.2	0.0	0.0	0.0	0.1	0.0	0.0	6.4	0.0	0080
0.2	0.7	0.8	0.8	0.5	0.5	0.2	0.1	0.1	5.6	0.8	0081
0.1	0.6	0.8	18.5	1.1	10.5	0.1	0.1	0.1	6.1	14.9	0082
0.1	0.7	0.6	0.7	0.5	1.3	0.2	0.1	0.1	3.5	0.6	0083
0.0	0.0	0.0	2.1	0.9	1.0	0.0	0.0	0.0	0.0	2.4	0084
0.0	0.0	0.0	3.9	1.8	1.9	0.0	0.0	0.0	0.0	4.4	0085
0.0	0.0	0.0	2.0	0.9	1.0	0.0	0.0	0.0	0.0	2.2	0086
0.0	0.0	0.0	0.3	0.1	0.1	0.0	0.0	0.0	0.0	0.3	0087
0.0	0.0	0.0	8.9	4.0	4.3	0.0	0.0	0.0	0.0	10.1	0088
0.0	0.0	0.0	8.0	4.1	3.9	0.0	0.0	0.0	0.0	9.2	0089
0.0	0.0	0.0	0.5	0.2	0.3	0.0	0.0	0.0	0.0	0.6	0090
0.0	0.0	0.0	1.8	0.8	0.9	0.0	0.0	0.0	0.0	2.0	0091
0.0	0.0	0.0	1.5	0.7	0.7	0.0	0.0	0.0	0.0	1.7	0092
0.0	0.0	0.0	2.0	1.0	1.0	0.0	0.0	0.0	0.1	2.3	0093
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0094
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0095
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0096
0.0	0.1	0.4	0.2	0.5	0.3	0.3	0.2	0.2	0.6	0.1	0097
0.0	0.2	0.6	0.2	0.4	0.2	0.3	0.2	0.2	0.6	0.1	0098
0.0	0.2	0.1	0.2	0.4	0.2	0.0	0.0	0.0	1.4	0.1	0099
0.0	0.1	0.3	0.3	0.4	0.3	0.0	0.0	0.0	0.4	0.1	0100
0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0101
0.0	0.0	2.5	0.1	1.5	0.3	0.0	0.0	0.0	0.2	0.1	0102
0.0	0.1	0.1	0.2	1.7	0.6	0.1	0.0	0.1	0.5	0.2	0103
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0104
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0105
—	—	—	—	—	—	—	—	—	—	—	0106
0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0107
0.1	1.1	0.4	0.2	0.2	0.3	0.3	0.0	0.2	2.3	0.4	0108
0.2	1.1	2.1	2.9	1.5	1.2	0.1	0.0	0.1	6.3	3.0	0109
0.0	0.0	0.0	0.2	7.0	1.1	0.0	0.0	0.0	0.0	0.1	0110
0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	3.5	0.0	0111
0.0	0.3	0.1	1.7	1.0	0.9	0.0	0.0	0.0	2.4	1.9	0112
0.2	1.0	0.4	0.4	0.1	0.3	0.2	0.0	0.1	6.8	0.3	0113
0.0	0.1	0.0	1.1	0.6	1.3	0.0	0.0	0.0	0.8	1.1	0114
0.1	0.9	1.6	0.2	0.2	0.1	0.1	0.0	0.1	2.6	0.2	0115
0.3	1.8	0.7	0.5	2.4	0.6	0.1	0.0	0.1	19.4	0.6	0116
1.3	2.8	0.4	0.0	0.0	0.1	0.0	0.0	0.0	26.3	0.1	0117
1.2	6.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	37.6	0.0	0118
10.9	20.4	12.5	—	—	—	0.3	—	0.0	607.9	—	0119
0.1	0.5	0.4	0.9	0.4	3.5	0.1	0.0	0.1	2.3	0.8	0120
0.2	0.6	0.8	1.9	1.5	6.7	0.1	0.0	0.1	5.2	1.7	0121
0.0	0.2	0.2	0.2	0.1	1.1	0.0	0.0	0.0	1.2	0.1	0122
0.3	2.2	4.0	2.1	0.9	1.5	0.4	0.2	0.4	10.4	3.2	0123
5.4	8.0	6.8	3.6	0.9	7.3	0.2	0.1	0.2	48.0	29.2	0124
0.0	0.1	0.1	8.0	0.3	2.4	0.0	0.0	0.0	0.4	7.5	0125
0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.6	0.1	0126
4.8	27.6	25.5	21.1	12.1	14.0	5.3	2.7	6.5	135.4	20.9	0127
49.0	346.9	270.3	145.8	68.7	105.6	30.6	9.6	29.8	1601.8	179.1	Total

Matrix E (continued)

	522	523	524	525	526	527	528	529	530	531	532
0001	7.9	0.0	0.0	0.0	2.0	23.1	0.6	0.0	0.0	0.0	0.0
0002	6.2	0.0	0.0	0.1	1.5	18.2	0.4	0.0	0.0	0.0	0.1
0003	0.3	0.0	0.0	0.0	0.1	0.6	0.0	0.0	0.0	0.0	0.0
0004	2.3	0.3	0.4	14.3	0.4	1.2	0.2	0.1	0.3	0.0	6.1
0005	0.3	0.0	0.0	0.0	0.1	0.9	0.0	0.0	0.0	0.0	0.0
0006	0.0	0.0	0.1	1.4	0.0	0.0	0.0	0.0	0.1	0.0	0.7
0007	0.0	0.0	0.0	0.4	0.0	0.2	0.0	0.0	0.0	0.0	0.3
0008	0.5	0.7	1.2	32.8	0.3	1.1	0.0	0.4	1.4	0.1	17.0
0009	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.4
0010	0.1	0.0	0.1	1.3	0.0	0.1	0.0	0.0	0.1	0.0	1.0
0011	0.1	0.1	0.1	2.9	0.0	0.3	0.0	0.0	0.5	0.0	1.9
0012	0.2	0.1	0.0	4.6	0.0	0.7	0.0	0.0	0.3	0.0	2.4
0013	0.1	0.1	0.2	4.2	0.1	0.3	0.0	0.1	0.4	0.0	2.6
0014	0.1	0.3	0.0	1.0	0.2	0.1	0.0	0.2	0.0	0.0	0.5
0015	0.1	0.1	0.1	2.7	0.1	0.1	0.0	0.0	0.1	0.0	1.3
0016	0.1	0.0	0.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	1.7
0017	—	0.7	0.4	0.6	0.0	0.0	—	0.4	1.7	0.0	0.3
0018	0.2	0.1	0.1	6.4	0.1	0.7	0.0	0.0	0.3	0.0	4.5
0019	0.0	0.0	0.1	1.3	0.0	0.3	0.0	0.0	0.1	0.0	0.9
0020	0.0	0.0	0.1	1.3	0.2	0.0	0.0	0.1	0.7	0.0	1.1
0021	—	—	—	—	—	—	—	—	—	—	—
0022	0.2	0.0	0.1	0.6	0.0	0.3	0.0	0.0	0.0	0.0	0.3
0023	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0024	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.1	0.0	0.4
0025	0.3	0.0	0.6	1.2	0.0	0.3	0.0	0.0	0.4	0.0	0.4
0026	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0027	—	—	0.2	0.2	—	—	—	0.0	—	0.0	—
0028	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.1
0029	0.1	0.0	0.1	8.0	0.0	0.1	0.0	0.0	0.1	0.0	7.8
0030	0.1	0.0	0.1	0.4	0.0	0.1	0.0	0.0	0.0	0.0	0.2
0031	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0032	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
0033	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
0034	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0035	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0036	—	—	—	—	—	—	—	—	—	—	—0.1
0037	0.0	0.0	0.0	0.3	0.0	0.1	0.0	0.0	0.0	0.0	0.1
0038	0.0	0.0	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0	1.1
0039	—	0.1	0.3	0.2	—	—	—	0.1	0.4	0.0	—
0040	0.0	0.1	0.0	0.6	0.0	0.0	0.0	0.0	0.3	0.0	0.1
0041	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.3
0042	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.2
0043	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.3
0044	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0045	—	0.0	0.1	0.5	—	—	—	0.0	—	0.0	0.1
0046	0.0	0.0	0.0	3.4	0.0	0.0	0.0	0.0	0.0	0.0	3.1
0047	0.0	0.0	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0048	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0049	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0050	0.1	0.0	0.0	0.2	0.0	0.1	0.0	0.0	0.4	0.0	0.1
0051	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.1	0.0	0.4
0052	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0053	—	0.0	0.1	0.1	—	—	—	0.0	—	0.0	—
0054	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0
0055	0.0	0.0	0.1	1.6	0.0	0.1	0.0	0.0	0.2	0.0	1.5
0056	0.1	0.0	0.0	0.3	0.0	0.1	0.0	0.0	0.0	0.0	0.3
0057	0.1	0.0	0.2	3.5	0.0	0.1	0.0	0.0	0.1	0.0	3.8
0058	0.0	0.3	0.0	0.1	0.0	0.0	0.0	0.1	4.0	0.0	0.1
0059	0.0	0.0	0.0	29.5	0.0	0.1	0.0	0.0	0.0	0.0	34.3
0060	1.6	0.1	0.1	5.3	0.2	1.6	0.1	0.0	0.1	0.0	2.2
0061	0.2	0.0	0.0	0.5	0.1	0.6	0.0	0.0	0.1	0.0	0.2
0062	0.3	0.0	0.1	4.0	0.1	0.8	0.0	0.0	0.1	0.0	2.2
0063	0.1	0.0	0.0	1.0	0.0	0.2	0.0	0.0	0.0	0.0	0.5
0064	0.1	0.0	0.0	6.6	0.0	0.6	0.1	0.0	0.0	0.0	2.0
0065	0.6	0.0	0.0	5.5	0.0	0.0	0.0	0.0	0.0	0.0	2.6

533	534	535	5/1	5/2	5/3	5/4	5/5	5/6	5/7	5/8	
0.0	0.5	-17.2	3820.9	3820.8	3837.9	31.2	16.4	14.8	14.8	0.1	0001
0.2	2.5	17.7	3111.5	3110.7	3093.0	25.1	13.1	12.0	11.9	0.4	0002
0.0	0.0	0.5	357.5	356.3	355.8	1.2	0.6	0.5	0.5	0.0	0003
21.2	245.3	160.7	2847.4	2821.7	2660.9	73.5	20.6	52.9	37.5	50.1	0004
0.0	0.0	-0.4	158.9	158.9	159.3	1.6	1.1	0.5	0.5	0.0	0005
3.7	52.9	16.4	1162.7	1162.4	1146.1	18.4	11.9	6.5	3.0	6.4	0006
0.5	13.9	3.1	151.9	151.2	148.1	6.2	3.8	2.4	0.7	2.3	0007
86.1	1230.7	336.5	5235.5	5229.5	4893.0	427.4	276.6	150.8	69.2	148.7	0008
1.7	25.5	44.1	178.2	178.1	134.0	8.4	5.3	3.1	1.4	3.0	0009
1.6	49.1	2.0	277.0	275.3	273.4	21.7	13.3	8.4	1.7	8.2	0010
4.0	107.8	14.2	531.5	528.6	514.4	49.4	30.1	19.4	4.7	19.0	0011
9.5	121.0	3.4	375.3	373.6	370.2	26.6	11.7	14.9	11.0	14.5	0012
11.5	174.1	37.6	681.6	680.2	642.6	37.6	17.3	20.3	9.9	19.9	0013
2.3	39.9	1.7	292.9	291.6	289.9	17.9	11.5	6.4	3.0	6.0	0014
5.2	60.2	2.1	191.8	191.3	189.2	24.1	11.0	13.0	6.9	12.9	0015
0.9	52.0	0.8	106.2	106.2	105.4	4.5	1.8	2.6	1.3	2.6	0016
1.0	58.0	—	79.8	79.8	79.8	3.8	2.0	1.9	1.5	1.9	0017
13.2	231.5	11.1	636.6	634.8	623.7	51.8	20.7	31.1	16.1	30.1	0018
2.6	62.5	3.5	170.2	169.9	166.5	18.2	12.7	5.5	1.4	5.4	0019
0.2	33.1	0.1	83.9	83.9	83.7	3.6	0.5	3.1	0.5	3.1	0020
—	11.1	—	44.5	44.5	44.5	0.0	0.0	—	—	—	0021
2.6	28.3	15.8	271.4	264.7	248.9	29.2	26.2	3.0	1.7	2.7	0022
0.0	0.3	0.1	100.8	92.5	92.4	0.2	0.2	0.0	0.0	0.0	0023
2.6	24.3	0.4	89.1	88.7	88.3	7.0	3.7	3.3	1.9	3.2	0024
15.9	320.8	-26.4	1156.6	1153.6	1180.0	42.1	33.8	8.3	5.2	7.8	0025
0.1	8.1	0.2	144.9	144.7	144.5	2.3	2.0	0.4	0.3	0.3	0026
57.6	4.0	—	91.5	91.5	91.5	4.9	1.4	3.6	1.7	3.6	0027
0.8	45.8	1.0	229.0	228.6	227.6	111.6	2.2	109.3	0.5	109.2	0028
26.7	293.6	11.9	745.4	744.8	732.9	72.3	45.8	26.5	8.4	26.3	0029
7.8	37.8	15.0	441.1	440.3	425.5	164.7	159.8	4.9	2.5	4.7	0030
0.0	60.6	0.3	106.8	106.8	106.5	10.2	10.1	0.1	0.0	0.1	0031
0.0	60.5	0.2	162.3	162.3	162.0	7.7	5.9	1.8	0.5	1.8	0032
0.0	145.7	0.3	213.6	213.5	213.2	2.2	0.4	1.9	0.9	1.9	0033
0.0	99.7	-7.5	293.1	293.1	300.6	3.0	0.2	2.8	2.8	2.8	0034
77.2	0.2	10.6	124.2	124.1	113.5	0.4	0.2	0.2	0.2	0.2	0035
7.8	73.6	—	145.5	145.5	145.5	0.1	—	0.1	0.1	0.1	0036
3.5	23.8	7.2	280.7	280.4	273.2	10.8	9.1	1.7	0.9	1.6	0037
3.3	193.0	1.5	269.1	269.0	267.5	18.2	9.8	8.3	5.3	8.3	0038
0.	81.4	—	214.7	214.7	214.7	3.2	0.7	2.5	2.1	2.5	0039
0.4	75.3	0.1	154.4	154.4	154.4	1.2	0.4	0.8	0.6	0.8	0040
4.7	69.8	1.0	205.4	205.3	204.3	4.9	2.7	2.2	1.5	2.1	0041
7.2	42.4	0.9	89.1	89.1	88.2	5.0	4.7	0.3	0.2	0.3	0042
4.1	98.6	0.8	148.6	148.6	147.8	4.2	2.2	2.0	1.4	2.0	0043
0.0	1.3	49.7	603.9	603.9	554.1	468.5	468.1	0.3	0.3	0.3	0044
0.4	41.4	—	130.7	130.7	130.7	1.1	0.2	0.9	0.7	0.9	0045
0.6	189.3	0.2	225.3	225.3	225.1	5.3	1.7	3.6	1.1	3.6	0046
0.6	16.0	-7.2	181.2	181.1	188.3	7.4	6.9	0.6	0.4	0.6	0047
0.1	326.0	90.7	1569.0	1568.9	1478.2	93.2	85.8	7.4	7.4	7.3	0048
0.3	45.2	0.0	84.9	84.8	84.8	3.3	2.3	1.0	0.1	1.0	0049
0.1	29.6	19.0	347.5	343.6	324.6	122.9	16.8	106.1	1.3	105.5	0050
9.4	299.7	2.3	521.4	521.0	518.7	41.2	32.6	8.6	1.7	8.5	0051
0.1	4.5	1.0	177.5	177.4	176.4	56.9	54.8	2.1	0.8	2.1	0052
0.	2.5	—	53.7	53.7	53.7	1.2	0.3	0.9	0.4	0.9	0053
0.2	36.5	0.1	102.2	102.1	102.1	1.4	0.9	0.5	0.3	0.5	0054
1.8	72.2	9.8	185.5	184.9	175.1	21.5	11.5	10.0	1.5	9.9	0055
0.2	9.7	0.1	46.4	44.4	44.4	1.8	1.2	0.6	0.2	0.5	0056
1.2	103.7	2.2	237.9	236.5	234.3	42.3	11.0	31.3	2.0	31.1	0057
0.6	34.5	1.5	208.8	208.7	207.2	42.6	40.3	2.3	2.1	2.3	0058
7.2	733.1	2.0	991.6	991.0	989.0	38.4	4.9	33.5	12.1	33.4	0059
8.8	97.1	5.2	843.9	829.6	824.4	29.5	8.8	20.7	14.0	18.3	0060
1.3	14.3	1.4	264.3	261.3	259.9	17.1	5.1	12.1	2.5	10.5	0061
7.4	86.4	65.5	487.5	484.0	418.5	91.5	75.9	15.6	12.8	14.5	0062
1.7	21.5	6.1	100.0	98.3	92.3	8.9	5.2	3.7	2.9	3.4	0063
6.7	77.8	3.3	279.6	274.9	271.6	26.4	4.7	21.8	17.4	21.4	0064
8.6	95.4	0.1	171.7	171.6	171.6	23.6	3.5	20.1	16.0	19.9	0065

Matrix E (continued)

	522	523	524	525	527	528	529	529	530	531	532
0066	0.0	0.0	0.0	12.3	0.0	0.0	0.0	0.0	0.0	0.0	5.9
0067	0.0	0.0	0.0	3.7	0.0	0.0	0.0	0.0	0.0	0.0	1.8
0068	0.0	0.1	0.0	1.2	0.0	0.3	0.0	0.0	0.3	0.0	1.0
0069	0.1	0.1	0.0	1.1	0.0	1.6	0.0	0.0	0.9	0.0	0.5
0070	0.0	0.0	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0	1.1
0071	0.6	0.3	0.3	17.0	0.2	0.4	0.0	0.1	0.3	0.0	7.8
0072	0.0	4.0	5.8	3.1	0.0	0.0	0.0	1.4	3.5	0.4	0.0
0073	0.0	0.0	0.0	4.8	0.0	0.0	0.0	0.0	0.0	0.0	2.6
0074	0.0	0.1	0.0	16.9	0.0	0.0	0.0	0.1	0.0	0.0	7.4
0075	0.0	0.2	0.3	4.5	0.1	0.1	0.0	0.1	0.2	0.0	2.3
0076	0.2	0.0	0.0	0.2	0.0	0.3	0.0	0.0	0.0	0.0	0.1
0077	0.7	0.0	0.0	1.0	0.3	1.0	0.1	0.0	0.1	0.0	0.5
0078	0.3	0.0	0.0	0.3	0.0	0.4	0.0	0.0	0.0	0.0	0.1
0079	1.5	0.1	0.1	1.9	0.7	1.9	0.1	0.0	0.2	0.0	1.0
0080	0.0	0.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0	1.3
0081	0.5	0.1	0.1	1.9	0.1	1.7	0.0	0.0	0.2	0.0	1.0
0082	5.2	0.1	0.1	2.0	2.9	3.7	0.4	0.0	0.2	0.0	0.9
0083	1.2	0.1	0.1	1.2	0.1	1.8	0.1	0.0	0.2	0.0	0.5
0084	1.1	0.0	0.0	0.0	0.3	3.2	0.1	0.0	0.0	0.0	0.0
0085	2.1	0.0	0.0	0.0	0.5	6.1	0.2	0.0	0.0	0.0	0.0
0086	1.1	0.0	0.0	0.0	0.3	3.1	0.1	0.0	0.0	0.0	0.0
0087	0.2	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
0088	4.8	0.0	0.0	0.0	1.2	13.9	0.3	0.0	0.0	0.0	0.0
0089	4.4	0.0	0.0	0.0	1.1	12.8	0.3	0.0	0.0	0.0	0.0
0090	0.3	0.0	0.0	0.0	0.1	0.8	0.0	0.0	0.0	0.0	0.0
0091	1.0	0.0	0.0	0.0	0.2	2.8	0.1	0.0	0.0	0.0	0.0
0092	0.8	0.0	0.0	0.0	0.2	2.4	0.1	0.0	0.0	0.0	0.0
0093	1.1	0.0	0.0	0.0	0.3	3.5	0.1	0.0	0.0	0.0	0.0
0094	0.0	0.0	0.0	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0
0095	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
0096	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0097	0.2	0.1	0.2	0.3	0.0	1.5	0.0	0.1	0.6	0.0	0.0
0098	0.2	0.1	0.2	0.3	0.0	1.3	0.0	0.0	0.5	0.0	0.1
0099	0.1	0.0	0.0	0.4	0.0	1.1	0.0	0.0	0.0	0.0	0.2
0100	0.2	0.0	0.0	0.2	0.0	1.3	0.0	0.0	0.0	0.0	0.0
0101	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
0102	0.1	0.0	0.0	0.1	0.0	4.2	0.0	0.0	0.0	0.0	0.0
0103	0.8	0.1	0.1	0.2	0.0	5.9	0.1	0.0	0.1	0.0	0.1
0104	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0105	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
0106	—	—	—	—	—	—	—	—	—	—	—
0107	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0
0108	0.2	0.1	0.2	0.7	0.0	0.6	0.0	0.0	0.1	0.0	0.3
0109	0.8	0.0	0.1	2.1	0.5	5.0	0.1	0.0	0.1	0.0	1.2
0110	1.0	0.0	0.0	0.0	0.0	22.9	0.1	0.0	0.0	0.0	0.0
0111	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
0112	1.0	0.0	0.0	0.7	0.2	3.4	0.1	0.0	0.0	0.0	0.4
0113	0.1	0.1	0.1	2.5	0.1	0.2	0.0	0.0	0.1	0.0	1.5
0114	1.4	0.0	0.0	0.5	0.2	1.8	0.1	0.0	0.0	0.0	0.1
0115	0.1	0.0	0.1	1.0	0.0	0.8	0.0	0.0	0.1	0.0	0.6
0116	0.3	0.0	0.1	5.5	0.1	8.0	0.0	0.0	0.1	0.0	2.9
0117	0.0	0.0	0.0	11.2	0.0	0.0	0.0	0.0	0.0	0.0	8.7
0118	0.0	0.0	0.0	16.2	0.0	0.0	0.0	0.0	0.0	0.0	18.9
0119	—	—	—	240.5	—	—	—	0.1	—	—	131.4
0120	3.1	0.0	0.0	0.9	0.1	1.2	0.2	0.0	0.1	0.0	0.4
0121	4.6	0.0	0.1	1.7	0.3	4.8	0.3	0.0	0.1	0.0	0.9
0122	0.1	0.0	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.1
0123	1.2	0.2	0.3	3.2	0.2	2.9	0.1	0.1	0.5	0.0	1.6
0124	4.0	0.1	0.1	11.7	0.7	3.2	0.3	0.0	0.2	0.0	4.5
0125	0.1	0.0	0.0	1.6	0.4	0.8	0.0	0.0	0.0	0.0	0.1
0126	0.1	0.0	0.0	0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.1
0127	10.8	2.5	3.9	42.6	3.2	41.2	0.8	0.9	7.6	0.3	21.2
Total	80.4	12.4	18.7	582.5	20.9	228.6	5.8	5.3	28.9	1.4	339.5

533	534	535	5/1	5/2	5/3	5/4	5/5	5/6	5/7	5/8	
19.2	215.1	0.0	353.3	353.2	353.2	47.3	7.8	39.5	29.9	39.5	0066
6.2	69.6	1.2	130.8	130.7	129.5	15.3	3.5	11.8	9.3	11.8	0067
0.9	29.5	0.3	122.1	119.0	118.7	3.9	1.2	2.7	1.4	2.7	0068
1.7	22.7	1.2	167.4	163.6	162.4	6.3	2.3	4.0	2.9	3.6	0069
3.6	43.9	4.8	106.0	105.1	100.3	10.6	3.4	7.3	5.6	7.1	0070
27.5	310.2	17.9	2045.8	2041.5	2023.6	83.6	19.3	64.3	46.6	63.6	0071
0.1	30.9	0.3	367.4	367.1	366.9	11.3	6.4	4.9	4.7	4.9	0072
8.7	112.8	0.0	176.3	176.3	176.3	27.5	7.4	20.2	17.2	20.1	0073
25.9	275.2	0.4	552.7	551.5	551.1	62.9	11.8	51.1	39.5	51.0	0074
7.7	87.3	0.8	237.5	236.3	235.5	19.3	4.0	15.3	12.2	15.2	0075
0.5	7.0	4.2	348.8	344.7	340.5	2.8	1.3	1.5	1.2	0.9	0076
1.8	27.3	89.6	2242.2	2212.9	2123.3	15.9	8.4	7.5	5.6	4.0	0077
0.7	8.7	6.0	307.0	304.3	298.4	3.1	1.6	1.6	1.2	0.9	0078
3.4	51.2	25.1	1294.8	1233.5	1208.4	26.9	12.0	14.9	11.1	7.6	0079
4.4	49.3	0.1	216.9	216.8	216.7	10.9	2.1	8.7	7.0	8.7	0080
3.5	50.3	5.8	412.4	395.6	389.8	18.2	10.1	8.0	5.6	6.5	0081
3.5	46.9	2.9	794.2	627.5	624.6	49.6	16.2	33.4	31.2	5.8	0082
3.2	38.9	4.3	517.2	505.5	501.2	14.0	7.1	6.9	5.2	4.2	0083
0.0	0.0	-1.0	438.7	438.7	439.7	4.1	2.2	1.9	1.9	0.0	0084
0.0	0.0	0.4	791.5	791.5	791.1	5.0	1.4	3.6	3.6	0.0	0085
0.0	0.1	39.9	503.2	503.2	463.3	4.1	2.3	1.9	1.8	0.0	0086
0.0	0.0	-0.1	439.9	439.9	440.0	2.9	2.6	0.3	0.3	0.0	0087
0.0	0.1	-10.8	1590.6	1590.6	1601.5	18.2	9.9	8.3	8.3	0.0	0088
0.0	0.1	-0.1	2367.5	2367.4	2367.5	16.8	9.0	7.8	7.8	0.0	0089
0.0	0.0	-2.4	129.7	129.7	132.1	1.3	0.8	0.5	0.5	0.0	0090
0.0	0.0	8.1	210.1	210.1	202.0	4.2	2.5	1.7	1.7	0.0	0091
0.0	0.0	-0.0	308.9	308.9	308.9	3.0	1.6	1.4	1.4	0.0	0092
0.0	0.5	5.5	850.0	849.9	844.4	5.1	2.8	2.3	2.2	0.1	0093
0.1	1.6	20.9	154.5	154.2	133.3	0.6	0.3	0.3	0.2	0.2	0094
0.0	0.0	0.0	420.9	420.9	420.9	0.1	0.1	0.0	0.0	0.0	0095
0.0	0.0	-7.8	781.9	781.9	789.7	1.1	1.1	0.0	0.0	0.0	0096
0.2	19.4	11.3	472.0	468.9	457.6	16.9	14.7	2.2	1.6	1.1	0097
0.7	14.0	16.7	580.1	573.5	556.9	12.5	10.1	2.4	1.6	1.6	0098
0.7	8.7	5.5	105.0	100.0	94.5	4.5	2.7	1.7	1.2	1.6	0099
0.3	11.6	2.6	205.8	204.2	201.6	3.4	2.1	1.3	0.9	0.8	0100
0.0	0.5	13.0	347.7	347.6	334.6	2.5	2.4	0.1	0.0	0.0	0101
0.1	0.6	41.4	1361.4	1361.2	1319.8	18.7	12.4	6.3	3.8	2.6	0102
0.3	15.4	2.4	655.5	591.1	588.7	11.2	9.1	2.1	1.9	0.7	0103
0.0	0.2	0.8	156.0	155.7	154.9	1.0	0.9	0.1	0.0	0.0	0104
0.0	0.2	0.3	207.1	206.6	206.2	0.7	0.7	0.1	0.0	0.0	0105
—	—	2.5	382.0	382.0	379.5	2.4	2.4	—	—	—	0106
0.2	2.9	1.3	139.7	138.8	137.5	3.2	2.8	0.4	0.2	0.3	0107
7.3	164.0	1.9	466.1	465.4	463.4	15.2	11.3	3.8	2.0	3.6	0108
3.0	52.8	28.5	738.0	729.6	701.2	29.4	18.3	11.1	7.0	8.1	0109
0.0	0.4	0.0	167.0	165.8	165.8	9.6	2.8	6.8	6.7	0.1	0110
1.6	18.4	0.8	213.8	213.6	212.8	89.3	85.1	4.2	3.6	4.1	0111
1.2	15.7	9.2	550.3	545.6	536.4	8.8	4.7	4.2	3.5	2.3	0112
3.6	64.2	1.2	252.4	248.6	247.4	12.7	5.1	7.6	4.9	6.9	0113
0.2	3.6	23.5	259.2	256.0	232.5	3.4	1.3	2.1	1.9	0.4	0114
1.2	26.9	9.2	311.7	296.7	287.5	10.3	5.6	4.8	1.9	4.3	0115
9.4	112.4	17.5	547.2	515.8	498.3	33.1	14.0	19.1	14.5	18.1	0116
10.1	293.1	3.0	450.2	450.0	446.9	33.9	8.1	25.8	16.1	25.7	0117
2.6	464.5	0.4	599.1	599.1	598.7	24.1	2.4	21.8	5.0	21.8	0118
437.3	4823.3	0.	7488.3	7488.3	7488.3	982.6	176.0	806.6	680.9	806.6	0119
1.7	23.0	2.0	440.9	291.0	289.1	59.9	3.6	56.3	55.1	2.9	0120
3.4	48.2	3.7	883.0	745.2	741.5	40.9	15.1	25.8	23.7	5.6	0121
1.0	10.2	0.9	2524.9	2523.3	2522.5	6.9	3.7	3.2	2.7	1.1	0122
10.6	112.5	10.8	1419.8	1399.0	1388.2	52.1	30.3	21.8	14.3	14.8	0123
16.4	181.1	23.6	1383.9	1372.2	1348.6	65.6	14.0	51.6	28.6	46.5	0124
0.4	4.5	0.3	624.8	624.5	624.2	1.5	0.7	0.8	0.6	0.5	0125
0.6	6.7	0.4	246.1	242.3	241.9	5.3	3.0	2.3	2.0	0.7	0126
151.5	1565.4	92.6	11457.5	11337.8	11245.2	433.9	228.9	205.0	133.6	171.8	0127
1233.4	16240.4	1469.6	89004.2	87994.8	86525.2	4995.2	2502.8	2492.5	1621.5	2226.5	Total

Matrix E (continued)

	5/9	5/10	5/11	5/12	5/13	5/14	5/15	5/16	5/17	5/18	5/19
0001	28.7	0.1	28.8	24.6	0.0	24.6	25.6	0.0	25.6	79.0	33.2
0002	22.3	0.4	22.7	19.0	0.1	19.1	20.2	0.1	20.2	62.1	25.7
0003	1.2	1.0	2.2	0.7	0.0	0.7	0.7	0.0	0.7	3.6	0.9
0004	3.7	35.6	39.2	7.9	15.0	22.9	1.8	6.5	8.3	70.4	9.1
0005	1.1	0.0	1.1	0.9	0.0	0.9	1.0	0.0	1.0	2.9	1.2
0006	0.1	5.0	5.1	0.1	1.5	1.6	0.1	0.8	0.9	7.6	0.3
0007	0.2	1.5	1.7	0.1	0.4	0.5	0.2	0.3	0.5	2.8	0.3
0008	3.1	116.3	119.4	1.8	34.6	36.4	1.4	18.8	20.3	175.8	6.1
0009	0.1	2.3	2.3	0.0	0.7	0.7	0.0	0.4	0.4	3.5	0.1
0010	0.2	5.2	5.4	0.1	1.3	1.5	0.1	1.2	1.3	8.2	0.3
0011	0.5	14.8	15.3	0.4	3.0	3.4	0.3	2.5	2.8	21.4	0.7
0012	0.7	14.3	15.0	1.2	4.1	5.3	0.8	2.7	3.5	23.7	1.1
0013	0.7	12.6	13.3	0.4	4.4	4.8	0.3	3.1	3.4	21.5	1.2
0014	1.4	4.9	6.3	0.5	1.4	1.9	0.3	0.8	1.1	9.2	3.2
0015	0.6	8.2	8.9	0.3	2.8	3.1	0.1	1.4	1.6	13.5	1.0
0016	0.0	4.7	4.7	0.1	2.4	2.5	0.0	1.7	1.7	8.8	0.0
0017	—	5.7	5.7	—	1.7	1.7	—	2.4	2.4	9.8	2.7
0018	1.3	17.6	18.9	0.7	6.7	7.4	0.8	4.8	5.6	3.9	1.4
0019	0.1	4.0	4.1	0.1	1.4	1.5	0.0	1.1	1.2	6.7	0.2
0020	0.0	4.9	4.9	0.0	1.6	0.6	1.0	1.9	1.9	8.3	0.8
0021	0.0	0.0	0.1	—	—	—	—	—	—	0.1	—
0022	0.4	3.6	4.0	0.3	0.7	1.1	0.4	0.3	0.7	5.8	0.4
0023	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0024	0.1	2.4	2.6	0.2	0.7	0.9	0.1	0.5	0.6	4.1	0.2
0025	1.4	6.0	7.5	1.0	1.9	2.8	0.4	0.9	1.2	11.6	1.1
0026	0.1	0.3	0.4	0.1	0.1	0.2	0.0	0.0	0.1	0.6	0.1
0027	—	1.3	1.3	—	0.4	0.4	—	0.0	0.0	1.7	0.0
0028	0.1	0.4	0.5	0.1	0.1	0.2	0.1	0.1	0.1	0.9	0.2
0029	0.3	19.8	20.1	0.2	8.2	8.4	0.1	7.9	8.1	36.5	0.6
0030	0.4	1.4	1.7	0.3	0.5	0.7	0.1	0.2	0.3	2.8	0.3
0031	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
0032	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.1	0.1	0.4	0.3
0033	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.6
0034	0.0	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0
0035	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
0036	—	—	—	—	—	—	—	—	—	—	—
0037	0.4	1.1	1.5	0.4	0.3	0.7	0.1	0.1	0.2	2.5	0.7
0038	0.0	6.6	6.6	0.0	2.1	2.1	0.0	1.1	1.1	9.8	0.0
0039	0.	1.7	1.7	—	0.7	0.7	—	0.5	0.5	2.9	0.5
0040	0.0	1.2	1.2	0.0	0.7	0.7	0.0	0.4	0.4	2.3	0.1
0041	0.1	4.0	4.1	0.0	1.5	1.5	0.0	0.3	0.3	5.9	0.2
0042	0.0	1.3	1.3	0.0	0.8	0.8	0.0	0.2	0.2	2.3	0.0
0043	0.0	3.2	3.2	0.0	0.9	0.9	0.0	0.3	0.3	4.5	0.0
0044	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
0045	—	1.4	1.4	—	0.6	0.6	—	0.1	0.1	2.1	0.8
0046	0.0	11.1	11.1	0.0	3.4	3.5	0.0	3.1	3.1	17.6	0.0
0047	0.0	2.2	2.2	0.0	0.6	0.6	0.0	0.1	0.1	2.9	0.0
0048	0.1	4.6	4.7	0.0	0.0	0.0	0.0	0.0	0.0	4.8	0.0
0049	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.2	0.0
0050	0.3	2.9	3.1	0.2	0.2	0.4	0.2	0.5	0.7	4.3	0.1
0051	0.1	4.7	4.8	0.1	0.8	0.9	0.1	0.5	0.5	6.3	0.3
0052	0.0	0.3	0.3	0.0	0.1	0.2	0.0	0.0	0.0	0.5	0.2
0053	—	3.2	3.2	—	0.2	0.2	—	0.0	0.0	3.4	0.2
0054	0.0	1.7	1.7	0.0	0.4	0.4	0.0	0.1	0.1	2.2	0.4
0055	0.2	7.4	7.6	0.1	1.7	1.8	0.1	1.7	1.8	11.2	0.2
0056	0.2	0.8	1.0	0.2	0.3	0.5	0.1	0.3	0.4	1.9	0.1
0057	0.2	13.4	13.7	0.2	3.7	3.9	0.1	3.9	4.1	21.7	0.3
0058	0.0	2.3	2.4	0.0	0.4	0.4	0.0	4.1	4.1	6.0	0.8
0059	0.2	59.8	59.9	0.1	29.5	29.6	0.1	34.3	34.4	123.9	0.2
0060	8.0	15.8	23.8	5.3	10.7	5.4	1.9	2.4	4.4	38.8	6.1
0061	1.1	1.4	2.6	1.0	0.5	1.5	0.6	0.3	0.9	4.9	1.5
0062	1.2	10.7	11.9	0.8	4.1	4.9	0.8	2.2	3.1	19.9	1.2
0063	0.3	2.6	2.9	0.2	1.0	1.2	0.3	0.5	0.8	4.9	0.3
0064	1.5	26.6	28.1	0.2	6.6	6.8	0.6	2.1	2.7	37.6	0.4
0065	0.0	15.7	15.7	0.6	5.5	6.1	0.0	2.6	2.6	24.4	0.0

5/20	5/21	5/22	5/23	5/24	5/25	5/26	5/27	5/28	
30.0	15.7	0.2	78.9	0.2	110.2	0.5	3435.7	0.7	0001
23.6	12.2	0.6	61.5	0.6	87.2	2.7	2692.8	3.6	0002
0.8	0.9	1.0	2.6	1.0	4.8	0.0	345.7	1.1	0003
2.0	4.4	54.9	13.3	57.0	143.9	266.5	441.8	371.6	0004
1.1	0.6	0.0	2.9	0.0	4.5	0.0	128.8	0.0	0005
0.2	0.2	6.9	0.3	7.3	25.9	56.6	18.3	68.2	0006
0.3	0.1	2.1	0.5	2.2	9.0	14.4	16.9	17.2	0007
3.6	5.6	161.0	6.3	169.7	603.4	1316.8	424.3	1585.2	0008
0.1	0.1	3.2	0.1	3.4	11.9	27.2	9.4	32.5	0009
0.3	0.3	7.3	0.5	7.7	29.8	50.7	33.6	60.0	0010
1.0	0.7	19.1	1.1	20.3	70.9	111.8	800.0	140.1	0011
1.3	0.5	20.8	2.7	21.0	50.4	130.5	101.6	164.3	0012
0.8	1.1	18.4	1.4	20.1	59.1	185.6	110.8	217.4	0013
0.3	0.6	5.1	2.2	7.0	27.1	42.2	61.3	53.8	0014
0.2	0.3	12.0	1.0	12.5	37.6	65.5	31.2	89.9	0015
0.0	0.3	8.5	0.1	8.7	13.3	52.9	4.6	58.1	0016
2.2	1.6	3.3	0.	9.8	13.7	59.0	5.2	70.7	0017
1.2	1.6	27.7	2.8	29.1	83.7	244.7	170.2	294.7	0018
0.2	0.4	5.9	0.2	6.6	24.9	65.1	19.5	71.5	0019
0.9	0.8	5.9	0.0	8.3	12.0	33.3	33.0	44.6	0020
—	0.1	—	0.0	0.0	0.1	11.1	2.7	11.2	0021
0.5	0.7	4.3	1.1	4.7	34.9	30.9	108.9	37.3	0022
0.0	0.0	0.0	0.0	0.0	0.2	0.3	87.0	0.4	0023
0.2	0.1	3.5	0.4	3.6	11.0	26.9	28.8	33.2	0024
0.9	3.9	5.6	2.8	8.8	53.6	336.7	450.4	352.0	0025
0.0	0.1	0.4	0.2	0.4	3.0	8.2	123.3	8.9	0026
—	0.8	0.9	—	1.7	6.6	61.5	—	66.8	0027
0.1	0.1	0.5	0.3	0.6	112.4	46.6	28.0	155.6	0028
0.4	0.7	34.9	0.7	35.9	108.8	320.3	75.8	352.4	0029
0.2	0.5	1.8	0.7	2.0	167.5	45.6	66.0	51.3	0030
0.0	0.0	0.1	0.0	0.1	10.3	60.7	0.6	60.7	0031
0.0	0.0	0.1	0.0	0.4	8.1	60.5	0.4	60.6	0032
0.6	0.0	0.1	0.0	0.6	2.9	145.7	0.6	145.9	0033
0.0	0.0	0.4	0.0	0.4	3.4	99.7	0.2	99.8	0034
0.0	0.0	0.0	0.0	0.1	0.6	77.5	0.3	77.6	0035
—	—	—	—	—	0.1	81.5	—	81.5	0036
0.1	0.3	1.3	0.9	1.5	13.3	27.3	34.2	29.6	0037
0.0	0.1	9.7	0.0	9.8	28.0	196.3	5.4	209.2	0038
0.6	1.4	0.4	—	2.9	6.2	81.4	0.4	81.4	0039
0.3	0.1	1.7	0.0	2.3	3.5	75.6	31.7	77.1	0040
0.0	0.1	5.6	0.1	5.8	10.8	74.5	10.7	77.8	0041
0.0	0.0	2.3	0.0	2.3	7.3	49.6	1.8	49.9	0042
0.0	1.7	2.7	0.0	4.5	8.7	102.7	2.0	106.2	0043
0.0	0.1	0.1	0.1	0.1	468.6	1.3	2.9	1.4	0044
—	0.1	1.2	—	2.1	3.2	41.8	59.0	43.4	0045
0.0	0.0	17.6	0.0	17.6	22.9	190.0	5.3	192.6	0046
0.0	1.0	1.8	0.1	2.8	10.3	16.6	4.1	17.1	0047
0.0	0.3	4.4	0.1	4.6	98.0	326.0	26.0	326.2	0048
0.0	0.0	0.1	0.1	0.1	3.5	45.4	17.9	45.9	0049
0.7	2.1	1.3	0.6	3.6	127.1	29.7	17.1	30.2	0050
0.1	0.3	5.5	0.3	6.0	47.5	309.0	25.4	313.0	0051
0.0	0.1	0.2	0.1	0.4	57.4	4.6	85.6	4.9	0052
—	0.1	3.1	—	3.4	4.5	2.5	20.4	2.5	0053
0.0	0.0	1.7	0.0	2.2	3.6	36.6	44.8	37.0	0054
0.3	0.3	10.3	0.4	10.8	32.7	73.9	18.7	83.5	0055
0.1	0.3	1.4	0.5	1.4	3.7	9.9	26.1	11.7	0056
0.3	0.6	20.5	0.6	21.1	64.0	104.9	25.7	125.4	0057
5.2	0.1	0.8	0.0	6.9	49.5	35.1	56.9	35.3	0058
0.1	0.1	123.5	0.4	123.6	162.3	740.3	59.4	769.5	0059
2.3	7.5	23.0	15.2	23.6	68.3	105.9	596.0	140.9	0060
0.8	0.6	2.0	2.7	2.2	22.1	15.6	160.0	19.3	0061
1.1	0.8	16.7	2.8	17.1	111.4	93.9	119.1	124.1	0062
0.3	0.2	4.0	0.8	4.0	13.8	23.2	34.3	30.3	0063
0.7	1.5	35.1	2.4	35.2	64.1	84.5	74.2	140.3	0064
0.0	0.6	23.7	0.6	23.7	48.0	104.0	6.7	147.5	0065

Matrix E (continued)

	5/9	5/10	5/11	5/12	5/13	5/14	5/15	5/16	5/17	5/18	5/19
0066	0.0	39.5	39.5	0.0	12.3	12.3	0.0	5.9	5.9	57.7	0.0
0067	0.0	9.0	9.1	0.0	3.7	3.7	0.0	1.8	1.8	14.6	0.0
0068	0.3	3.0	3.3	0.2	1.3	1.5	0.3	1.3	1.6	6.5	0.6
0069	0.7	3.7	4.4	0.3	1.3	1.6	1.6	1.5	3.1	9.1	0.8
0070	0.0	5.6	5.6	0.0	2.1	2.2	0.0	1.2	1.2	8.9	0.1
0071	1.8	45.9	47.8	2.1	17.6	19.8	0.7	8.2	8.9	76.5	4.2
0072	0.0	16.3	16.3	0.0	12.9	13.0	0.0	5.3	5.4	34.6	14.3
0073	0.0	12.2	12.2	0.0	4.8	4.8	0.0	2.6	2.6	19.6	0.0
0074	0.2	43.5	43.7	0.2	17.1	17.3	0.0	7.5	7.5	68.5	0.7
0075	0.5	12.0	12.5	0.2	5.0	5.2	0.2	2.6	2.8	20.5	1.3
0076	0.6	0.8	1.4	0.4	0.3	0.7	0.3	0.2	0.5	2.5	0.6
0077	3.9	3.1	7.0	2.6	1.1	3.7	1.4	0.6	2.1	12.8	4.5
0078	0.6	0.9	1.4	0.4	0.3	0.7	0.4	0.2	0.6	2.7	0.4
0079	7.9	5.9	13.8	5.3	2.0	7.3	2.7	1.2	3.9	25.1	9.4
0080	0.0	6.5	6.5	0.0	2.8	2.8	0.0	1.3	1.3	10.7	0.1
0081	1.8	6.0	7.9	1.4	2.1	3.5	1.9	1.3	3.2	14.5	2.1
0082	30.1	6.4	36.5	20.1	2.1	22.2	7.0	1.1	8.1	66.8	36.5
0083	2.5	3.9	6.4	1.8	1.3	3.1	2.0	0.7	2.7	12.3	1.7
0084	4.0	0.0	4.0	3.5	0.0	3.5	3.6	0.0	3.6	11.1	4.7
0085	7.5	0.0	7.5	6.6	0.0	6.6	6.8	0.0	6.8	20.9	8.9
0086	3.8	0.0	3.8	3.3	0.0	3.3	3.4	0.0	3.4	10.6	4.5
0087	0.6	0.0	0.6	0.5	0.0	0.5	0.5	0.0	0.5	1.6	0.7
0088	17.2	0.0	17.2	15.0	0.0	15.0	15.5	0.0	15.5	47.7	20.2
0089	16.1	0.0	16.1	13.6	0.0	13.6	14.2	0.0	14.2	43.9	18.3
0090	1.0	0.0	1.0	0.9	0.0	0.9	0.9	0.0	0.9	2.9	1.2
0091	3.4	0.0	3.5	3.0	0.0	3.0	3.1	0.0	3.1	9.6	4.0
0092	2.9	0.0	2.9	2.6	0.0	2.6	2.6	0.0	2.6	8.1	3.4
0093	4.0	0.1	4.1	3.4	0.0	3.4	3.8	0.0	3.8	11.3	4.6
0094	0.1	0.2	0.3	0.1	0.1	0.1	0.2	0.0	0.2	0.7	0.1
0095	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.3	0.1
0096	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0097	1.0	1.3	2.3	0.3	0.6	0.9	1.6	0.7	2.3	5.5	0.9
0098	0.8	1.3	2.1	0.3	0.6	0.9	1.3	0.6	2.0	5.0	0.8
0099	0.8	1.5	2.3	0.3	0.5	0.8	1.1	0.2	1.4	4.4	0.4
0100	1.1	0.5	1.6	0.4	0.2	0.6	1.3	0.1	1.4	3.5	0.5
0101	0.2	0.1	0.2	0.1	0.0	0.1	0.2	0.0	0.2	0.5	0.1
0102	1.8	0.2	2.0	0.2	0.1	0.3	4.3	0.0	4.3	6.6	0.3
0103	2.6	0.7	3.3	1.0	0.4	1.4	6.0	0.2	6.2	10.8	0.7
0104	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
0105	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.0
0106	—	—	—	—	—	—	—	—	—	—	—
0107	0.1	0.3	0.4	0.1	0.1	0.1	0.1	0.1	0.2	0.7	0.1
0108	0.7	2.9	3.6	0.6	1.1	1.7	0.6	0.5	1.1	6.4	1.1
0109	5.6	6.5	12.1	3.8	2.2	6.0	5.6	1.3	6.9	24.9	6.6
0110	8.3	0.0	8.3	1.0	0.0	1.1	23.0	0.0	23.0	32.4	0.3
0111	0.0	3.5	3.6	0.0	1.0	1.1	0.0	0.5	0.5	5.2	0.0
0112	3.6	2.5	6.1	2.9	0.8	3.6	3.7	0.4	4.1	13.8	3.9
0113	0.8	7.1	7.9	0.5	2.6	3.1	0.3	1.7	2.0	13.0	1.1
0114	2.9	0.8	3.7	2.5	0.5	3.0	2.1	0.1	2.1	8.9	2.3
0115	0.6	2.9	3.4	0.3	1.1	1.4	0.8	0.7	1.5	6.3	0.6
0116	3.5	19.6	23.1	0.9	5.6	6.5	8.0	2.9	11.0	40.5	1.3
0117	0.1	26.4	26.5	0.1	11.2	11.3	0.0	8.7	8.8	46.5	0.1
0118	0.0	37.6	37.6	0.0	16.2	16.2	0.0	18.9	18.9	72.7	0.0
0119	—	608.2	608.2	—	240.5	240.5	—	131.5	131.5	980.2	0.4
0120	4.8	2.5	7.3	3.9	0.9	4.9	1.6	0.5	2.1	14.2	1.9
0121	10.0	5.5	15.5	6.3	1.8	8.1	5.4	1.0	6.4	30.0	4.0
0122	1.3	1.3	2.6	0.2	0.3	0.5	0.3	0.2	0.5	3.6	0.4
0123	4.5	11.4	15.9	4.3	3.6	7.9	3.2	2.1	5.4	29.2	6.1
0124	11.9	48.4	60.3	33.2	11.9	45.1	4.2	4.7	8.9	114.3	33.9
0125	10.6	0.4	11.1	7.6	1.6	9.2	1.3	0.1	1.3	21.6	15.9
0126	0.3	0.7	0.9	0.2	0.2	0.4	0.2	0.1	0.3	1.7	0.3
0127	47.3	149.9	197.2	31.8	48.8	80.6	45.1	29.9	75.1	352.8	53.8
Total	320.2	1671.7	1991.9	260.9	612.6	873.5	255.1	374.9	630.2	3494.7	394.1

5/20	5/21	5/22	5/23	5/24	5/25	5/26	5/27	5/28	
0.0	0.0	57.7	0.0	57.7	105.0	234.3	12.1	330.9	0066
0.0	0.0	14.5	0.0	14.6	29.9	75.7	5.9	101.8	0067
0.7	0.2	5.0	0.8	5.7	10.4	30.4	55.9	35.4	0068
2.9	0.4	5.0	2.7	6.4	15.3	24.4	94.6	34.0	0069
0.0	0.1	8.7	0.1	8.8	19.6	47.6	11.0	62.9	0070
1.0	1.6	69.7	4.6	71.8	160.1	337.7	174.1	471.2	0071
4.6	10.0	5.8	0.1	34.6	46.0	30.9	268.1	70.2	0072
0.0	0.0	19.6	0.0	19.6	47.1	121.5	5.4	161.2	0073
0.1	0.3	67.5	0.4	68.1	131.4	301.1	84.0	419.7	0074
0.4	0.6	18.2	0.9	19.6	39.7	95.0	72.9	129.6	0075
0.4	0.5	1.1	1.4	1.2	5.4	7.5	52.3	9.4	0076
1.5	2.3	4.5	7.9	4.9	28.7	29.1	169.6	36.4	0077
0.6	0.6	1.2	1.4	1.3	5.9	9.4	89.6	11.5	0078
2.7	4.6	8.4	15.9	9.2	52.0	54.6	311.8	68.2	0079
0.0	0.1	10.4	0.0	10.6	21.5	53.7	6.5	72.9	0080
2.5	1.4	8.6	5.1	9.4	32.7	53.8	238.4	68.0	0081
5.0	16.3	9.0	57.2	9.6	116.4	50.4	492.3	64.1	0082
2.5	2.7	5.3	6.3	6.0	26.3	42.0	399.6	51.1	0083
4.2	2.2	0.0	11.1	0.0	15.2	0.0	430.9	0.0	0084
7.9	4.2	0.0	20.9	0.0	25.9	0.0	783.2	0.0	0085
4.0	2.1	0.0	10.6	0.0	14.7	0.1	453.0	0.2	0086
0.6	0.3	0.0	1.6	0.0	4.5	0.0	430.7	0.0	0087
18.0	9.5	0.0	47.7	0.0	65.9	0.1	1381.8	0.1	0088
16.9	8.6	0.0	43.9	0.0	60.7	0.1	2265.0	0.1	0089
1.1	0.6	0.0	2.9	0.0	4.2	0.0	119.4	0.0	0090
3.7	1.9	0.0	9.6	0.0	13.8	0.0	196.1	0.0	0091
3.1	1.6	0.0	8.1	0.0	11.1	0.0	305.4	0.0	0092
4.5	2.2	0.1	11.2	0.1	16.4	0.5	817.0	0.7	0093
0.2	0.1	0.3	0.4	0.3	1.2	1.7	126.4	2.1	0094
0.1	0.1	0.0	0.3	0.0	0.4	0.0	416.6	0.0	0095
0.0	0.0	0.0	0.0	0.0	1.1	0.0	788.0	0.0	0096
2.8	0.9	0.9	2.9	2.6	22.4	19.6	358.8	23.3	0097
2.4	0.8	1.0	2.5	2.5	17.5	14.6	479.6	18.2	0098
1.5	0.4	2.0	2.2	2.2	8.9	9.4	62.9	12.9	0099
1.7	0.6	0.7	2.7	0.8	6.9	11.9	125.4	13.2	0100
0.3	0.1	0.1	0.4	0.1	3.0	0.5	324.8	0.6	0101
5.7	0.4	0.3	6.3	0.3	25.3	0.7	1284.6	3.5	0102
7.8	1.6	0.8	9.6	1.2	22.1	15.7	523.9	17.4	0103
0.0	0.0	0.0	0.1	0.0	1.1	0.2	130.1	0.2	0104
0.1	0.0	0.0	0.1	0.0	0.9	0.2	198.0	0.2	0105
—	—	—	—	—	2.4	—	376.4	—	0106
0.2	0.1	0.4	0.3	0.4	3.9	3.1	117.1	3.6	0107
1.0	0.9	3.4	1.9	4.5	21.6	171.3	200.0	178.6	0108
6.7	2.1	9.5	14.9	10.0	54.3	55.8	299.8	70.5	0109
29.9	2.1	0.1	32.3	0.1	41.9	0.4	136.4	0.5	0110
0.0	0.1	5.0	0.1	5.1	94.5	20.0	18.2	29.1	0111
4.4	2.0	3.5	10.2	3.6	22.6	16.9	420.7	22.5	0112
0.5	0.7	10.8	1.6	11.4	25.7	67.8	107.4	85.3	0113
2.4	2.8	1.4	7.5	1.4	12.3	3.8	211.0	5.5	0114
1.1	0.4	4.2	1.6	4.7	16.6	28.1	188.4	35.0	0115
10.4	1.0	27.8	12.4	28.1	73.6	121.9	199.6	166.5	0116
0.1	0.1	46.2	0.2	46.3	80.4	303.3	27.9	374.7	0117
0.0	0.0	72.7	0.0	72.7	96.9	467.0	30.7	561.5	0118
—	0.0	979.8	—	980.2	1962.8	5260.6	264.9	7047.4	0119
1.7	6.9	3.6	10.3	4.0	74.1	24.8	226.4	30.9	0120
6.4	11.8	7.8	21.8	8.2	71.0	51.6	587.0	63.7	0121
0.4	1.2	1.6	1.8	1.8	10.5	11.2	97.8	13.9	0122
4.5	3.5	15.1	12.1	17.1	81.4	123.0	891.4	152.6	0123
4.4	11.9	64.1	49.3	65.0	179.9	197.5	695.4	308.1	0124
1.1	2.5	2.1	19.5	2.2	23.1	4.9	612.3	7.5	0125
0.3	0.3	0.9	0.7	1.0	7.0	7.4	82.9	9.0	0126
63.7	36.3	199.1	124.2	228.6	786.7	1716.9	7644.3	2087.5	0127
336.9	242.1	2523.5	886.1	2659.4	8490.8	17473.8	38691.9	21758.6	Total

F. MATRIX B (I-A)⁻¹Z. Total consumption of primary commodity-groups for different types of final demand 1957.

	199, 201-203	501	502	503	504	505	506	507	508	509	510
0198	0.8	111.2	23.7	0.4	2.9	2.8	6.9	0.1	0.2	2.2	0.6
1001-1005	0.4	32.1	133.2	0.1	0.5	0.2	0.2	0.5	0.1	0.5	0.1
1006-1107	0.4	28.8	7.2	0.0	0.7	0.4	0.6	0.1	0.0	0.2	0.1
1008-1011, 1198	6.3	366.3	137.8	2.1	19.9	17.7	35.1	0.7	0.6	14.0	3.1
1012-1063	7.0	360.0	312.4	2.3	25.6	20.1	63.7	1.3	1.0	16.7	4.4
1064-1070	0.9	20.0	30.8	1.0	1.5	0.7	1.8	0.2	0.1	9.2	1.3
1071-1075	0.3	10.4	14.1	0.5	0.6	0.3	0.6	0.0	0.1	4.8	0.6
1076-1083	3.6	12.0	35.9	0.2	0.7	0.3	0.5	0.6	0.1	0.6	0.1
1084-1096	0.3	18.4	216.4	0.0	0.4	0.5	0.3	0.6	0.0	0.0	0.0
1097-1103	6.9	42.5	424.1	0.2	3.7	2.3	1.3	1.1	0.0	0.9	0.1
1104-1108	0.5	9.7	67.3	0.1	0.6	0.4	0.8	0.1	0.1	0.4	0.1
1109-1116	8.7	146.5	364.6	1.4	7.9	2.6	4.4	2.3	0.2	10.1	1.6
0201	10.0	283.0	355.0	1.7	7.2	4.3	9.8	2.3	0.9	12.4	1.8
0202	0.2	19.7	8.2	0.1	0.6	0.4	1.0	0.1	0.1	0.5	0.1
0203	1.9	64.1	79.5	0.3	1.3	0.7	1.4	0.5	0.2	2.7	0.4
1201	0.1	1.7	2.1	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0
1202	1.1	85.3	35.5	0.3	2.7	1.9	4.3	0.3	0.2	2.1	0.4
1203	7.2	245.2	304.1	1.3	4.9	2.7	5.2	1.8	0.9	10.3	1.5
1301	1.6	34.4	32.5	0.2	0.9	0.5	1.5	0.3	0.3	1.4	0.2
1302	1.1	26.6	543.3	0.1	1.7	0.5	0.4	1.4	0.0	0.7	0.1
1303	0.1	13.4	36.5	0.0	1.1	0.3	0.7	0.0	0.0	0.3	0.0
1304	3.5	18.4	136.7	0.1	2.2	1.1	0.5	0.3	0.0	0.5	0.0
1305	0.1	25.1	3.0	0.1	0.3	0.4	0.8	0.0	0.0	0.4	0.1
1306	0.3	33.2	8.0	0.1	0.9	1.0	2.1	0.0	0.1	0.8	0.2
1307	1.0	37.4	60.6	0.2	1.2	0.4	0.6	0.4	0.1	1.4	0.2
1309	3.3	50.0	114.6	0.3	1.8	0.8	1.2	0.6	0.0	1.7	0.3
0401	46.8	801.3	1074.4	4.9	45.3	32.9	89.4	8.0	2.4	24.9	4.9
0402	112.3	2207.3	2731.3	13.3	88.9	64.9	154.3	18.4	7.5	81.1	16.2
0403	1.0	3.9	35.5	0.0	0.4	0.3	0.5	0.1	0.0	0.2	0.0
0404	-1.0	-51.1	-311.4	-0.1	-1.5	-0.6	-0.5	-1.9	-0.0	-0.4	-0.1
0405	3.7	121.5	1407.0	0.8	4.2	2.8	3.0	2.8	0.2	6.1	0.9
0406	2.3	56.5	203.0	0.4	3.5	2.6	6.3	0.7	0.1	2.6	0.6
199, 407	225.8	5901.3	6114.1	23.4	129.1	79.0	190.7	47.5	14.2	149.0	24.2
2201.1	171.1	8333.3	3405.3	22.8	158.8	95.8	234.4	29.2	14.0	141.7	23.6
2202.1	3.2	590.9	103.6	1.9	10.9	13.1	29.5	0.6	1.5	13.7	2.4
2203.1	1.2	46.7	65.9	0.3	1.2	0.9	2.1	0.3	0.3	2.5	0.4
2203.2	34.3	1279.0	851.5	5.7	26.9	14.6	31.0	6.0	6.2	45.6	6.6
2301.1	11.0	243.7	175.3	2.1	7.0	3.9	11.9	1.4	2.5	18.1	2.5
2401.1	1.2	24.0	25.1	0.1	1.5	1.1	3.2	0.2	0.1	0.7	0.1
2401.2	1.3	19.4	32.8	0.1	1.0	0.7	1.9	0.2	0.1	0.7	0.1
2401.3	2.5	17.1	57.7	0.2	0.6	0.4	0.6	0.4	0.1	1.0	0.2
2402.1	8.0	177.4	195.2	1.1	6.4	4.7	11.6	1.3	0.7	7.4	1.4
2402.2	2.0	17.4	86.1	0.1	1.6	0.7	1.2	0.4	0.0	0.5	0.1
2402.3	22.4	407.9	590.2	2.6	17.0	11.6	27.5	3.8	1.5	16.4	3.1
1001-1127, 1201-1203 = competitive imports	43.6	1376.9	2085.6	9.4	69.6	50.0	118.7	9.6	3.4	70.0	13.3
1301-1309 = non- competitive imports	11.1	238.5	935.1	1.1	10.3	5.0	8.0	3.1	0.6	7.2	1.2
1001-1127, 1201-1309 = imports	54.7	1615.4	3020.7	10.5	80.0	55.0	126.7	12.7	4.0	77.2	14.6
201-301 = electric power, fuels	22.0	733.4	816.8	3.8	17.7	10.6	23.2	5.2	2.5	29.4	4.4
0401-0403 = labour	422.1	5570.4	11495.4	57.8	216.2	138.8	317.2	109.7	20.0	446.8	68.3
199, 401-407 = value added	652.9	11598.6	18908.1	82.3	351.5	222.5	516.7	158.8	34.6	604.2	93.9
199, 401-403, 407 = lab., cap. serv., etc.	647.9	11471.7	17609.5	81.2	345.3	217.7	507.9	157.2	34.3	595.9	92.5
0198-0407, 1001-1407 = all primary comm.	720.6	13692.0	22395.2	95.2	443.5	285.8	662.5	174.4	39.9	699.1	111.3

511	512	513	514	515	516	517	518	519	520	521	
0.2	3.2	2.0	0.1	0.0	0.1	0.1	0.0	0.1	4.9	0.1	0198
0.0	0.1	0.0	0.5	0.2	0.3	0.0	0.0	0.0	0.6	0.6	1001-1005
0.0	0.2	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	1006-1007
0.6	10.3	10.3	0.4	0.1	0.3	0.5	0.2	0.6	24.1	0.4	1008-1011, 1198
0.9	10.5	5.3	0.8	0.3	1.2	0.4	0.2	0.9	26.7	1.1	1012-1063
0.2	0.7	0.4	0.1	0.1	0.1	0.0	0.0	0.0	9.5	0.1	1064-1070
0.1	0.3	0.2	0.0	0.0	0.0	0.1	0.0	0.1	4.5	0.0	1071-1075
0.0	0.1	0.2	0.4	0.1	0.2	0.0	0.0	0.0	0.9	0.3	1076-1083
0.0	0.0	0.0	0.6	0.3	0.3	0.0	0.0	0.0	0.1	0.7	1084-1096
0.0	0.2	0.9	0.2	0.6	0.3	0.3	0.1	0.2	1.2	0.2	1097-1103
0.0	0.2	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.5	0.1	1104-1108
0.3	1.7	2.0	1.6	1.2	1.0	0.2	0.1	1.7	12.1	0.1	1109-1116
0.5	3.8	2.5	1.8	0.7	1.1	0.3	0.1	0.3	15.5	1.8	0201
0.0	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0202
0.2	0.6	0.3	0.4	0.1	0.3	0.0	0.0	0.0	3.5	0.7	0203
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	1201
0.2	1.9	0.4	0.1	0.1	0.1	0.1	0.0	0.1	3.8	0.1	1202
0.7	2.5	1.3	1.4	0.5	1.1	0.1	0.0	0.1	13.5	2.6	1203
0.1	0.3	0.3	0.1	0.1	0.1	0.0	0.0	0.0	2.0	0.1	1301
0.0	0.1	0.0	1.3	0.7	0.6	0.0	0.0	0.0	0.9	1.4	1302
0.0	0.2	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.4	0.1	1303
0.0	0.1	0.2	0.1	0.2	0.1	0.1	0.0	0.1	0.5	0.1	1304
0.0	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	1305
0.1	1.2	1.4	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0	1306
0.1	0.2	0.3	0.4	0.2	0.2	0.0	0.0	0.0	2.0	0.4	1307
0.1	0.4	0.5	0.5	0.3	0.3	0.0	0.0	0.0	2.7	0.5	1309
1.3	19.3	26.7	4.5	2.6	3.6	1.8	0.5	1.8	39.6	4.2	0401
4.3	49.2	41.4	12.0	4.4	9.0	5.5	1.4	4.3	124.2	11.4	0402
0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0403
-0.0	-0.1	-0.0	-2.0	-1.0	-1.0	-0.0	-0.0	-0.0	-0.6	-2.3	0404
0.4	1.5	0.9	2.5	1.1	1.7	0.1	0.0	0.1	8.3	4.0	0405
0.1	1.2	0.7	0.5	0.3	0.4	0.1	0.0	0.1	3.7	0.5	0406
8.3	54.0	58.6	23.2	13.3	20.7	6.1	2.2	6.0	216.0	32.4	199, 407
7.8	73.5	47.7	21.2	9.0	13.4	4.4	1.3	4.3	214.4	20.5	2201.1
1.0	13.8	2.5	0.4	0.1	0.3	0.4	0.1	0.5	24.1	0.3	2202.1
0.1	0.9	0.4	0.2	0.1	0.2	0.1	0.0	0.1	3.7	0.3	2203.1
3.2	14.6	7.1	3.9	1.9	2.7	0.8	0.2	0.9	60.9	3.7	2203.2
0.9	2.6	2.3	0.8	0.3	0.8	0.1	0.0	0.1	23.5	0.8	2301.1
0.0	0.6	0.8	0.1	0.1	0.1	0.0	0.0	0.1	1.2	0.1	2401.1
0.0	0.5	0.5	0.1	0.1	0.1	0.1	0.0	0.0	1.1	0.1	2401.2
0.0	0.2	0.3	0.3	0.1	0.2	0.1	0.0	0.0	1.4	0.2	2401.3
0.4	4.0	2.6	0.9	0.3	0.7	0.5	0.1	0.4	10.9	0.9	2402.1
0.0	0.2	0.7	0.3	0.1	0.2	0.1	0.0	0.0	0.7	0.2	2402.2
0.8	9.0	6.7	2.5	0.9	1.9	1.1	0.3	0.8	24.4	2.4	2402.3
3.1	28.8	21.7	6.3	3.6	5.0	1.9	0.6	2.2	98.3	7.9	1001-1127, 1201-1203 = competitive imports
0.4	2.9	2.9	2.5	1.6	1.5	0.3	0.1	0.3	11.3	11.3	1301-1309=non- competitive imports
3.5	31.7	24.6	8.8	5.2	6.5	2.2	0.7	2.4	109.6	10.7	1001-1127, 1201-1309 = imports
1.6	9.5	5.0	3.9	1.4	2.7	0.6	0.2	0.6	39.4	5.4	201-301=electric power, fuels
16.3	101.3	93.8	45.6	19.6	35.9	10.7	3.5	9.7	533.5	59.7	0401-0403=labour
25.2	157.9	154.0	69.8	33.4	57.6	17.0	5.7	15.9	760.9	94.4	199, 401-407=value added
24.7	155.3	152.4	68.8	32.9	56.6	16.8	5.7	15.7	749.5	92.1	199, 401-403, 407= lab., cap. serv., etc.
29.6	197.6	183.6	80.8	39.4	65.5	19.6	6.5	18.8	895.3	107.7	0198-0407, 1001-1407 =all primary comm.

Matrix F (continued)

	522	523	524	525	526	527	528	529	530	531	532
0198	0.0	0.0	0.1	1.5	0.0	0.1	0.0	0.0	0.1	0.1	1.0
1001-1005	0.3	0.0	0.0	0.2	0.1	0.9	0.0	0.0	0.0	0.0	0.1
1006-1107	0.0	0.0	0.0	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.1
1008-1011, 1198	0.2	0.2	0.3	7.5	0.1	0.4	0.0	0.1	0.6	0.0	5.1
1012-1063	0.5	0.1	0.3	10.3	0.1	0.9	0.0	0.1	0.5	0.0	8.1
1064-1070	0.0	0.0	0.0	3.7	0.0	0.3	0.0	0.0	0.1	0.0	2.2
1071-1075	0.0	0.1	0.1	1.8	0.0	0.0	0.0	0.0	0.1	0.0	0.9
1076-1083	0.1	0.0	0.0	0.3	0.1	0.3	0.0	0.0	0.0	0.0	0.2
1084-1096	0.3	0.0	0.0	0.0	0.1	1.0	0.0	0.0	0.0	0.0	0.0
1097-1103	0.2	0.1	0.2	0.5	0.0	1.8	0.0	0.0	0.2	0.0	0.2
1104-1108	0.0	0.0	0.1	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.1
1109-1116	0.9	0.1	0.1	4.5	0.2	4.1	0.1	0.0	0.2	0.0	2.6
0201	0.7	0.1	0.2	5.5	0.2	2.2	0.1	0.1	0.3	0.0	2.9
0202	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.2
0203	0.2	0.0	0.0	1.2	0.0	0.5	0.0	0.0	0.0	0.0	0.6
1201	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1202	0.1	0.0	0.0	1.2	0.0	0.2	0.0	0.0	0.1	0.0	0.7
1203	0.8	0.1	0.1	4.6	0.2	1.8	0.0	0.0	0.2	0.0	2.3
1301	0.1	0.0	0.0	0.7	0.0	0.2	0.0	0.0	0.0	0.0	0.3
1302	0.7	0.0	0.0	0.3	0.2	2.3	0.1	0.0	0.0	0.0	0.2
1303	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.1
1304	0.1	0.0	0.1	0.2	0.0	0.7	0.0	0.0	0.1	0.0	0.1
1305	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1
1306	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.4
1307	0.2	0.0	0.0	0.6	0.1	0.7	0.0	0.0	0.0	0.0	0.3
1309	0.2	0.0	0.0	0.9	0.1	1.1	0.0	0.0	0.1	0.0	0.5
0401	2.3	0.7	1.0	13.5	0.7	8.4	0.2	0.3	1.6	0.1	8.2
0402	5.3	2.3	3.1	44.4	1.8	14.5	0.4	0.9	4.6	0.2	27.5
0403	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0
0404	-1.1	-0.0	-0.0	-0.2	-0.3	-3.4	-0.1	-0.0	-0.0	-0.0	-0.1
0405	1.6	0.0	0.1	2.7	0.4	3.9	0.1	0.0	0.1	0.0	1.5
0406	0.3	0.0	0.1	1.4	0.1	1.1	0.0	0.0	0.1	0.0	1.0
199, 407	14.3	2.6	3.8	73.1	3.4	44.5	1.0	1.0	6.5	0.3	39.6
2201.1	9.2	1.8	2.5	69.9	3.5	29.8	0.6	0.8	4.3	0.2	37.8
2202.1	0.2	0.1	0.2	7.4	0.1	0.3	0.0	0.1	0.3	0.0	4.0
2203.1	0.1	0.0	0.0	1.3	0.0	0.3	0.0	0.0	0.1	0.0	0.7
2203.2	2.9	0.3	0.5	20.6	0.6	6.4	0.1	0.1	0.9	0.0	10.5
2301.1	0.6	0.1	0.1	8.1	0.1	1.1	0.0	0.0	0.2	0.0	3.9
2401.1	0.1	0.0	0.0	0.4	0.0	0.2	0.0	0.0	0.0	0.0	0.2
2401.2	0.1	0.0	0.0	0.4	0.0	0.2	0.0	0.0	0.0	0.0	0.2
2401.3	0.1	0.0	0.0	0.5	0.0	0.3	0.0	0.0	0.1	0.0	0.2
2402.1	0.4	0.2	0.3	3.9	0.1	1.0	0.0	0.1	0.4	0.0	2.3
2402.2	0.1	0.0	0.0	0.3	0.0	0.4	0.0	0.0	0.1	0.0	0.1
2402.3	1.1	0.5	0.7	8.7	0.4	3.1	0.1	0.2	1.0	0.0	5.2
1001-1127, 1201-1203 = competitive imports	3.5	0.7	1.2	35.0	0.9	11.9	0.2	0.3	1.8	0.1	22.7
1301-1309=non- competitive imports	1.3	0.1	0.2	3.6	0.4	5.2	0.1	0.1	0.3	0.0	2.0
1001-1127, 1201-1309 = imports	4.8	0.9	1.4	38.6	1.3	17.0	0.3	0.4	2.2	0.1	24.7
201-301=electric power, fuels	1.9	0.2	0.3	13.4	0.5	4.8	0.1	0.1	0.6	0.0	7.0
0401-0403=labour	26.1	4.4	6.3	196.7	6.5	65.4	1.9	1.8	10.4	0.5	112.7
199, 301-407=value added	41.2	7.1	10.2	273.8	10.0	111.5	3.0	2.9	17.1	0.7	154.6
199, 401-403, 407= lab., cap. serv., etc.	40.5	7.0	10.1	269.8	9.9	109.9	3.0	2.9	16.9	0.7	152.3
0198-0407, 1001-1407 = all primary comm.	47.0	8.1	11.9	320.8	11.6	131.3	3.4	3.4	19.7	0.9	184.0

533	534	535	5/1	5/2	5/3	5/4	5/5	5/6	5/7	5/8	
4.0	60.5	9.4	239.2	238.5	229.2	21.5	13.0	8.5	2.5	8.4	0198
0.4	4.1	1.7	178.2	177.8	176.1	2.3	1.0	1.3	1.1	0.8	1001-1005
0.2	6.4	1.0	46.2	45.9	44.9	2.9	1.7	1.1	0.3	1.0	1006-1007
18.4	313.0	30.3	1027.7	1023.2	992.9	114.4	74.8	39.6	15.3	39.0	1008-1011, 1108
28.9	405.9	23.6	1342.2	1335.3	1311.8	151.8	111.7	40.2	19.1	38.8	1012-1063
6.3	82.2	1.6	175.3	174.5	172.9	17.1	4.9	12.2	9.5	12.0	1064-1070
3.2	35.6	0.5	79.8	79.5	79.0	8.0	1.9	6.1	4.9	6.1	1071-1075
0.6	8.6	0.9	68.1	64.4	63.5	3.4	1.6	1.8	1.3	1.2	1076-1083
0.0	0.6	1.7	242.7	242.4	240.7	2.0	1.3	0.7	0.6	0.1	1084-1096
1.0	20.9	13.0	525.2	518.3	505.4	10.7	7.4	3.3	2.1	2.2	1097-1103
1.8	7.6	0.6	91.7	91.2	90.6	2.7	1.8	1.0	0.5	0.9	1104-1108
7.5	109.9	11.5	714.0	705.5	694.0	34.5	16.3	18.2	12.6	15.9	1109-1116
11.6	149.9	18.6	909.0	899.3	880.7	47.0	22.9	24.1	15.5	21.8	0201
0.7	9.6	2.3	45.6	45.4	43.1	3.4	2.1	1.3	0.6	1.2	0202
2.2	27.6	3.3	195.0	193.2	189.9	8.6	3.7	4.9	3.4	4.5	0203
0.1	0.9	0.1	5.5	5.4	5.3	0.3	0.1	0.1	0.1	0.1	1201
3.0	41.4	9.8	197.4	196.5	186.7	14.7	9.2	5.5	2.6	5.3	1202
8.6	105.7	12.6	745.7	738.7	726.2	33.0	14.1	18.9	12.9	17.1	1203
1.2	14.4	1.8	95.5	94.0	92.2	5.9	3.1	2.8	1.9	2.5	1301
0.5	6.0	3.5	594.8	593.7	590.2	5.1	2.8	2.3	2.1	0.9	1302
1.3	30.3	0.4	86.0	85.8	85.5	2.8	2.1	0.7	0.4	0.7	1303
0.3	6.7	5.3	178.6	175.1	169.8	5.0	3.9	1.1	0.8	0.8	1304
0.5	8.1	11.8	52.4	52.3	40.5	2.6	1.6	1.0	0.4	1.0	1305
1.2	21.9	3.8	79.9	79.6	75.8	8.1	4.2	3.9	1.0	3.8	1306
1.0	14.7	3.0	128.1	127.1	124.2	5.2	2.5	2.7	1.9	2.3	1307
1.5	25.0	3.4	213.1	209.8	206.4	7.9	4.1	3.7	2.4	3.1	1309
40.0	592.0	64.1	2974.2	2928.1	2864.0	260.1	172.6	87.5	35.4	79.5	0401
95.4	1488.1	162.5	7613.6	7503.6	7341.1	539.7	321.4	218.3	107.1	199.8	0402
0.1	2.3	0.9	46.3	45.2	44.3	1.7	1.2	0.6	0.3	0.5	0403
-0.3	-3.2	1.4	-382.8	-381.8	-383.1	-5.1	-2.7	-2.4	-2.3	-0.5	0404
5.2	63.8	1.6	1654.5	1650.9	1649.2	23.5	10.8	12.7	9.1	9.9	0405
3.7	51.6	5.5	351.4	349.2	343.7	18.9	12.9	6.1	3.5	5.3	0406
167.4	2237.4	266.9	16201.1	15978.7	15711.8	778.1	422.2	355.9	210.8	308.4	199, 407
150.7	2190.7	598.3	16147.4	15983.4	15385.1	849.2	511.8	337.4	184.9	308.2	2201.1
18.5	260.3	73.2	1179.7	1177.7	1104.5	90.9	55.4	35.5	15.8	34.9	2202.1
3.1	32.1	2.3	167.9	166.7	164.5	9.5	4.5	4.9	3.1	4.6	2203.1
40.1	523.9	85.6	3099.8	3066.8	2981.2	167.5	78.2	89.3	57.8	83.3	2203.2
13.3	161.4	14.7	715.3	704.4	689.7	55.1	24.9	30.2	21.9	28.9	2301.1
1.1	18.0	2.0	82.7	81.5	79.6	8.6	6.0	2.6	1.1	2.4	2401.1
1.2	15.5	1.5	80.5	79.2	77.6	6.0	3.7	2.2	1.0	2.0	2401.2
0.9	12.0	1.4	99.4	96.9	95.5	4.1	1.8	2.2	1.6	1.8	2401.3
8.2	122.8	11.8	588.5	580.7	568.9	41.6	23.8	17.8	9.4	16.4	2402.1
0.5	9.2	2.9	126.3	124.3	121.4	5.5	3.6	1.9	0.9	1.5	2402.2
18.8	281.2	30.4	1506.2	1484.2	1453.8	100.0	58.7	41.3	21.8	37.5	2402.3
80.0	1143.0	108.9	5439.9	5398.8	5289.9	397.9	247.9	150.0	83.0	140.4	1001-1127, 1201-1203 = competitive imports
7.5	127.0	33.0	1428.4	1417.5	1384.4	42.6	24.4	18.2	10.8	15.1	1301-1309= non- competitive imports
87.6	1270.0	141.9	6868.3	6816.3	6674.4	440.5	272.3	168.2	93.8	155.6	1001-1127, 1201- 1309= imports
27.4	349.5	48.5	2193.8	2172.5	2124.1	113.0	55.3	57.7	37.1	52.5	201-301= electric power, fuels
405.7	5258.1	377.5	26266.2	25849.6	25472.1	1586.1	729.9	856.2	576.6	746.5	0401-0403= labour
581.7	7607.7	652.9	44090.4	43446.6	42793.7	2401.5	1173.0	1228.5	797.6	1069.7	199, 401-407= value added
573.1	7495.5	644.4	42467.3	41828.3	41183.9	2364.2	1152.1	1212.1	787.3	1054.9	199, 401-403, 407= lab., cap. serv., etc.
687.9	9125.3	828.3	52347.4	51639.3	50811.0	2922.6	1487.0	1435.5	913.4	1261.1	0198-0407, 1001-1407 = all primary comm.

Matrix F (continued)

	5/9	5/10	5/11	5/12	5/13	5/14	5/15	5/16	5/17	5/18	5/19
0198	0.2	5.1	5.3	0.1	1.5	1.6	0.1	1.1	1.2	8.1	0.3
1001-1005	1.1	0.6	1.7	0.9	0.2	1.1	1.0	0.1	1.1	3.9	1.3
1006-1107	0.1	0.7	0.8	0.1	0.2	0.2	0.1	0.1	0.2	1.3	0.1
1008-1011, 1198	0.9	25.4	26.3	0.6	7.9	8.6	0.5	5.8	6.3	41.1	1.6
1012-1063	2.3	28.1	30.4	1.6	10.7	12.3	1.1	8.7	9.7	52.5	2.7
1064-1070	0.3	9.6	9.9	0.1	3.8	3.9	0.4	2.3	2.7	16.4	0.2
1071-1075	0.1	4.6	4.7	0.0	1.9	1.9	0.0	1.0	1.1	7.7	0.3
1076-1083	0.7	1.0	1.7	0.5	0.3	0.8	0.3	0.2	0.6	3.0	0.8
1084-1096	1.2	0.1	1.2	1.0	0.0	1.0	1.1	0.0	1.1	3.3	1.3
1097-1103	1.0	1.7	2.7	0.4	0.8	1.1	1.9	0.4	2.3	6.2	0.9
1104-1108	0.1	0.7	0.8	0.1	0.3	0.4	0.1	0.1	0.2	1.5	0.3
1109-1116	3.8	12.5	16.3	2.6	4.7	7.2	4.4	2.8	7.3	30.8	3.8
0201	3.5	16.2	19.7	2.5	5.8	8.3	2.5	3.3	5.7	33.7	4.3
0202	0.1	0.9	1.0	0.0	0.3	0.3	0.0	0.2	0.2	1.5	0.1
0203	0.8	3.6	4.4	0.9	1.2	2.1	0.5	0.7	1.2	7.7	1.2
1201	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.2	0.0
1202	0.3	4.0	4.3	0.2	1.2	1.4	0.2	0.7	0.9	6.7	0.4
1203	3.0	13.9	16.9	3.4	4.7	8.1	2.0	2.5	4.5	29.5	4.4
1301	0.3	2.1	2.3	0.2	0.7	0.9	0.2	0.3	0.5	3.8	0.3
1302	2.6	0.9	3.5	2.1	0.3	2.5	2.5	0.2	2.7	8.6	2.9
1303	0.1	0.5	0.7	0.1	0.2	0.3	0.1	0.1	0.2	1.2	0.2
1304	0.5	0.7	1.2	0.2	0.3	0.5	0.7	0.2	1.0	2.7	0.4
1305	0.0	0.7	0.7	0.0	0.2	0.2	0.0	0.1	0.1	1.1	0.0
1306	0.1	2.2	2.2	0.0	0.6	0.7	0.0	0.5	0.5	3.4	0.1
1307	0.8	2.0	2.8	0.6	0.7	1.3	0.8	0.4	1.1	5.2	0.9
1309	1.1	2.8	3.9	0.8	0.9	1.7	1.2	0.6	1.8	7.5	1.2
0401	10.7	43.7	54.4	6.5	15.1	21.7	9.3	10.1	19.4	95.4	12.2
0402	25.4	135.4	160.8	16.9	49.6	66.4	16.7	33.2	49.9	277.0	33.9
0403	0.1	0.2	0.3	0.0	0.1	0.1	0.1	0.1	0.2	0.7	0.1
0404	-4.0	-0.6	-4.6	-3.4	-0.2	-3.6	-3.8	-0.1	-3.8	-12.1	-4.6
0405	5.3	8.5	13.8	5.6	2.8	8.4	4.4	1.5	5.9	28.1	7.0
0406	1.3	4.0	5.2	0.9	1.5	2.4	1.2	1.1	2.3	9.9	1.4
199, 407	57.2	230.3	287.4	46.9	79.3	126.3	48.9	47.5	96.3	509.9	68.7
2201.1	43.6	224.5	268.1	30.0	73.9	103.9	33.8	43.0	76.8	448.6	52.3
2202.1	0.8	25.2	26.0	0.5	7.7	8.2	0.4	4.4	4.8	39.0	1.4
2203.1	0.5	3.9	4.4	0.4	1.3	1.7	0.4	0.8	1.1	7.2	0.6
2203.2	8.4	62.8	71.2	6.7	21.3	28.0	7.1	11.5	18.6	117.8	9.4
2301.1	1.9	23.9	25.8	1.3	8.3	9.6	1.2	4.1	5.3	40.8	1.9
2401.1	0.3	1.3	1.6	0.2	0.4	0.6	0.2	0.3	0.5	2.7	0.4
2401.2	0.3	1.2	1.6	0.2	0.4	0.6	0.3	0.3	0.6	2.7	0.4
2401.3	0.6	1.5	2.1	0.4	0.6	1.0	0.4	0.3	0.7	3.7	0.7
2402.1	2.0	11.9	13.8	1.3	4.4	5.7	1.2	2.8	3.9	23.5	2.8
2402.2	0.5	0.9	1.4	0.3	0.3	0.6	0.4	0.2	0.7	2.7	0.6
2402.3	5.4	26.7	32.0	3.5	9.8	13.4	3.5	6.4	9.9	55.3	7.1
1001-1127, 1201-1203 =competitive imports	14.9	103.0	117.9	11.5	36.8	48.3	13.0	24.9	37.9	204.0	18.0
1301-1309=non- competitive imports	5.5	11.9	17.5	4.1	3.9	8.0	5.6	2.4	8.0	33.5	6.1
1001-1127, 1201-1309 =imports	20.4	114.9	135.3	15.6	40.7	56.3	18.6	27.3	46.0	237.5	24.1
201-301=electric power, fuels	8.0	40.7	48.7	7.3	14.0	21.3	5.4	7.7	13.2	83.1	10.6
0401-0403=labour 199, 401-407=value added	101.1	557.4	658.5	86.1	207.2	293.4	73.7	125.3	199.0	1150.7	128.7
199, 401-403, 407= lab., cap. serv., etc.	160.8	799.5	960.3	136.1	290.7	426.9	124.4	175.3	299.7	1686.6	201.2
0198-0407, 1001-1407 =all primary comm.	185.7	940.3	1126.0	155.3	340.3	495.6	146.1	207.8	354.0	1975.2	231.1

5/20	5/21	5/22	5/23	5/24	5/25	5/26	5/27	5/28	
0.2	0.3	7.3	0.3	7.8	29.6	64.5	24.3	75.9	0198
1.1	0.6	0.9	2.9	1.0	6.2	4.5	136.7	6.2	1001-1005
0.1	0.1	1.0	0.2	1.0	4.1	6.7	7.6	8.0	1006-1007
1.3	1.5	36.8	2.0	39.1	155.6	331.5	142.2	387.2	1008-1011, 1198
1.9	3.0	45.0	5.0	47.5	204.4	434.9	318.9	501.0	1012-1063
0.5	0.2	15.5	0.8	15.6	33.5	88.5	31.8	114.0	1064-1070
0.1	0.2	7.1	0.2	7.5	15.7	38.8	14.3	52.3	1071-1075
0.4	0.4	1.4	1.5	1.5	6.4	9.2	38.0	11.5	1076-1083
1.3	0.6	0.1	3.2	0.1	5.3	0.6	220.2	0.8	1084-1096
2.6	0.8	1.8	3.3	2.9	16.9	21.9	428.5	26.3	1097-1103
0.1	0.2	0.8	0.4	1.1	4.2	9.3	67.8	11.1	1104-1108
5.6	2.2	19.2	10.8	20.0	65.3	117.4	377.9	149.8	1109-1116
3.3	2.3	23.9	8.5	25.2	80.8	161.6	366.1	203.9	0201
0.1	0.1	1.3	0.2	1.4	4.9	10.3	8.4	12.4	0202
0.6	0.6	5.4	2.2	5.5	16.3	29.9	82.2	30.3	0203
0.0	0.0	0.1	0.1	0.2	0.5	1.0	2.2	1.2	1201
0.3	0.3	5.7	0.7	6.0	21.4	44.4	36.6	53.9	1202
2.5	2.2	20.5	8.4	21.1	62.5	114.2	314.5	150.1	1203
0.3	0.2	3.0	0.7	3.1	9.7	15.6	33.5	20.7	1301
3.0	1.4	1.3	7.3	1.4	13.8	6.5	552.0	8.7	1302
0.2	0.2	0.6	0.4	0.8	4.0	31.6	36.8	33.0	1303
1.1	0.4	0.8	1.4	1.3	7.7	7.0	138.5	8.9	1304
0.0	0.0	1.0	0.0	1.1	3.7	8.6	3.1	10.3	1305
0.1	0.1	3.1	0.1	3.3	11.5	23.0	8.2	27.6	1306
1.0	0.4	3.0	3.3	3.0	10.4	15.7	63.2	20.6	1307
1.6	0.6	4.1	3.1	4.4	15.3	26.4	118.3	33.0	1309
13.1	8.9	61.3	26.5	69.0	355.6	632.0	1109.7	728.5	0401
25.0	22.3	196.0	58.9	218.2	816.8	1583.5	2810.9	1890.7	0402
0.2	0.1	0.3	0.3	0.4	2.4	2.4	35.9	3.0	0403
-4.4	-2.2	-0.8	-11.2	-0.8	-17.2	-3.5	-324.6	-4.8	0404
5.2	3.5	12.5	15.3	12.8	51.6	69.0	1425.2	90.3	0405
1.6	0.9	6.1	3.4	6.5	28.9	55.3	207.2	64.9	0406
66.6	46.1	328.7	152.9	357.1	1288.2	2404.8	6318.0	2969.8	199, 407
44.6	30.2	322.0	107.4	341.4	1298.0	2341.4	3549.0	2888.3	2201.1
0.0	1.3	35.5	1.8	37.3	129.9	278.8	107.2	339.9	2202.1
0.5	0.4	5.7	1.3	5.9	16.7	35.2	67.5	44.4	2203.1
9.4	7.1	92.0	22.2	95.7	285.4	564.0	881.0	726.4	2203.2
1.6	1.6	35.6	4.5	36.3	95.9	174.7	181.2	235.8	2301.1
0.3	0.2	1.8	0.7	2.0	11.3	19.1	26.1	22.0	2401.1
0.4	0.3	1.7	0.8	1.9	8.7	16.7	33.9	19.4	2401.2
0.5	0.4	2.1	1.3	2.4	7.8	12.9	59.3	16.6	2401.3
1.8	1.9	17.1	4.4	19.0	65.0	131.0	201.2	158.8	2402.1
0.6	0.4	1.1	1.3	1.4	8.2	9.7	87.9	11.6	2402.2
5.3	4.7	38.3	12.4	42.9	155.3	300.0	606.9	361.8	2402.3
18.0	12.2	155.9	39.4	164.7	602.0	1223.0	2137.1	1473.4	1001-1127, 1201-1203 = competitive imports
7.2	3.3	16.9	15.2	18.3	76.1	134.5	953.6	162.8	1301-1309=non- competitive imports
25.2	15.6	172.8	54.6	183.0	678.1	1357.5	3090.7	1636.2	1001-1127, 1201- 1309=imports
7.0	5.6	59.8	20.7	62.5	196.1	376.9	843.4	481.6	201-301= electric power, fuels
99.1	80.6	842.8	260.9	890.0	2737.0	5663.8	11871.6	7118.6	0401-0403=labour
168.1	128.9	1189.2	421.3	1265.6	4088.5	8189.4	19497.4	10238.8	199, 401-407=value added
165.7	126.7	1171.5	413.9	1247.1	4025.2	8068.6	18189.6	10088.4	199, 401-403, 407= lab., cap. serv., etc.
197.4	147.7	1400.0	487.1	1488.5	4898.2	9813.2	23069.1	12206.5	0198-0407, 1001-1407 = all primary comm.

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LIST OF COMMODITY-GROUPS

Number		Corresponding sub-group in industrial statistics
1	Animal agricultural products	—
2	Vegetable agricultural products	—
3	Market-gardening produce	—
4	Timber and wood	—
5	Fish	—
6	Iron ore	1 a
7	Other ores	1 b
8	Pig-iron, castings, hot-rolled iron and steel	2 a*
9	Ferro-alloys	2 a*
10	Unprocessed metals	2 b*
11	Sheet metal; tubes, rods and wire of metal	2 b*
12	Products of thin sheet-metal	2 c
13	Drawn and cold-rolled iron and steel	2 d*
14	Implements and tools	2 d*
15	Bolts, nuts, screws, nails	2 d*, e*
16	Fittings for gas, water, heating, steam	2 d*, e*
17	Iron and steel furniture, safes	2 d*
18	Other manufactures of iron and steel	2 d*
19	Metal castings	2 e*
20	Lighting fittings	2 e*
21	Gas lamps, cooking apparatus for liquid fuel	2 e*
22	Other metal manufactures	2 e*
23	Gold, silver and electroplate articles	2 f
24	Galvanising, nickel-plating, tinning	2 g
25	Motor cars	2 h*
26	Cycles	2 h*
27	Tractors	2 h*
28	Locomotives, railway wagons, other vehicles	2 h*
29	Cast iron and articles of cast iron	2 i*
30	Internal combustion engines	2 i*
31	Water and steam turbines	2 i*
32	Machines for metal processing	2 i*
33	Machines for wood, pulp, paper	2 i*
34	Other machines for industry and handicrafts	2 i*
35	Agricultural machines	2 i*
36	Dairy machines	2 i*

* Part.

Number		Corresponding sub-group in industrial statistics
37	Bearings, couplings, transmissions	2i*
38	Heavy sheet metal work, iron and steel structures	2i*
39	Office machines	2i*
40	Refrigerating apparatus	2i*
41	Fans, ventilators, pneumatic apparatus	2i*
42	Pumps	2i*
43	Lifts and lifting apparatus	2i*
44	Armaments, weapons, aircraft	2i*
45	Washing machines, sewing machines	2i*
46	Central-heating boilers, metal radiators	2i*
47	Other mechanical engineering products	2i*
48	Ships and boats	2k
49	Accumulators	2l*
50	Telephone and telegraph apparatus	2l*
51	Electric motors	2l*
52	Radio material	2l*
53	Vacuum cleaners, floor polishers	2l*
54	Electric cookers, ovens, cooking apparatus	2l*
55	Other electrical apparatus	2l*
56	Electric lamps	2l*
57	Electrical conduction material	2l*
58	Instruments	2m
59	Plumbing and sanitary installations	2n
60	Repairs to motor cars	2h*
61	Repairs to other vehicles	2h*
62	Repairs to machines and apparatus (not electrical)	2i*
63	Repairs to electrical machines and apparatus	2l*
64	Clay, gravel, stone, lime	1c, 3a, b, c, d
65	Cement	3e
66	Cement and concrete work	3f
67	Bricks and tiles	3g
68	China, porcelain, glazed tiles, earthenware	3h
69	Glass	3i
70	Mortar, abrasives, other earth- and stone-products	3k
71	Sawn and planed timber	4a, b
72	Furniture	4d
73	Prefabricated wooden houses	4e*
74	Joinery	4e*
75	Other woodworking-industry products	4c, f, g, h
76	Mechanical pulp	5a
77	Cellulose	5b
78	Newsprint	5c*
79	Other paper and cardboard	5c*

* Part.

Number		Corresponding sub-group in industrial statistics
80	Wallboard	5d
81	Cardboard and paper products	5e
82	Printing and bookbinding work (not newspapers)	6a, b, d
83	Newspapers, advertising	6e
84	Flour	7a
85	Bread	7b
86	Sugar	7c
87	Chocolate, confectionery, ice cream	7d
88	Milk, butter and cheese (from dairies)	7e
89	Meat including cooked meat products	7f
90	Prepared and preserved fish	7g
91	Vegetable preserves, soups, jams, juices	7h
92	Margarine	7i
93	Roasted coffee, starch, other food products, fodder mixtures	7k
94	Alcoholic liquors	8a
95	Malt beverages, mineral water	8b, c
96	Tobacco manufactures	8d
97	Wool yarn, woollen textiles	9a
98	Cotton yarn, cotton textiles	9b
99	Linen and jute yarn; linen and jute textiles	9c, d
100	Silk and silk textiles	9e, f
101	Knitted goods	9g
102	Ready-made clothing	9p
103	Other textile, needlework and rope products; dyeing, bleaching, laundering	9h, i, k, l, m, n, q, r
104	Leather	10a
105	Furs, gloves, leather clothing	10b
106	Shoes	10c
107	Other goods of leather and skin; brooms and brushes	10d, f, i
108	Rubber goods	10g, h
109	Basic chemical products	11a
110	Medicines	11b
111	Explosives, ammunition, matches	11d, k
112	Animal and vegetable oils and fats	11e
113	Paints and enamels	11h
114	Soaps and detergents, cosmetics, candles	11i
115	Plastic goods	11l
116	Condensed gases, charcoal, lubricants, glue, linoleum, other chemical products	11c, g, m
117	Painting and decorating	—
118	Electrical installations	—
119	Buildings, structures, grounds	—
120	Postal services	—
121	Telephone and telegraphic services	—
122	Shipping	—

Number		Corresponding sub-group in industrial statistics
123	Railway transport	—
124	Road transport	—
125	Tramway and omnibus transport	—
126	Air transport	—
127	Trade services	—
198	Scrap & waste	—
199	Goods and services, not specially mentioned	—
201	Electric power	12a
202	Coke, lighting gas	12b
203	Petrol, paraffin, motor fuels, heating oils	11f
301	Coal of foreign origin	—
302	Southern fruits, unroasted coffee, copra, soya-beans, cocoa-beans, wine, tobacco	—
303	Natural rubber	—
304	Wool (uncombed), cotton, hemp, jute	—
305	Foreign ores	—
306	Foreign metals	—
307	Foreign minerals	—
308	Crude oil	—
309	Foreign chemicals	—
401	Labour, carried out by administrative personnel	—
402	Labour, carried out by operative personnel	—
403	Labour, carried out by outworkers	—
404	Subsidies	—
405	Indirect taxes	—
406	Customs duties and import fees	—
407	Real-capital services, interests, profit etc.	—

Commodities for which certain separate calculations have been made:

2201.1	Electric power (1000 kWh)
2202.1	Coke (1000 tons)
2203.1	Petrol, motor-fuels, paraffin (1000 m ³)
2203.2	Heating oils (1000 m ³)
2301.1	Coal (1000 tons)
2401.1	Technical personnel, foremen (thousands)
2401.2	Office personnel (thousands)
2401.3	Other administrative personnel (thousands)
2402.1	Man workers (thousands)
2402.2	Female workers (thousands)
2402.3	Working hours (thousands)

LIST OF FINAL DEMAND AND CONSUMPTION 1957

The total final consumption 1957 has been divided into 35 types. In contrast to the classification of commodities this division is not the only one compatible with the model, but can be chosen with regard to what is suitable for each application. The types are listed below. An account of their exact extent is given in *Input-output-tabeller för Sverige år 1957*, Chapters VI–XI.

In the application for 1957 aggregates of the types have also been used. Those aggregates are listed below.

199, 201–203	Inputs for production of commodity groups 0199, 0201–0203
501	Exports
502	Private consumption
503	National defense: central administration etc.
504	National defense: army
505	National defense: navy and coast artillery
506	National defense: air-force
507	Civil state activities (except "Statens allmänna fastighetsfond"): consumption
508	Civil state activities (except "Statens allmänna fastighetsfond"): investments made by "Arbetsmarknadsstyrelsen".
509	Civil state activities (except "Statens allmänna fastighetsfond"): other investments
510	"Statens allmänna fastighetsfond"
511	"Domänverket": investments
512	"Statens järnvägar": investments
513	"Televerket": investments
514	Cities and urban districts, current activities: education
515	Cities and urban districts, current activities: health
516	Cities and urban districts, current activities: other
517	Cities and urban districts, investments, excl. buildings, structures, grounds: education
518	Cities and urban districts, investments, excl. buildings, structures, grounds: health
519	Cities and urban districts, investments, excl. buildings, structures, grounds: other
520	Cities and urban districts, investments in buildings, structures, grounds
521	Rural districts, current activities: education
522	Rural districts, current activities: other
523	Rural districts, investments excl. buildings, structures, grounds: education
524	Rural districts, investments excl. buildings, structures, grounds: other
525	Rural districts, investments in buildings, structures, grounds
526	County councils, current activities: education

527	County councils, current activities: health
528	County councils, current activities: other
529	County councils, investments excl. buildings, structures, grounds: education
530	County councils, investments excl. buildings, structures, grounds: health
531	County councils, investments excl. buildings, structures, grounds: other
532	County councils, investments in buildings, structures, grounds
533	Agriculture, investments
534	Industry, trade, etc., investments
535	Inventory changes

Aggregates:

5/1	199-535	Total final product
5/2	501-535	Final consumption excl. 199, 201-203
5/3	501-534	Final consumption excl. 199, 201-203 and inventory changes
5/4	503-513	State
5/5	503-506	State, national defence
5/6	507-513	State, civil activities
5/7	507-509	State, working budget ("driftbudgeteten")
5/8	508-513	State, civil investments
5/9	514-516	Cities and urban districts, consumption
5/10	517-520	Cities and urban districts, investments
5/11	514-520	Cities and urban districts, total
5/12	521-522	Rural districts, consumption
5/13	523-525	Rural districts, investments
5/14	521-525	Rural districts, total
5/15	526-528	County councils, consumption
5/16	529-532	County councils, investments
5/17	526-532	County councils, total
5/18	514-532	Local-government, total
5/19	514, 517, 521, 523, 526, 529	Local-government, education, excl. buildings
5/20	515, 518, 527, 530	Local-government, health, excl. buildings
5/21	516, 519, 522, 524, 528, 531	Local-government, other, excl. buildings
5/22	520, 525, 532	Local-government, investments in buildings, structures, grounds
5/23	514-516, 521-522, 526-528	Local-government, current activities
5/24	517-520, 523-525, 529-532	Local-government, investments
5/25	503-532	State and local-government
5/26	533-534	Private investments

5/27 502, 507,
514-516,
521-522,
526-528 Total consumption
5/28 508-513,
517-520,
523-525,
529-534 Total investments

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