ST/ESA/STAT/SER.F/20 (Part II)

STUDIES IN METHODS Series F No. 20 (Part II)

COMPARISONS OF THE SYSTEM OF NATIONAL ACCOUNTS AND THE SYSTEM OF BALANCES OF THE NATIONAL ECONOMY

Part Two

CONVERSION OF AGGREGATES OF SNA TO MPS AND VICE VERSA FOR SELECTED COUNTRIES

UNITED NATIONS

ST/ESA/STAT/SER.F/20 (Part II)

DEPARTMENT OF INTERNATIONAL ECONOMIC AND SOCIAL AFFAIRS
STATISTICAL OFFICE

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New York, 1981

NOTE

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The term "country" as used in the text of this publication also refers, as appropriate, to territories or areas.

The designations "developed" and "developing" economies are intended for statistical convenience and do not necessarily express a judgement about the stage reached by a particular country or area in the development process.

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PREFACE

This publication is Part two of the study of the relationships between the System of National Accounts (SNA) 1/ used in the countries with market economies and the System of Balances of the National Economy (MPS) used in the countries with centrally planned economies. 2/

Part one of the study, entitled Comparisons of the System of National Accounts and the System of Balances of the National Economy: Part one, Conceptual Relationships, 3/ published in 1977, describes the conceptual framework for intersystem comparisons developed by the United Nations. One of the important components of the framework is a set of conversion tables showing the exact adjustments needed for the conversion of the aggregates of SNA most suitable for international comparisons into their MPS counterparts and vice versa.

The purpose of Part two is to provide illustrative numerical calculations demonstrating the feasibility of application in practice of the conceptual framework and the conversion tables in particular.

As is well known, international comparisons of national product and similar aggregates of national accounting systems require international comparability with regard both to the concepts, definitions and classifications underlying the estimates, and to their valuation. The problems of valuation of aggregates in a common currency are not dealt with in this publication. Attention is given here to illustration of the conversion procedure in terms of concepts, definitions and classifications.

1/ A System of National Accounts, Series F, No. 2, Rev. 2 (United Nations publication, Sales No. 69. XVII.3).

2/ Basic Principles of the System of Balances of the National Economy, Series F, No. 17 (United Nations publication, Sales No. 71.XVII.10).

3/ Series F, No. 20 (United Nations publication, Sales No. E.77.XVII.6).

As a review of national practices shows, there are differences in the methods of computation of national product figures even among countries with similar socio-economic systems which employ essentially the same concepts and definitions in their national accounting systems. Those differences, however, become more profound and systematic between countries with market economies and those with centrally planned economies applying substantially different conceptual frameworks for national accounting. Therefore, the problems of international comparability of the data on production, consumption and capital formation compiled within the framework of the national accounting systems of those two groups of countries deserve special attention.

The numerical illustration of the conversion of the aggregates of SNA and MPS most suitable for international comparison is an experimental exercise, the purpose of which can be defined more specifically as follows:

(a) To show, in principle, the feasibility of application of the conceptual framework for intersystem comparisons set out in Part one;

(b) To test, in particular, on the basis of actual data, the conversion tables designed for the derivation of net material product for the countries using SNA and gross domestic product for the countries using MPS;

(c) To accumulate experience in processing the primary data needed for those calculations;

(d) To give as accurately as possible estimates of the magnitudes involved and the relationships among them.

This exercise is in conformity with the recommendation of the Statistical Commission at its eighteenth session, which asked the Statistical Office "to gather, compile, and issue data periodically on the national accounting aggregates in respect of the supply and disposition of goods and services and incomes from production in terms of MPS in the case of countries using SNA and in terms of SNA in the case of countries using MPS".

The study of SNA/MPS links is an important part of the overall work carried out by the Statistical Commission in the field of international comparison of national product and similar aggregates. The data obtained with the help of those comparisons are widely used both at the national and international levels for comparative analysis of the economy, economic policy-making and research. International organizations seek comparable data on national product for solving their various practical problems ranging from co-ordination of the economic plans and programmes of their member States to computations of weights needed to calculate regional and world index numbers. They need

internationally comparable data to determine the share of the countries in financing certain common projects and outlays. For example, at the United Nations, internationally comparable data on national product constitute one of the important factors used in determining the contributions of countries to the United Nations budget; at the Council for Mutual Economic Assistance (CMEA), internationally comparable data on national product are used to determine the share of the CMEA member countries in financing certain common expenditures.

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INTRODUCTION

This publication contains the results of experimental illustrative calculations carried out to derive estimates of net material product for eight countries using the SNA and estimates of gross domestic product for two countries using MPS. The calculations were prepared by the Statistical Office of the Department of International Economic and Social Affairs, United Nations Secretariat, in close collaboration with the central statistical offices of the participating countries, which supplied requested data and made comments on the drafts of the conversion tables. The Hungarian Central Statistical Office was the principal author of the estimates of gross domestic product for that country.

Estimates of net material product were carried out for:

Developed market economies

United States of America, for 1963 and 1967
United Kingdom of Great Britain and Northern Ireland, for 1963, 1971 and 1972
Japan, for 1965 and 1970
Austria, for 1964
Finland, for 1965

Developing countries

Peru, for 1969
Philippines, for 1961 and 1965
Zambia, for 1969 and 1971

Estimates of gross domestic product were carried out for:

Centrally planned economies

Hungary, for 1972 and 1976
Yugoslavia, for 1962 and 1970

Input/output tables were found to be the most useful source of the primary data needed for the intersystem comparisons. They contain data which, broadly speaking, fit the framework for intersystem comparisons and the schemes of the conversion tables set out in Part one. In order to make the original input/output tables convenient and adapted to the calculations, they were condensed to major divisions of the

International Standard Industrial Classification of All Economic Activities. 1/ Since ISIC does basically distinguish between industries producing material goods and industries rendering non-material services, the flows of material goods were thus separated from the flows of non-material services in the condensed input/output tables. This made it possible to identify the most important adjustments associated with major conceptual differences between the two systems.

In some cases, however, additional information was requested from and supplied by the central statistical offices of the participating countries so that the borderline could be drawn between the two spheres of the economy for each country more precisely. This was the case for data on value-added of selected material activities not infrequently shown in the input/output tables combined with non-material activities.

The latest version of the CMEA classification by kind of economic activity approved by the CMEA Standing Commission on Statistics at its twenty-sixth session was used to ensure a uniform definition of the material sphere. According to that classification, the material sphere is defined to include industry, construction, agriculture, forestry, transportation, communication, trade and other branches. 2/ Transportation of both goods and passengers is included for practical reasons; correspondingly, communication includes services both to business units and to households.

In some cases, due to lack of data, it proved to be impossible to isolate certain material activities from industries of the non-material sphere and vice versa. For example, distribution of water and gas was not separated from their production; and in many cases the output of hotels includes payments to restaurants etc.

Special efforts were undertaken to separate secondary output of non-material services originally produced by industries of the material sphere but "transferred" to industries of the non-material sphere where those services are normally produced as characteristic products in the input/output tables of the United States and Zambia. This has made it possible to draw a more precise borderline between material and non-material activities. The detailed explanatory notes on the

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1/ See the Indexes to the International Standard Industrial Classification of All Economic Activities, Series M, No. 4, Rev. 2, Add.1 (United Nations publication, Sales No. E.71.XVII.8).

2/ Certain activities which provide material services are allocated to various industries of material production - e.g., dyeing and cleaning and laundries are classified under industrial activities; veterinary services are classified under agriculture; motion picture production is classified under other branches of the material sphere.

procedure that was employed for the handling of secondary output are given in the chapters describing the derivation of net material product for the United States and Zambia.

Since the net material product is defined to exclude consumption of fixed assets employed in material production, efforts were made to separate that item from the gross operating surplus shown in the input/output tables of a number of countries; in some cases, data were extracted from sources other than input/output tables, e.g., from national publications on national accounts statistics; in some cases, estimates were made of consumption of fixed assets on the basis of data on stocks of fixed assets and rates of depreciation.

In most cases, input/output tables are conceptually and statistically integrated with the national accounts, so that the figures on gross domestic product or net material product contained in the input/output tables are identical to those recorded in the framework of national accounts and balances. In some cases, however, there are differences between the two sources of data; such differences are noted in the country chapters.

A summary of the main results of the intersystem calculations is given in table A. It shows the relationships between the original data compiled according to SNA (MPS) methods, and the estimates of the corresponding categories of MPS (SNA) derived in the conversion tables. Ratios are calculated for the following pairs of aggregates: gross domestic product and net material product; net domestic product and net material product; final consumption expenditure according to SNA and MPS concepts, respectively; gross capital formation and net capital formation; gross fixed capital formation and net fixed capital formation.

It will be noted that the ratios between SNA categories and the corresponding categories of MPS, and vice versa, differ considerably both from country to country and from one aggregate to another within a country. For example, the ratios between net domestic product and net material product for the countries with market economies range from 134.9 for the United States to 106.9 for Zambia. The fluctuations in the ratios are caused by differences in the industrial structures of the economies and differences in the structure of disposition of goods and services. It is clear, for example, that a relatively large share of the gross output of material goods absorbed by industries of non-material services is a factor which, other conditions being equal, decreases the difference between gross domestic product and net material product for countries using SNA. It may also be noted that while for some countries, e.g., United States and United Kingdom - the excess of gross domestic product over net material product is larger for recent years than for earlier years, for other countries e.g., Japan and Peru - the opposite trend is observed.

This publication consists of two chapters. The first contains a brief description of the general methodology used for intersystem calculations, and the second is devoted to a detailed description of the methodology used for each country. The second chapter contains 10 sections - one per country. Each section includes a description of the sources of data used, an explanation of the procedure employed to derive certain needed adjustments and the presentation of the actual estimates.

Table A. Relationships between the original data on the main aggregates of SNA (MPS) and the estimates of the corresponding categories derived in the conversion tables

Countries and years \ Aggregates	The relationships between the categories (SNA categories as a percentage of corresponding MPS categories)				
	Gross domestic product and net material product	Net domestic product and net material product	Final consumption expenditure according to SNA and MPS respectively	Gross capital formation and net capital formation	Gross fixed capital formation and net fixed capital formation
	1	2	3	4	5
Market economies					
Developed countries					
Japan					
1965	129.5	112.9	121.3*	166.0	172.6
1970	126.1	109.7	120.5	150.1	157.0
United Kingdom					
1963	136.1	125.7*	130.1	196.1	204.9
1971	143.0	130.1*	138.6	222.2	225.2
1972	144.4	131.1	138.2*	229.4	229.9
United States					
1963	147.0	133.9	135.7	264.3	302.1
1967	147.3	134.9	137.4	227.2	268.5
Austria					
1964	126.5	112.5	114.6	167.0	178.6
Finland					
1965	136.9	124.3	132.3	150.0	150.8
Developing countries					
Peru					
1969	119.5	115.9	122.6	141.6	150.0
Philippines					
1961	121.8	112.3	119.7	171.4	542.2
1965	127.4	120.6	130.6	164.9	170.0
Zambia					
1969	113.3	106.3	119.7	167.4	151.5
1971	134.8	115.8	124.4	171.9	189.4
Centrally planned economies					
Hungary					
1972	119.5	106.0	108.0	154.2	183.2
1976	119.3	105.0	107.2	148.4	184.6
Yugoslavia					
1962	124.5	115.3	121.1	132.1	137.6
1970	129.2	118.3	124.5	132.9	144.6

* The figures on net material product derived in the conversion tables were adjusted by value added originating in selected material services. The adjustments were made outside the conversion tables.

Chapter I

GENERAL METHODOLOGY

1.1 As was indicated above, a description of the conceptual framework for the international comparisons of the production, consumption and capital formation aggregates of SNA and MPS is set out in Part one of this publication and need not be repeated here in detail. Only the most essential principles for linking the aggregates of the two systems underlying the conversion procedure will be introduced here.

1.2 The conceptual framework for intersystem comparisons consists of three basic components:

(a) A detailed description of the differences in concepts, definitions and classifications used in the production, consumption and capital formation accounts of SNA and in the balance of production, consumption and accumulation of the global product of MPS;

(b) Modified matrices of SNA and MPS where the flows treated differently in the two systems are identified in a more precise manner;

(c) A set of conversion tables where specific adjustments are made to permit a transition from SNA categories to their MPS counterparts and vice versa.

1.3 Three types of conversion tables are used:

(a) A conversion table relying on value-added data, classified by industry of origin;

(b) A conversion table relying on final demand data;

(c) A conversion table relying on gross output and intermediate input data.

Since consistency in the interrelated adjustments occurring in the different conversion tables is ensured in principle by the use of input/output data, the estimates of gross domestic product (net material product) derived in all three types of conversion tables should be identical.

1.4 The conversion is carried out for the corresponding aggregates of the two systems relating to supply and disposition of goods and services and to income from production. The aggregates thought to be the most suitable for international comparisons are:

On the SNA side:

Domestic product (gross and net)

Final consumption expenditures, subdivided into (i) final consumption expenditures by households, and (ii) other final consumption

Gross capital formation, subdivided into (i) gross fixed capital formation, and (ii) increase in stocks

Exports and imports

On the MPS side:

Net material product

Consumption of material goods, subdivided into (i) personal material consumption, and (ii) other final consumption

Net capital formation, subdivided into (i) net fixed capital formation, and (ii) increase in stocks

Exports and imports of material goods.

1.5 The schemes of conversion tables set out in Part one also provide the adjustments needed for linking some other categories, e.g., gross output and intermediate consumption; components of value-added, such as compensation of employees, operating surplus including indirect taxes, net; etc. It should be noted, however, that gross output and intermediate consumption are less suitable for intersystem comparisons because of institutional incomparabilities, and therefore, linking of those categories in the conversion tables is of a purely technical nature: the conversion of those items is carried out to ensure intermediate data needed to derive the estimates of gross domestic product (net material product).

1.6 As for the components of value-added, comparable data on those categories may be useful for comparative structural analysis, with certain reservations; the impact of differences in institutional arrangements should be borne in mind. For example, in countries with centrally planned economies, many expenditures associated with the compensation of employees are financed out of operating surplus; peculiarities in the price structure and in the ratio of depreciation may also hinder structural analysis. The conversion tables included in this publication do not contain sufficiently detailed adjustments to convert individual components of value-added in one system to another, except for the conversion carried out by the Hungarian Central Statistical Office.

1.7 Total consumption of the population, which is defined to include the acquisition of consumer goods and services by households financed from all sources, is another aggregate suitable for international comparison purposes. In this publication, however, it proved to be possible to make estimates of total consumption of the population only for Hungary.

1.8 All differences between the aggregates of the two systems considered can be, broadly speaking, classified in two major groups. The first group comprises differences arising from differences in the fundamental concepts underlying the two systems. The second group reflects peculiarities in statistical practice, in sources of data, in traditions etc. An example of the first type of differences is the definition of the boundaries of economic production. In SNA, production includes all market and government activities resulting in production of material goods and non-material services, and also the services of dwellings occupied by their owners, domestic services, and production for own use by households of primary commodities (agricultural, fishing, forestry, mining and quarrying commodities) and small manufactures. In MPS, economic production is restricted to production of material goods and material services. Own-account production by households of primary commodities is included, as is construction of dwellings on own account by households and household processing of agricultural goods. Ownership of dwellings is not included, nor are domestic services 1/. In contrast to SNA, own consumption of such articles as shoes, clothing etc., by small unincorporated units is not included in the global product in MPS.

1.9 The differences in the definition of economic production lead to corresponding differences in the concepts of consumption (both final and intermediate) and redistribution. Thus, while in SNA final consumption expenditure includes, among other things, purchases of non-material services by households and consumption expenditures by the general government and private non-profit organizations, in MPS final consumption is defined, broadly speaking, to include purchases of material goods by households, consumption of fixed assets in the form of dwellings, and material input (including depreciation), absorbed by the industries providing non-material services.

1.10 The differences in the concepts of economic production do not affect the content of the capital formation flows in the two systems, where the main difference is that SNA capital formation is computed on both gross and net bases, i.e., before and after deduction of consumption of fixed assets while in MPS, that item is defined only on the net basis, excluding consumption of fixed assets.

1/ The definition of "material production sphere" is given in Council for Mutual Economic Assistance, Classification by Kind of Economic Activities of the CMEA Country-members (Moscow, 1975).

1.11 The content of exports and imports in the two systems is, of course, co-ordinated with the concept of production. Therefore, one of the major differences is that in MPS those items are defined to include only material goods and services, whereas in SNA they include both material and non-material goods and services.

1.12 Examples of differences of the second kind are the treatment of business travel expenditures; expenditures on cultural, recreational and similar services provided by enterprises to their employees expenditures on public relations designed to improve good will towards the business; transfer costs on purchases of intangible assets, land and mineral deposits; and losses of stocks. Mention should be also made of differences in the treatment of expenditures by residents abroad and by non-residents in the given country, of the work in progress in construction, and of the expenditures on military purposes. Also worth noting is the difference in the scope of consumption of fixed assets in the two systems: while in SNA that flow includes allowances for normal wear and tear foreseen obsolescence and normally expected accidental damage of fixed capital, MPS includes in addition the undepreciated value of scrapped fixed assets, which is considered to measure unforeseen obsolescence; also, SNA values consumption of fixed assets at replacement value, while MPS uses original value, or cost.

1.13 In the conversion tables presented in the country sections below, adjustments were in all cases introduced to account for the major conceptual differences between two systems associated with the differences in the definition of economic production. In some cases, the input/output tables also contained the information needed for adjustments of the second type. For example, the Japanese input/output tables include separate data on "final consumption expenditure outside households". In some other cases, data on those items were requested from and supplied by the central statistical offices of the participating countries.

1.14 The major adjustments made in the actual country conversion tables can be set out as follows:

The conversion procedure relying on value-added data is described in the following equation:

$$G-D-V+P+E+I = N \qquad (1)$$

where G denotes GDP; D, consumption of fixed assets; V, value-added originating in the non-material sphere; P, purchases of non-material services by material sphere; E, business travel expenditures in the material sphere; I, expenditures on cultural, recreational etc. services by enterprises of the material sphere to their employees; and N, net material product.

The adjustments in the conversion tables relying on final demand data are described by the following equation:

$$G-D-F+L+D^{l}+E^{m}+I^{m} = N \qquad (2)$$

where G, D and N are as above; F, final consumption of non-material services; L, material input by non-material sphere; D^1, consumption of fixed assets in the non-material sphere; E^m, the material part of business travel expenditures both in the material and the non-material spheres, e.g. payments for transportation, purchases of goods, etc.; I^m, the material part of the expenditures on recreational, cultural etc. services provided by enterprises of both spheres of the economy to their employees.

Finally, the adjustments made in the conversion tables based on gross output and intermediate consumption data are described by the following equations:

$$Q - Q_1 = Q_2 \qquad (3)$$

$$M - M_1 + D_2 - P - E - I = M_2 \qquad (4)$$

$$Q_2 - M_2 = N \qquad (5)$$

where Q is gross output of material goods and non-material services; Q_1, gross output of the non-material sphere; Q_2, gross output of material goods; M, intermediate consumption; M_1, intermediate consumption in the non-material sphere; M_2, intermediate consumption in the material sphere including depreciation; D_2, consumption of fixed assets in the material sphere; and P, E and I as equation (1).

1.15 These adjustments account for most of the difference between the two systems from a statistical point of view at the level of GDP (NMP). Other adjustments, which have been omitted from the actual conversion tables due to lack of data, in many cases affect only the structure of GDP (NMP), but not their totals. For instance, this is true of material assistance to foreign countries, which is included in intermediate consumption of general government in SNA, but in exports in MPS. Another example relates to work in progress in construction, which is allocated to gross fixed capital formation in SNA, but to increase in stocks in MPS. The differences in the treatment of purchases of goods and services by residents abroad and by non-residents in the given country, affecting both external trade flows and final consumption expenditures, to a considerable extent cancel each other at the level of GDP (NMP).

1.16 It should also be noted that no special steps have been taken in the actual conversion tables to achieve comparability of the scope of individual industries. The only exception is in calculations of GDP for Hungary, in the course of which special adjustments were made to allow for differences in the content of the individual branches. The reliability of the estimates of GDP (NMP) is, therefore, less at the level of individual categories of final demand and of individual industries than at the level of the total GDP (NMP).

1.17 Input/output tables are believed to be the most suitable source of the primary data needed for intersystem comparisons. They are in most cases integrated conceptually and statistically with the national accounts, and they contain data in a form which is convenient for intersystem comparisons. Yet in most instances, input/output tables have to be adapted to be suitable for that use, by aggregation of sectors, isolation of material activities from non-material activities when they are shown together, and reallocation of certain flows. For example, in some cases indirect taxes on final product originally shown in the quadrant IV of input/output tables must be reclassified by industry of origin and shifted to the quadrant III.

1.18 As was indicated above, in some cases input/output data were supplemented from other sources of information. In such cases, the adjustments needed for derivation of GDP (NMP) were made outside the conversion tables. This approach was adopted because it was thought to be essential to maintain consistency among the various items of conversion tables. Only under those conditions can they be understood and interpreted. Thus, all the adjustments in the conversion tables compiled below for the participating countries are extracted exclusively from input/output tables. The only exceptions are the conversion tables for Hungary, in which it proved to be possible to co-ordinate data obtained from different sources. This approach has made is possible to ensure virtually identical estimates of the GDP (NMP) in all three conversion tables compiled for each country. Some minor discrepancies in the conversion tables are in most cases caused by the discrepancies in the original input/output tables.

1.19 As was indicated in Part one, the international comparability of national product and similar aggregates of national accounting systems depends not only on the concepts and definitions underlying the quantitative estimates of those categories but also to some extent on the institutional organization of economies. For example, a comparison of national product figures may be affected by differences in the way expenditures on television and radio services are financed. The results, to some extent, depend on whether those expenditures are financed out of payments by households, which are allocated to final consumption, or out of payments for advertisements by business units, which are normally considered as intermediate input. Another example in this area relates to differences in methods of financing expenditures on scientific and research services provided to business units.

1.20 The impact of differences of that sort between the countries with market economies and countries with centrally planned economies is not taken into account in the present exercise, owing to lack of data.

1.21 More specific matters connected with the derivation of gross domestic product (net material product) for the participating countries are described below in the discussions for individual countries.

Chapter II

CALCULATIONS FOR SELECTED COUNTRIES

Developed countries

1. United States of America

Sources of data and their primary processing

2.1 The main source used in compiling the condensed input/output tables for the United States and the conversion tables is Input-Output Structure of the United States Economy, vol. 1, Transactions Data for Detailed Industries, 1/ for the years 1963 and 1967. Some supplementary data on services, employee compensation and indirect business taxes were extracted from Survey of Current Business, July 1968 and November 1969. All additional calculations needed for condensing the input/output tables were made by the Bureau of Economic Analysis of the United States Department of Commerce.

2.2 The data of the original input/output tables for 1963 and 1967 contain information on the interindustry transactions of 85 industries, the sales of each industry to final uses and the components of its value-added. Some reclassification of the data was necessary for this study, and the input/output tables were condensed in order to cover the transactions of 18 industry groups within the framework of ISIC.

2.3 The output of research and development activities of private educational and non-profit institutions and of independent laboratories, which in the original United States tables are classified with miscellaneous business services, was shown separately in the condensed table for 1963. That separation was not made in the input/output table for 1967. It was assumed that the research and development activities of general government are reflected in its purchases. Most other private research and development activities are conducted by industries producing those items, and the costs of the research activities are covered in the selling prices of the items.

2.4 Hotels and lodging places are considered as rendering non-material services according to MPS definitions of the scope of productive activities. Separate rows and columns for those activities are, therefore, shown in the condensed input/output tables, although they are included with distribution trades in the original tables. Motion picture production, automobile

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1/ United States Department of Commerce (United States Government Printing Office).

repairs and services, dyeing, cleaning, shoe repairs and similar personal services were transferred to the material sphere because they are part of material production in MPS. The item "Community, social and personal services, excluding material services", therefore, only covers amusement and recreational services, barber and beauty shops, and medical and educational services, including such services provided by non-profit institutions.

2.5 The original input/output tables included entries for a number of dummy industries, the most important of which are business travel, entertainment and gifts, office supplies, and scraps, wastes and second-hand goods. The first group was retained without change, because it provides data needed for intersystem comparisons. The two last dummy industries were combined in the condensed input/output tables.

2.6 In the input/output tables of the United States, secondary output in most cases is treated as if sold by the producing industry to the industry of which it is a typical product, and is added to the output of that industry before being distributed by users. If a secondary output differs considerably from an industry's typical output and particularly if it is a large portion of its total output, the industry was redefined to exclude secondary output.

2.7 For intersystem comparisons the following adjustments must be made:

(a) Transfers of secondary output of non-material services must be separated from data on actual intermediate consumption 2/

(b) Components of input (both intermediate and primary) associated with the transferred secondary output of non-material services must be identified.

Strictly speaking a similar operation should have been carried out for the secondary output of material goods originally produced by industries of the non-material sphere. That was not done, however, because such cases are quantitatively of little importance.

2.8 Isolation of these items made it possible to obtain the adjustments needed in the conversion tables, in particular, material input by industries of the non-material sphere, and secondary gross output of non-material services.

2.9 The separation of the items in question was carried out in the condensed input/output table for 1963 (table 1.1). The entries in the cells at the intersections of columns 1-6 and 8 and of rows 3b, 4b, 5b, 8b, 9b, and 10b refer to inputs associated with the secondary output of non-material

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2/ The operation is especially important in cases when the secondary output of non-material services produced by establishments in the material sphere is transferred to the appropriate industries of the non-material sphere.

services transferred largely to the "Finance, insurance, real estate" industry. The entries in the cells at the intersections of column 9 and rows 1b, 2b, 3b, etc. refer to transfers of the secondary output of non-material services from industries producing material goods, in particular agriculture.

2.10 For 1967, data on transfers of secondary non-material products and on the corresponding inputs are shown in supporting tables 1.6, "Transfers of secondary output, United States, 1967" and 1.7, "Cost structure of secondary output transferred from industries of the material sphere to industries of the non-material sphere", respectively. Those tables were compiled on the basis of information supplied by the Bureau of Economic Analysis of the United States Department of Commerce. In contrast to the procedure adopted for 1963, the adjustments were not introduced into the condensed input/output table. Therefore, the information contained in the input/output table had to be supplemented by the supporting tables 1.6 and 1.7. For example, in order to obtain data on material inputs of industries of the non-material sphere, it was necessary to deduct from intermediate consumption shown in the input/output table the transfers of secondary output of non-material services shown in table 1.6.

Derivation of gross national product in the conversion tables

2.11 Most of the items needed for derivation of gross national product in the conversion tables can be identified in the condensed input/output tables. Therefore, only a few explanatory notes needed to clarify the procedure used to derive certain items are given below.

2.12 First, some comments should be made on the procedure employed for the calculation of gross output and intermediate consumption shown in table 1.4, where gross national product is obtained as the difference between those two categories. Gross output is taken to be the difference between "total output" in the condensed input/output table ($1142.7 billion) and the sum of the following items: the output of dummy industries ($7.8 billion + $3.6 billion); secondary output of non-material services transferred from the material sphere to "Finance, insurance and real estate" ($16.6 billion); transferred imports shown in the input/output table ($14.3 billion). Intermediate consumption was computed as the difference between "total intermediate consumption" shown in the condensed input/output tables ($532.7 billion + $19.6 billion) and the sum of the items deducted above from gross output.

2.13 A somewhat similar procedure was used to compile gross output and intermediate consumption for 1967, presented in table 1.10. Gross output was computed as the difference between "Total output" shown in the condensed input/output table ($1490.2 billion) and the sum of the following items: transferred imports ($22.6 billion); secondary output of non-material services produced by material activities ($21.6 billion); gross output of dummy industries ($11.2 billion + $21.6 billion). Intermediate consumption was obtained as the difference between "Total intermediate consumption" shown in the condensed input/output table ($694.9 billion) and the sum of the items deducted above from gross output.

2.14 In order to improve the breakdown of gross national product by industry of origin, data on value-added originating in the subsidiary activities producing secondary output of non-material services were taken into account. While for 1963 those data can be identified in the condensed input/output table, for 1967 they are shown in supporting table 1.7, "Cost structure of secondary output transferred from industries of the material sphere to industries of the non-material sphere".

Derivation of net material product

2.15 The adjustments needed to convert GDP into net material product for 1963 and 1967 are consistent with the general methodology described in chapter I. Most of the adjustments are associated with the difference in treatment of non-material activities. It proved possible to take into account differences in handling of business travel expenditures and revaluation of stocks. Since in the original input/output tables of the United States, the concept of national rather than domestic product is employed, an additional adjustment was made to take care of the difference in treatment in the two systems of net factor income from abroad (MPS uses a territorial basis of registration).

2.16 The explanatory comments given below are intended to clarify the procedure used to compute certain adjustments.

2.17 In table 1.8 for 1967, the value of non-material services consumed by industries of the material sphere is taken as the difference between the purchases of non-material services by material activities, shown in the condensed input/output table, and the input of similar items by the subsidiary non-material activities of the material sphere, shown in table 1.7. Such a procedure was not, however, necessary for 1963 because, as indicated above, the input by subsidiary activities is shown separately in the condensed input/output table itself. Because of lack of data, it was assumed that directly allocated imports by industries of the material sphere consist only of material goods and, therefore, the above-mentioned item includes only purchases of domestically produced non-material services. This relates to calculations for both 1967 and 1963.

2.18 Material input in the non-material sphere shown in table 1.9 for 1967 is computed as follows: the sum of intermediate consumption by industries of the material sphere shown in the condensed input/output table is reduced by imports transferred to industries of the non-material sphere (because that item does not represent actual input), value of non-material services consume by the non-material sphere, business travel expenditures by the non-material sphere, and secondary output of non-material services transferred from the industries of the material sphere to the industries of non-material sphere; the latter item is subtracted because in the input/output table the "transfer are combined with the actual input of goods. The residual was then increased by the material input of subsidiary activities of the material sphere producing non-material services as a secondary output; the data on that item are contained in table 1.7. A somewhat similar procedure was used in the case of calculations for 1963. In calculations for both 1967 and 1963, it was

again assumed that imports directly allocated to the non-material sphere consist only of material goods.

2.19 Net exports of non-material services both for 1967 and 1963, shown in tables 1.3 and 1.9, respectively, were computed as the difference between the exports of non-material services shown in a special column of quadrant II of the input/output tables and the value of "transferred imports" of non-material services shown in quadrant III of the input/output tables. In other words, due to the lack of data, directly allocated imports of non-material services were taken to be equal to zero. In calculations for 1967, it was arbitrarily assumed that the imports "transferred" to the dummy industry "business travel expenditures" consist exclusively of non-material services.

2.20 Though exports in MPS are defined to exclude purchases of goods by non-residents and imports are defined to exclude purchases of goods by residents abroad, the difference in treatment of those items has not been taken into account in the conversion tables. Since, however, corresponding adjustments have not been made for the final consumption expenditures either, the differences in question to a considerable extent cancel each other.

2.21 Gross output of non-material services shown in table 1.4 for 1963 was computed as follows: "total output" of non-material services in the condense input/output table, including output of the "rest of the world industry" and stock revaluation adjustment ($276.8 billion) is reduced by the amount of "transferred imports" of non-material services absorbed by non-material activities ($1.0 billion); the stock revaluation adjustment was included in order to ensure valuation of the global product according to the methods recommended in MPS, but that item could have been shown separately in the conversion table. Intermediate consumption by the non-material sphere for 1963 (see table 1.4) was computed as follows: "total intermediate consumptio by non-material activities shown in the condensed input/output table was reduced by imports "transferred to non-material industries" as well as by secondary output of non-material services "transferred into finance, insurance, real estate ...". The residual was then increased by the intermediate input of non-material subsidiary activities of the material sphe A similar procedure was used for the computation of gross output and intermediate consumption of the non-material sphere for 1967. Thus, gross output of non-material activities shown in table 1.10 was computed as follows: the "total output" of non-material activities including the output of the rest of world industry and the stock revaluation adjustment shown in the condensed input/output table ($380.4 billion) was reduced by imports of non-material services transferred into non-material activities ($1.8 billion). Intermediate consumption of non-material industries was calculated as follows: the sum of intermediate input by non-material activities shown in the condense input/output table($104.7 billion) was increased by intermediate input into non-material subsidiary activities of the material sphere shown in table 1.7 ($5.7 billion) and reduced by "transferred imports" of non-material services into non-material industries ($1.8 billion) as well as by the amount of the secondary output of non-material services transferred from the materia

sphere into the non-material sphere (see table 1.7, $21.6 billion).

2.22 Some additional comments should be made concerning the stock revaluation adjustment which is introduced in the conversion tables. Though the official description of MPS, contained in Basic Principles of the System of Balances of the National Economy does not contain any specific references to the handling of this item, the assumption that in the majority of the countries using MPS capital formation in stocks represents the change in the value of stocks rather than the value of the change of stocks is believed to be an accurate one. It should be noted, however, that in some cases where the appropriate government bodies of countries with centrally planned economies make a decision to revalue stocks of goods at the beginning of the year, the appropriate adjustment is also included in the capital formation flows recorded in MPS.

Table 1.1. Condensed input/output table, United States, 1963

(million dollars)

	Code	Agriculture, hunting, forestry and fishing	Mining and quarrying	Manufacturing	Electricity, gas and water	Construction	Wholesale and retail trade, and restaurants	Hotels	Transport and storage, and communication	Finance, insurance, real estate and business services	Community, social and personal services, excluding material services	Material personal services and movie production	Business travel, entertainment and gifts	Other dummy industries	Directly allocated imports	Transferred imports	Rest of the world	Stock revaluation adjustment	Unclassified and discrepancy	Research and development	Total intermediate output	Final demand: Personal consumption	Final demand: Gross fixed capital formation	Final demand: Stocks	Final demand: Exports, net	Final demand: Purchases of federal government	Final demand: Purchases of state and local governments	Final demand: Total	Total output (a + h)
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
Agriculture, hunting, forestry and fishing	1 a	18904		27978	3	326	172		90	581	58	2	150						104		50892	5127	-4	1075	3012	-242	69	9037	59929
	b			7			1			2516																			
Mining and quarrying	2 a	128	1135	14629	2700	737	13		31	4	47	3							60		19607	182		-42	536	279	8	963	20570
	b									120																			
Manufacturing	3 a	8001	1669	180734	939	31662	6609	96	4195	358	2455	3424	2533	2972					-43	2162	258980	127334	28026	4188	16415	19784	3942	199689	458669
	b	10		43	2		5		4	11150																			
Electricity, gas and water	4 a	559	388	4828	5776	318	2491	83	1165	757	1148	164							330	30	18516	11607			30	377	875	12889	31405
	b	4		19			2		2	452																			
Construction	5 a	75	406	282	949	24	257	106	1515	7358	1239	63							1002	7	14872		46150		2	5424	18866	70442	85314
	b	241	9	1067	43		140		89																				
Wholesale and retail trade, and restaurants	6 a	1834	320	13896	176	7155	2417	229	1558	907	104	1493	449	5					29	15	32051	80791	4859	325	1739	746	101	88561	120612
	b									1464																			
Hotels	7 a									174			1000								1174	2118				349	117	2584	3758
	b																												
Transport and storage and communication	8 a	1252	616	12596	1525	3048	3155	68	5123	3607	810	221	3186	311					820	51	37357	15240	1059	152	3083	1781	1155	22470	59827
	b	6		27	1		4		2	928																			
Finance, insurance, real estate and business services	9 a	3690	2922	16523	855	4243	13896	566	3098	20236	4989	1256							354	198	74016	73751	1225		633	2190	1718	79517	153533
	b	180	6	800	32		105		67																				
Community, social and personal services, excluding material services	10 a	129	5	437	323	5	86	59	16	2378	2243	200	224						-756	15	5346	41944			373	25877	31342	99536	104822
	b			5	2		5																						
Material personal services and movie production	11 a	207	44	1230	35	199	1435		465	709	1207	109							8		5648	12429		6		21	137	12593	18241
	b																												
Business travel, entertainment and gifts	12 a	79	101	2886	115	513	1188	107	315	1419	797	127							56	62	7793								7793
	b	9		14			2		3																				
Other dummy industries (office supplies, scrap)	13 a	4	20	2147	29	62	276	9	120	688	145	17							43	7	3573	-250	-972	106	329	89	749	51	3624
	b	3		1			1		1																				
Directly allocated imports	14 a	216		1933			26		797	130	118	15							242		3477	6004	166	21	-12320	2649	3	-3477	0
	b																												
Transferred imports	15 a	848	1880	8916	105				1017	15			251	336			924		26		14318				-14318			-14318	0
	b																												
Rest of the world	16 a																					-1382			6208	-643		4183	4183
	b																												
Stock revaluation adjustment	17 a																							-502				-502	-502
	b																												
Unclassified and discrepancy	18 a			202	2814		-21	60	124	1413	139	189							-210		4682	646			90	191		927	5609
	b			42																									
Research and development	19 a			51																	51					5244		5244	5295
	b																												
Total intermediate consumption	A	35926	9506	289268	16344	48292	31900	1383	19629	40734	15499	7283	7793	3624	0	0	924		2065	2547	532717	375541	80509	5329	5812	64116	59082	590389	1142742
including transfers	B	453	15	2025	80		265		168	16630											19636								
Consumption of fixed assets	C	4050	2983	11250	2837	1500	4997	600	4871	14200	1152	1884									50524								
	D	350	17	1550	63		203		129												2312								
Value added, net	E	17437	7961	147007	11772	35522	82251	1775	34399	81969	88231	9074					3259	502	3544	2748	526447								
	F	1713	88	7569	309		996		631												11306								
Total input		59929	20570	458669	31485	85314	120612	3758	59827	153533	104882	18241	7793	3624	0	0	4183	502	5609	5295	1142742								

Table 1.2. Derivation of net material product from data on value-added, United States, 1963

(million dollars)

	Code	Gross national product	Consumption of fixed assets	Net national product (1-2)	Value-added in the non-material sphere	Value of non-material services consumed in the material sphere	Business travel expenses in the material sphere	Net material product (3-4+5+6)
		1	2	3	4	5	6	7
Agriculture, hunting, forestry and fishing	1	21487	4050	17437		3819	79	21335
Mining and quarrying	2	10944	2983	7961		2927	101	10989
Manufacturing	3	158257	11250	147007		17213	2886	167106
Electricity, gas and water	4	14609	2837	11772		3992	115	15879
Construction	5	37022	1500	35522		4248	513	40283
Wholesale and retail trade, and restaurant	6	87248	4997	82251		13861	1188	97300
Transport and storage, and communication	8	39270	4871	34399		3238	315	37952
Material personal services and movie production	11	10958	1884	9074		1645	127	10846
I. Material sphere		379795	34372	345423		50943	5324	401690
Hotels	7	2375	600	1775	1775			
Finance, insurance, real estate and business services	9	96169	14200	81969	81969			
Community social and personal services excluding material services	10	89383	1152	88231	88231			
Rest of the world	16	3259		3259	3259			
Stock revaluation adjustment	17	-502		-502	-502			
Unclassified and discrepancy	18	3544		3544	3544			
Research and development	19	2748		2748	2748			
Secondary production	D+F	13618	2312	11306	11306			
II. Non-material sphere		210594	18264	192330	192330			
III. Total (1+11)		590389	52636	537753	192330	50943	5324	401690

Table 1.3. Derivation of net material product from data on final uses, United States, 1963

(million dollars)

Categories of the SNA		Final expenditures on non-material services	Consumption of fixed assets	Material inputs in the non-material sphere	Consumption of fixed assets in the non-material sphere	Material inputs in business travel expenses	Net factor income from abroad	Revaluation stock adjustment	Categories of the MPS	
	1	2	3	4	5	6	7	8	9	
Final consumption expenditures of residential households and other final consumption	498739	185487		29628	18264	6318			367462	Personal and other final consumption (1-2+4+5+6)
Gross fixed capital formation	80509	1225	52636						26648	Net fixed capital formation (1-2-3)
Capital formation in stocks	5329							-502	5831	Capital formation in stocks (1-8)
Exports minus imports including net factor income from abroad	5812	804					3259		1749	Exports minus imports (1-2-7)
Gross national product	590389	187516	52636	29628	18264	6318	3259	-502	401690	Net material product (1-2-3+4+5+6-7-8)

Table 1.4. Derivation of net material product from data on gross output and intermediate consumption, United States, 1963

(million dollars)

Categories of the SNA		Gross output of the non-material sphere	Intermediate consumption in the non-material sphere	Consumption of non-material services in the material sphere	Consumption of fixed assets in the material sphere	Business travel expenses in the material sphere	Categories of the MPS	
	1	2	3	4	5	6	7	
Gross output	1100377	275793					824584	Global product (1-2)
Intermediate consumption	509988		65199	50943	34372	5324	422894	Intermediate consumption including depreciation (1-3-4+5-6)
Gross national product	590389	275793	65199	50943	34372	5324	401690	Net material product (1-2+3+4-5+6)

Table 1.5. Condensed input/output table, United States, 1967

(million dollars)

	Code	Agriculture, hunting, forestry and fishing	Mining and quarrying	Manufacturing	Electricity, gas and water	Construction	Wholesale and retail trade, and restaurants	Hotels	Transport and storage, and communication	Finance, insurance, real estate and business services	Community, social and personal services, excluding material services	Material personal services and movie production	Business travel, entertainment and gifts	Other dummy industries	Directly allocated imports	Transferred imports	Rest of the world	Stock revaluation adjustment	Unclassified and discrepancy	Total intermediate output	Final demand: Personal consumption	Final demand: Gross fixed capital formation	Final demand: Stocks	Final demand: Exports, net	Final demand: Purchases of federal government	Final demand: Purchases of state and local governments	Final demand: Total	Total output (a + h)
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
Agriculture, hunting, forestry and fishing	1	18541		31390		263	148	7	48	2876	324		196						4	53797	6152		1162	3301	-1430	116	9301	63098
Mining and quarrying	2	138	1238	17280	3557	930	9	4	35	251	10	2							6	23460	128		439	778	101	7	1453	24913
Manufacturing	3	8677	2334	213886	681	37534	8614	357	5352	17039	4036	6269	3600	3839					289	312507	154939	47796	9818	23776	36718	5282	278329	590836
Electricity, gas and water	4	304	448	6407	7703	74	2415	227	617	1037	1576	231							358	21397	13935			74	344	1598	15951	37348
Construction	5	603	572	2560	1314	30	526	139	1940	7553	796	130							1534	17697		54338		15	4928	26302	85583	103280
Wholesale and retail trade, and restaurants	6	2936	355	18109	226	8225	3382	133	1879	3337	1136	2011	748	1					73	42551	109367	6544	508	2615	1397	384	120815	163366
Hotels	7								13	478			1408							1899	2882			2	609	23	3516	5415
Transport and storage and communication	8	1362	424	16380	873	2984	3736	174	7088	8561	1273	427	4629	57					97	48085	20456	1924	228	4047	4139	1697	32491	80576
Finance, insurance, real estate and business services	9	4527	3605	28945	759	6269	19548	1110	4653	30909	5538	2120		5					798	108786	100725	2104	-1	1125	3036	2572	109561	218347
Community, social and personal services, excluding material services	10	200	12	445	16	97	413	35	316	867	963	45	236						4	3649	49224			11	2314	2471	54020	57669
Material personal services and movie production	11	268	45	2140	110	425	2221	358	1790	1496	656	2258	32	6					32	11837	18117		-56	321	172	236	18790	30627
Business travel, entertainment and gifts	12	95	120	4123	136	695	2045	138	502	2063	328	305							56	11206								11206
Other dummy industries (office supplies, scrap)	13	3	131	2911	36	44	350	12	159	849	168	73							14	4750	1286	-2921	-121	580	-128	1152	-152	4598
Directly allocated imports	14	36		2115		101	46		1048	87	6	64							323	3826	9870	658	-100	-18221	3964	3	-3826	-
Transferred imports	15	1025	2137	15071	145				1363	20			356	690			1763			22570				-22570			-22570	-
Rest of the world	16																				-2047			9188	-861		6280	6280
Stock revaluation adjustment	17																						-1843				-1843	-1843
Unclassified and discrepancy	18	1		78	2586	34	1647	9	521	1723	52	182							6	6839	5626			90	35501	46471	87688	94527
Total intermediate consumption	A	38716	11421	361840	18142	57705	45100	2703	27324	79166	17462	14117	11205	4598		0	1763		3594	694856	490660	110443	10034	5132	90804	88514	795587	1490243
Consumption of fixed assets	B	4386	3577	16575	3590	1900	7071	800	6676	17500	1776	1355	-							65206								
	C	214	23	1125	10	-	129	-	424	-	-	69			-					1994								
Value Added, net	D	18297	9731	203468	15537	43675	110169	1912	43207	121681	38431	14620	1				4517	-1843	90933	714336								
	E	1485	161	7828	69	-	897	-	2945	-	-	466								13851								
Total input	F	63098	24913	590836	37348	103280	163366	5415	80576	218347	57669	30627	11206	4598	0	0	6280	-1843	94527	1490243								

Table 1.6. Transfers of secondary output, United States, 1967

(million dollars)

Industries from which secondary output was transferred \ Industries to which secondary output was transferred	Code	Agriculture, hunting, forestry and fishing	Mining and quarrying	Manufacturing	Electricity, gas and water	Construction	Wholesale and retail trade, and restaurants	Hotels	Transport and storage, and communication	Finance, insurance real estate and business services	Community, social and personal services
		1	2	3	4	5	6	7	8	9	10
Agriculture, hunting, forestry and fishing	1			1401					39	2325	45
Mining and quarrying	2			1064	202		9			236	
Manufacturing	3	9	179		90		4137			12256	
Electricity, gas and water	4		29	82						103	
Construction	5										
Wholesale and retail trade, and restaurants	6									1392	
Hotels	7									478	
Transport and storage, and communication	8				4		25			4604	
Finance, insurance, real estate and business services	9				1					3454	
Community, social and personal services	10									152	
Material, personal services and movie production	11									669	
Unclassified and discrepancy	18			7	2582		1546		398	1138	
TOTAL		9	208	2554	2879	-	5717	-	437	26807	45

Table 1.7. Cost structure of secondary output of non-material services transferred from industries of the material sphere to industries of non-material sphere, United States, 1967

(million dollars)

Industries of the origin of the input to the secondary output / Industries from which secondary output was transferred	Agriculture, hunting, forestry and fishing	Mining and quarrying	Manufacturing	Electricity, gas and water	Construction	Wholesale and retail trade, and restaurants	Transport and communication	Material personal services	TOTAL
Agriculture, hunting, forestry and fishing	7	-	40	-	-	-	14	-	61
Mining and quarrying	-	-	-	-	-	-	-	-	-
Manufacturing	62	3	351	2	-	3	120	4	545
Electricity, gas and water	12	-	70		-	1	24	5	112
Construction	-	-	-	-	-	-	-	-	-
Wholesale and retail trade, and restaurants	25	2	140	-	-	2	48	3	220
Transport and storage, and communication	49	5	281	2		6	97	10	450
Material services	91	8	523	3	-	11	178	10	824
Total material input	246	18	1405	7	-	23	481	32	2212
Non-material services	380	34	1898	17	-	343	754	102	3528
Intermediate consumption	626	52	3303	24	-	366	1235	134	5740
Value added	1485	161	7828	69	-	897	2945	466	13851
Consumption of fixed assets	214	23	1125	10	-	129	424	69	1994
Gross output	2325	236	12256	103	-	1392	4604	669	21585
Expenditures on business trips (estimates)	8	6	165	6		110	42	13	350

Table 1.8. Derivation of net material product from data on value-added, United States, 1967

(million dollars)

	Code	Gross national product	Consumption of fixed assets	Net national product (1-2)	Value-added in the non-material sphere	Value of non-material services consumed in the material sphere	Business travel expenses in the material sphere	Net material product (3-4+5+6)
		1	2	3	4	5	6	7
Agriculture, hunting, forestry and fishing	1	22683	4386	18297		4348	87	22732
Mining and quarrying	2	13308	3577	9731		3583	114	13428
Manufacturing	3	220043	16575	203468		27570	3958	234996
Electricity, gas and water	4	19127	3590	15537		3344	130	19011
Construction	5	45575	1900	43675		6400	695	50770
Wholesale and retail trade, and restaurants	6	117240	7071	110169		21265	1935	133369
Transport and storage, and communication	8	49883	6676	43207		4749	460	48416
Material personal services and movie production	11	15975	1355	14620		2245	292	17157
I. Material sphere		503834	45130	458704		73504	7671	539879
Hotels	7	2712	800	1912	1912			
Finance, insurance, real estate and business services	9	139181	17500	121681	121681			
Community, social and personal services excluding material services	10	40207	1776	38431	38431			
Rest of the world	16	4517		4517	4517			
Revaluation stock adjustment	17	-1843		-1843	-1843			
Unclassified and discrepancy	18	90933		90933	90933			
Secondary production of non-material services	D+F	15845	1994	13851	13851			
II. Non-material sphere		291552	22070	269482	269482			
III. Total (1+11)		795386	67200	728186	269482	73504	7671	539879

Table 1.9. Derivation of net material product from data on final uses, United States, 1967
(million dollars)

Categories of the SNA		Final expenditures on non-material services	Comsumption of fixed assets	Material inputs in the non-material sphere	Consumption of fixed assets in the non-material sphere	Material inputs in business travel expenses	Net factor income from abroad	Revaluation stock adjustment	Categories of the MPS	
	1	2	3	4	5	6	7	8	9	
Final consumption expenditures of residential households and other final consumption	669778	251454		37855	22070	9205			487454	Personal and other final consumption (1-2+4+5+6)
Gross fixed capital formation	110443	2104	67200						41139	Net fixed capital formation (1-2-3)
Capital formation in stocks	10034							-1843	11877	Capital formation in stocks (1-8)
Exports minus imports	5132	1206					4517		-591	Exports minus imports (1-2-7)
Gross national product	795387	254764	67200	37855	22070	9205	4517	-1843	539879	Net material product (1-2-3+4+5+6-7-8)

Table 1.10. Derivation of net material product from data on gross output and intermediate consumption, United States, 1967

(Million dollars)

Categories of the SNA		Gross output of the non-material sphere	Intermediate consumption in the non-material sphere	Consumption of non-material services in the material sphere	Consumption of fixed assets in the material sphere	Business travel expenses in the material sphere	Categories of the MPS	
	1	2	3	4	5	6	7	
Gross output	1430284	378612					1051672	Global product (1-2)
Intermediate consumption	634897		87059	73504	45130	7671	511793	Intermediate consumption including depreciation(1-3-4+5-6)
Gross national product	795387	378612	87059	73504	45130	7671	539879	Net material product (1-2+3+4-5+6)

2. United Kingdom of Great Britain and Northern Ireland

Sources of data

2.23 The basic sources of data used for derivation of net material product of the United Kingdom for the years 1963, 1971 and 1972 are Input-Output Tables for the United Kingdom, 1963 3/ and National Income and Expenditures, 1964-1974 4/. The former source was used in compiling the condensed input/output tables, from which data on various adjustments needed for the conversion were obtained.

2.24 Supplementary data for 1963 on value-added for selected material services 5/ which in the original input/output table are shown together with non-material services in the category "Miscellaneous services", as well as data for 1971 on capital consumption classified by industries of the material and non-material spheres, were furnished by the Central Statistical Office of the United Kingdom. The estimates of value-added of selected material services for 1971 and 1972 were obtained by extrapolation. It proved, however, impossible to separate output of cafés and restaurants from hotels shown under "miscellaneous services" because nearly all hotels make a single charge for room and breakfast, while many of them make a combined charge for accommodation and full board.

2.25 It also proved to be impossible to obtain data on business travel expenditures and on expenditures on cultural, medical and similar services provided by enterprises to employees. It is believed that any rough estimates which could be made of those items would be less accurate than leaving them out.

3/ Studies of Official Statistics (Her Majesty's Stationery Office, 1971 and 1972).

4/ Her Majesty's Stationery Office, 1975.

5/ Includes repair, dyeing, cleaning, laundries, movie production etc.

General remarks on the procedure used

2.26 The procedure employed for the derivation of net material product of the United Kingdom is essentially consistent with the general methodology outlined above (see chapter I). At the same time, it should be noted that it was thought to be desirable to subdivide it into two stages:

(a) In the first stage, calculations of net material product were made within the framework of three conversion tables relying on various pieces of data contained in the input/output tables - i.e., value-added data, final demand data, and gross output and intermediate consumption data.

(b) In the second stage, account was taken of the supplementary data on value-added of selected material services furnished by the Central Statistical Office of the United Kingdom.

2.27 This procedure was chosen to ensure a strict consistency among the various adjustments included in the conversion tables and the estimates of NMP derived with their help. Extracting the data on all adjustments included in the conversion tables from input/output tables facilitated achieving consistency between corresponding items in the different conversion tables. For example, value of gross output of non-material services, shown in table 2.4, is equal to the sum of the following items: final expenditures on non-material services (table 2.3), intermediate input of non-material services by the material sphere (table 2.2), and intermediate input of non-material services by the units of non-material sphere (table 2.1). Introducing supplementary data into the conversion tables inevitably would have upset this consistency.

2.28 All adjustments included in the conversion tables are essentially standard; they are associated with differences in the definition of the production boundaries in SNA and MPS; as was indicated above, it proved to be impossible to obtain data needed to take into account differences in treatment of business travel expenditures and of expenditures on cultural, recreational etc. services provided by enterprises to their employees free of charge and charged to intermediate input.

Derivation of GDP in the conversion tables

2.29 Some explanatory comments should be made concerning the derivation of gross domestic product and net domestic product in the conversion tables from input/output data. In some cases, the data on certain components of GDP can easily be identified from the condensed input/output tables, whereas in other cases, some regrouping of data is needed. In this connexion, some comments should be first of all made concerning the treatment of indirect taxes in the original input/output tables, and on the resulting procedure in the computation of GDP in the conversion tables. In the original input/output tables of the United Kingdom, indirect taxes

less subsidies are allocated among intermediate and final users in a separate row of the table, in quadrants III and IV, respectively. Thus, net indirect taxes are allocated to the industries which purchase intermediate goods and services, while net indirect taxes on final products are allocated to final uses - i.e., final consumption etc. This means that the value-added data recorded in quadrant III of the input/output table do not include net indirect taxes levied on final products. These indirect taxes should be added in order to obtain GDP at purchasers' prices. Besides, it is essential for derivation of net material product to allocate those taxes to the respective industries of origin - at least at the level of the material and non-material spheres.

2.30 Data on net indirect taxes on final product for 1963 were reclassified by industry of origin by the Central Statistical Office of the United Kingdom. This made it possible to reallocate indirect taxes levied on final users from the final-demand side to the supply side of the table - i.e., from quadrant IV to quadrant III. This, of course, led to corresponding changes in the entries relating to gross output of each industry and its disposition among various purposes. The condensed input/output table for 1963 includes all the above-mentioned changes and therefore, all categories of GDP in the conversion tables can easily be identified.

2.31 This is not the case, however, for 1971 and 1972. The original form of the input/output tables for those years was kept without any changes. The breakdown of net indirect taxes by industry of origin was made for 1971 by the Central Statistical Office of the United Kingdom; similar data for 1972 were estimated by extrapolation. The data on net indirect taxes by industries have made it possible to derive GDP in the conversion tables at purchasers' prices. They are practically identical to those published in the Yearbook of National Accounts Statistics. In other words, with some minor exceptions, they are defined in accordance with the present SNA.

Derivation of net material product

2.32 As was indicated above, the adjustments included in the conversion tables are consistent with the general methodology outlined in chapter I. The magnitudes of the adjustments can be easily identified in the condensed input/output tables. In some cases, however, additional explanatory notes with regard to the procedure employed to derive certain items are given below.

2.33 Since net material product is computed on a net basis - i.e., after deduction of consumption of fixed assets - efforts have been undertaken to separate depreciation allowances from the gross operating surplus shown in the original input/output table. The information contained in National Income and Expenditures, 1964-1974 was used to obtain estimates of the consumption of fixed assets classified by industries.

2.34 The value of non-material services consumed by the material sphere from domestic production was supplemented by the value of imported non-material services purchased by industries producing material goods (see table 2.6) because in the input/output tables, entries relating to the disposition of domestic goods and services are shown separately from data on the disposition of imports. The data on consumption of non-material services from domestic sources can be easily identified in the condensed input/output tables. As for the consumption of imported non-material services, special efforts were made to subdivide "directly allocated imports" to each sector into material and non-material components. The procedure which was used for that purpose is described below.

(a) The figures on net exports of non-material services furnished by the Central Statistical Office of the United Kingdom were used as a starting point.

(b) The figures on exports of non-material services were identified from the input/output tables, and this made it possible to estimate imports of non-material services (as the difference between net exports of non-material services and exports of non-material services).

(c) Imports of non-material services were then subdivided into intermediate and final components. The data from "Commodity analysis of imports" contained in Input-Output Tables for the United Kingdom, 1963 were used for that purpose; intermediate input of imported non-material services was further broken down into input in the material sphere and input in the non-material sphere.

(d) The value of imported non-material services consumed by the material sphere was next distributed among its individual industries. The assumption used for the purpose was that values of non-material imported services consumed by individual industries are proportional to the totals of imports to those industries. It is believed that this assumption can not lead to serious distortions of the estimates of the NMP; in fact, it can only slightly distort the breakdown of NMP by industries.

2.35 The procedure outlined above was employed only for the calculations for 1971 and 1972. For 1963, owing to the lack of data on net exports of non-material services, imports of non-material services were taken to be equal to zero.

2.36 In table 2.8, gross output of non-material services was taken to be equal to the sum of the following items:

(a) Gross output of non-material services shown in the condensed input/output table;

(b) The corresponding amount of net indirect taxes levied on final

non-material services. The data on (b) are not shown explicitly in the input/output table for 1971 because, as was indicated above, they are recorded in quadrant IV, where they are classified by final-use categories rather than by industry of origin; they are reclassified, however, by the Central Statistical Office.

The same procedure was employed for 1972 but not for 1963; in the latter case, the condensed input/output table was reorganized in a special way, so that all net indirect taxes are shown in quadrant III.

2.37 Final consumption expenditure of households on non-material services in table 2.11 was taken to be equal to the sum of the following items:

(a) Value of non-material services purchased by households from domestic producers. (The data on this item can easily be identified in the condensed input/output table);

(b) The corresponding part of indirect taxes levied on non-material services;

(c) Imports of final non-material services purchased by households. The data on (b) and (c) are not shown explicitly in the condensed input/output table for 1971. They were obtained with the help of the calculations described above. The same procedure was applied for 1972.

2.38 As was indicated above, the estimates of NMP derived in the conversion tables must be adjusted by the value-added in selected material services. Thus, final estimates of net material product of the United Kingdom, in millions of pounds sterling, can be presented as follows:

1963	21 434 a/	+ 753	=	22 187
1971	37 768 a/	+ 1605	=	39 373
1972	41 791 a/	+ 1705	=	43 496

a/ Including transfer costs of transactions in land and buildings incurred by the industries of the material sphere: for 1963 - £5 million; 1971 - £30 million; 1972 - £42 million.

Table 2.1. Condensed input/output table, United Kingdom, 1963

(£ million)

												Final demand						
												Current expenditures		Gross domestic capital formation				
		Agriculture, forestry and fishing	Mining and quarrying	Manufacturing	Construction	Gas, electricity and water supply	Trade	Transport and communication	Miscellaneous services	Public administration, etc.	Total intermediate output	Consumers	Public authorities	Fixed assets	Stocks	Exports	Total	Total output (a+g)
	Code	1	2	3	4	5	6	7	8	9	a	b	c	d	e	f	g	h
Agriculture, forestry and fishing	1			443		1		4	10		458	1001	90	9	26	49	1175	1633
Mining and quarrying	2	5		343	65	346	3	35	3		800	216	32	22	-35	51	286	1086
Manufacturing	3	532	188	4547	1049	185	308	481	733		8023	6964	1318	2025	189	3872	14368	22391
Construction	4	30	21	90		4	53	25	34		257	416	286	2210	21	15	2948	3205
Gas, electricity and water supply	5	20	34	386	11		82	28	99		660	670	75	153	4	6	908	1568
Trade	6	116	17	628	57	16		41	25		900	3800	81	172		265	4318	5218
Transport and communication	7	28	44	797	45	68	540		177		1699	711	211	68	1	761	1752	3451
Miscellaneous services	8	92	25	1056	116	46	313	66			1714	2898	524	197		435	4054	5768
Public administration, domestic services, ownerships of dwellings	9											1492	2736				4228	4228
Sub-total	A	823	329	8290	1343	666	1299	680	1081	-	14511	18168	5353	4856	206	5454	34037	48548
Imports	B	133	11	2721	95	17	39	587	50		3653	1586	184	237	13	273	2293	5946
Sales by final demand	C	3		122	12		22		20		179	263	-353	-177		88	-179	-
Total intermediate and final consumption	D	959	340	11133	1450	683	1360	1267	1151	-	18343	20017	5184	4916	219	5815	36151	54494
Taxes on expenditures, net	E	-280	13	2317	24	50	689	-104	670		3379							
Consumption of fixed assets	F	120	48	636	57	284	130	370	325	350	2320							
Income from employment, gross profits and other trading income	G	834	685	8305	1674	551	3039	1918	3622	3878	24506							
Total input (D+E+F+G)	H	1633	1086	22391	3205	1568	5218	3451	5768	4228	48548							

Table 2.2. Derivation of net material product from data on value-added, United Kingdom, 1963

(£ million)

	Code	Gross domestic product	Consumption of fixed assets	Net Domestic product (1-2)	Value-added in the non-material sphere	Value of non-material services consumed in the material sphere	Net material product (3-4+5)
		1	2	3	4	5	6
Agriculture, forestry and fishing	1	674	120	554		92	646
Mining and quarrying	2	746	48	698		25	723
Manufacturing	3	11258	636	10622		1056	11678
Construction	4	1755	57	1698		116	1814
Gas, electricity and water supply	5	885	284	601		46	647
Trade	6	3858	130	3728		313	4041
Transport and communication	7	2184	370	1814		66	1880
1. Material sphere		21360	1645	19715		1714	21429
Miscellaneous services	8	4617	325	4292	4292		
Public administration, domestic services, ownerships of dwelling	9	4228	350	3878	3878		
II. Non-material sphere		8845	675	8170	8170		
III. Total (I + II)		30205	2320	27885	8170	1714	21429

Table 2.3. Derivation of net material product from data on final uses, United Kingdom, 1963

(£ million)

Categories of the SNA		Final expenditures on material services	Consumption of fixed assets	Material inputs in the non-material sphere	Consumption of fixed assets in the non-material sphere	Categories of the MPS	
	1	2	3	4	5	6	
Final consumption expenditures of residential households	20017	4390				15627	Personal consumption (1-2)
Other final consumption	5184	3260		1151	675	3750	Other final consumption (1-2+4+5)
Gross fixed capital formation	4916	197	2320			2399	Net fixed capital formation (1-2-3)
Capital formation in stocks	219					219	Capital formation in stock
Exports minus imports	-131	435				-566	Exports minus imports (1-2)
Gross domestic product	30205	8282	2320	1151	675	21429	Net material product (1-2-3+4+5)

Table 2.4. Derivation of net material product from data on gross output and intermediate consumption, United Kingdom, 1963

(£ million)

Categories of the SNA		Gross output of the non-material sphere	Intermediate consumption in the non-material sphere	Consumption of non-material services in the material sphere	Consumption of fixed assets in the material sphere	Categories of the MPS	
	1	2	3	4	5	6	
Gross output	48548	9996				38552	Global product (1-2)
Intermediate consumption	18343		1151	1714	1645	17123	Intermediate material comsumption including depreciation (1-3-4+5)
Gross domestic product	30205	9996	1151	1714	1645	21429	Net material product (1-2+3+4-5)

Table 2.5. Condensed input/output table, United Kingdom, 1971

(£ million)

	Code	Agriculture, forestry and fishing	Mining and quarrying	Manufacturing	Construction	Gas, electricity and water supply	Trade	Transport and communication	Miscellaneous services	Public administration, etc.	Total intermediate output	Final demand: Current expenditures: Consumers	Final demand: Current expenditures: Public authorities	Final demand: Gross domestic capital formation: Fixed assets	Final demand: Gross domestic capital formation: Stocks	Final demand: Exports	Final demand: Total	Total output (a+g)
		1	2	3	4	5	6	7	8	9	a	b	c	d	e	f	g	h
Agriculture, forestry and fishing	1			1233		2		7	12		1254	1043	23	27	65	106	1264	2518
Mining and quarrying	2	7	1	321	150	440		1	1		921	152	43	14	36	54	299	1220
Manufacturing	3	909	212	10244	2139	331	685	632	1456		16608	9251	1927	3700	7	8429	23314	39922
Construction	4	53	60	198		102	40	12	38		503	835	306	4507	13	58	5719	6222
Gas, electricity and water supply	5	31	41	667	21	23	231	53	141		1208	1323	148	217		4	1692	2900
Trade	6	40	11	1283	59	17		87			1497	5289	150	89		475	6003	7500
Transport and communication	7	92	28	1516	128	70	823	99	520		3276	1300	178	290	-1	1914	3681	6957
Miscellaneous services	8	106	48	2875	232	190	272	149			3872	4115	1489	596	1	1362	7563	11435
Public administration, domestic services, ownerships of dwellings	9										-	3434	6072				9506	9506
Sub-total	A	1238	401	18337	2729	1175	2051	1040	2168	-	29139	26742	10336	9440	121	12402	59041	88180
Imports	B	132	26	5452	143	63	35	1541	560		7952	2580	331	1011	-10		3912	11864
Sales by final demand	C	2	4	321	20	8	20	36	16		427	664	-755	-515		179	-427	- -
Total intermediate and final consumption	D	1372	431	24110	2892	1246	2106	2617	2744	-	37518	29986	9912	9936	111	12581	62526	100044
Taxes on expenditures less subsidies	E	-231	64	692	285	93	503	160	664		2230	4895	441	243		64	5643	7873
Income from employment, gross profits and other trading income	F	1377	725	15120	3045	1561	4891	4280	8027	9506	48432							48432
Total input (D+E+F)	G	2518	1220	39922	6222	2900	7500	6957	11435	9506	88180	34881	10353	10179	111	12645	68169	156349

Table 2.6. Derivation of net material product from data on value-added, United Kingdom, 1971 (£ million)

	Code	Gross domestic product	Consumption of fixed assets	Net domestic product (1-2)	Value-added in the non-material sphere	Value of non-material services consumed in the material sphere		Net material product (3-4+5+6)
						from domestic output	from imports	
		1	2	3	4	5	6	7
Agriculture, forestry and fishing	1	1178	222	956		106	19	1081
Mining and quarrying	2	772	144	628		48	4	680
Manufacturing	3	20360	1242	19118		2875	445	22438
Construction	4	3220	116	3104		232	20	3356
Gas, electricity and water supply	5	1601	663	938		190	9	1137
Trade	6	5356	225	5131		272	4	5407
Transport and communication	7	4219	868	3351		149	139	3639
I. Material sphere		36706	3480	33226		3872	640	37738
Miscellaneous services	8	10093	557	9536	9536			
Public administration, domestic services, ownerships of dwellings	9	9506	1025	8481	8481			
II. Non-material sphere		19599	1582	18017	18017			
III. Total (1+II)		56305	5062	51243	18017	3872	640	37738

Table 2.7. Derivation of net material product from data on final uses, United Kingdom, 1971

(£ million)

Categories of the SNA		Final expenditures on non-material services	Consumption of fixed assets	Material inputs in the non-material sphere	Consumption of fixed assets in the non-material sphere	Categories of the MPS	
	1	2	3	4	5	6	
Final consumption expenditures of residential households	34881	9373				25508	Personal consumption (1-2)
Other final consumption	10353	7561		2744	1582	7118	Other final consumption (1-2+4+5)
Gross fixed capital formation	10179	596	5062			4521	Net fixed capital formation (1-2-3)
Capital formation in stocks	111	1				110	Capital formation in stocks (1-2)
Exports minus imports	781	300				481	Exports minus imports (1-2)
Gross domestic product	56305	17831	5062	2744	1582	37738	Net material product (1-2-3+4+5)

Table 2.8. Derivation of net material product from data on gross output and intermediate consumption, United Kingdom, 1971

(£ million)

Categories of the SNA		Gross output of the non-material sphere	Intermediate consumption in the non-material sphere	Consumption of non-material services in the material sphere	Consumption of fixed assets in the material sphere	Categories of the MPS	
	1	2	3	4	5	6	
Gross output	93823	22343				71480	Global product (1-2)
Intermediate consumption	37518		2744	4512	3480	33742	Intermediate material consumption including depreciation (1-3-4+5)
Gross domestic product	56305	22343	2744	4512	3480	37738	Net material product (1-2+3+4-5)

Table 2.9. Condensed input/output table, United Kingdom, 1972

(£ million)

	Code	Agriculture, forestry and fishing	Mining and quarrying	Manufacturing	Construction	Gas, electricity and water supply	Trade	Transport and communication	Miscellaneous services	Public administration, etc.	Total intermediate output	Final demand: Current expenditures: Consumers	Final demand: Current expenditures: Public authorities	Final demand: Gross domestic capital formation: Fixed assets	Final demand: Gross domestic capital formation: Stocks	Final demand: Exports	Final demand: Total	Total output (a+g)
		1	2	3	4	5	6	7	8	9	a	b	c	d	e	f	g	h
Agriculture, forestry and fishing	1			1462		2		8	32		1504	1123	22	34	76	127	1382	2886
Mining and quarrying	2	4	1	376	156	499		2	1		1039	142	44	12	4	51	253	1292
Manufacturing	3	968	318	10786	2301	348	651	670	1873		17915	10392	2148	3716	42	8735	25033	42948
Construction	4	54	73	173		98	35	10	49		492	1008	342	5324	-23	75	6726	7218
Gas, electricity and water supply	5	35	45	686	21	27	228	57	153		1252	1537	167	239		3	1946	3198
Trade	6	54	16	1410	61	20		101	8		1670	5794	176	103	2	557	6632	8302
Transport and communication	7	100	34	1564	130	80	828	112	619		3467	1521	196	329	-2	1965	4009	7476
Miscellaneous services	8	105	52	2783	218	180	250	149			3737	4922	1710	774		1489	8895	12632
Public administration, domestic services, ownerships of dwellings	9										-	3917	7062				10979	10979
Sub-total	A	1320	539	19240	2887	1254	1992	1109	2735	-	31076	30356	11867	10531	99	13002	65855	96931
Imports	B	144	45	5993	179	68	42	1513	666		8650	3187	378	1293	-82		4776	13426
Sales by final demand	C	2	4	337	22	9	21	40	18		453	788	-857	-565		181	-453	-
Total intermediate and final consumption	D	1466	588	25570	3088	1331	2055	2662	3419	-	40179	34331	11388	11259	17	13183	70178	110357
Taxes on expenditures less subsidies	E	-162	-121	735	257	114	476	85	689		2073	5304	388	287		56	6035	8108
Income from employment, gross profits and other trading income	F	1582	825	16643	3873	1753	5771	4729	8524	10979	54679							54679
Total input (D+E+F)	G	2886	1292	42948	7218	3198	8302	7476	12632	10979	96931	39635	11776	11546	17	13239	76213	173144

Table 2.10. Derivation of net material product from data on value-added, United Kingdom, 1972

(£ million)

	Code	Gross domestic product	Consumption of fixed assets	Net domestic product (1-2)	Value-added in the non-material sphere	Value of non-material services consumed in the material sphere		Net material product (3-4+5+6)
						from domestic output	from imports	
		1	2	3	4	5	6	7
Agriculture, forestry and fishing	1	1420	249	1171		105	13	1289
Mining and quarrying	2	704	160	544		52	4	600
Manufacturing	3	21994	1372	20622		2783	533	23938
Construction	4	4130	129	4001		218	16	4235
Gas, electricity and water supply	5	1867	727	1140		180	7	1327
Trade	6	6247	254	5993		250	4	6247
Transport and communication	7	4814	987	3827		149	137	4113
I. Material sphere		41176	3878	37298		3737	714	41749
Miscellaneous services (excluding material)	8	10632	792	9840	9840			
Public administration, domestic services, ownerships of dwellings	9	10979	1079	9900	9900			
II. Non-material sphere		21611	1871	19740	19740			
III. Total (I + II)		62787	5749	57038	19740	3737	714	41749

Table 2.11. Derivation of net material product from data on final uses, United Kingdom, 1972

(£ million)

Categories of the SNA		Final expenditures on material services	Consumption of fixed assets	Material inputs in the non-material sphere	Consumption of fixed assets in the non-material sphere	Categories of the MPS	
	1	2	3	4	5	6	
Final consumption expenditures of residential households	39635	10733				28902	Personal consumption (1-2)
Other final consumption	11776	8772		3419	1871	8294	Other final consumption (1-2+4+5)
Gross fixed capital formation	11546	774	5749			5023	Net fixed capital formation (1-2-3)
Capital formation in stocks	17					17	Capital formation in stocks
Exports minus imports	-187	300				-487	Exports minus imports (1-2)
Gross domestic product	62787	20579	5749	3419	1871	41749	Net material product (1-2-3+4+5)

Table 2.12. Derivation of net material product from data on gross output and intermediate consumption, United Kingdom, 1972

(£ million)

Categories of the SNA		Gross output of the non-material sphere	Intermediate consumption in the non-material sphere	Consumption of non-material services in the material sphere	Consumption of fixed assets in the material sphere		Categories of the MPS
	1	2	3	4	5	6	
Gross output	102966	25030				77936	Global product (1-2)
Intermediate consumption	40179		3419	4451	3878	36187	Intermediate material consumption including depreciation (1-3-4+5)
Gross domestic product	62787	25030	3419	4451	3878	41749	Net material product (1-2+3+4-5)

3. Japan

Sources of data and their primary processing

2.39 The primary sources used in estimating MPS net material product of Japan are the input/output tables for 1965 and 1970 published in Japan Statistical Yearbook, 1968 and in the special publication, Input-Output Tables, 1970. The original input/output tables were reclassified and adjusted as far as possible to yield categories useful for MPS/SNA comparisons. They were condensed to the main divisions of the International Standard Industrial Classification of All Economic Activities. The condensed input/output tables are shown in tables 3.1 (for 1965) and 3.5 (for 1970).

2.40 Owing to the treatment of "consumption outside households" and import duties in the input/output tables, figures on value-added shown in them are not strictly identical to those published in the Yearbook of National Accounts Statistics. Therefore, efforts were undertaken to convert the data to SNA concepts as a first step. The procedure is described below.

2.41 Additional data on selected material services and on some other items were kindly furnished by the Office of Statistical Standards of Japan.

2.42 A number of items classified under "Community, social and personal services" in the input/output tables were shifted from that category to selected material services. 6/ On the other hand, some non-material services shown combined with material activities in the input/output tables were reallocated to industries providing non-material services, for example, sewage and other sanitary services shown in the input/output tables under "Electricity, gas, water supply and sanitary services." The shift in all cases was made outside the condensed input/output tables and, therefore, did not affect the estimates derived in the conversion tables. Those adjustments were introduced at the second stage of calculations where the figures on net material product computed in the conversion tables were adjusted.

6/ Restaurants, cafés, dining places and other catering services, laundries, cleaning and dyeing; motion picture production and other similar services.

General remarks on procedures used

2.43 The general procedure employed for derivation of net material product of Japan is similar to that used for the United Kingdom. Two separate stages were employed. In the first stage, the conversion of SNA categories into their MPS counterparts was carried out strictly within the framework of the conversion tables, and input/output tables were used as the only source of primary data. In the second stage, the estimates of net material product derived in the conversion tables were adjusted by additional data supplied from other sources. This ensures consistency in the interrelated adjustments in the conversion tables, as well as identical estimates of net material product in the different conversion tables; in addition, this approach makes it possible to demonstrate the links between the input/output tables and the conversion tables; major adjustments in the conversion tables can be identified in the input/output tables.

2.44 All adjustments included in the conversion tables are consistent with general methodology described in chapter I, the adjustment relating to "consumption expenditures outside households" being the only exception. That item relates to expenditures on public relations designed to improve good will of business units, treated in SNA as intermediate consumption but in the countries using the MPS normally financed out of profits. The adjustment with regard to that item was not mentioned in the common conversion procedure, because Japan is the only country for which data on the item are available.

Derivation of gross domestic product in the conversion tables

2.45 Certain adjustments were required in the input/output tables to obtain estimates of gross domestic product consistent with SNA categories, at least in broad terms. "Consumption expenditures outside households" shown in the original input/output tables as a component of value-added and final demand was reallocated to intermediate input. Indirect taxes shown in quadrant III are defined to exclude import duties and, therefore, import duties were added to indirect taxes to obtain gross domestic product at purchasers' prices.

Derivation of net material product

2.46 Data for all of the adjustments included in the conversion tables are extracted from the condensed input/output tables, and only a few comments are believed to be useful to clarify the procedures used.

2.47 In table 3.4, relying on gross output and intermediate consumption data, the estimates of gross output on non-material services include:

(a) The sum of gross output of non-material industries shown in the condensed input/output tables; and

(b) Import duties relating to non-material services, shown in quadrant II of the input/output tables.

2.48 "Unclassified items" distinguished in the input/output tables were treated as belonging to the non-material sphere.

2.49 The final estimates of net material product, in billions of yen; obtained on the basis of the two-stage procedure described above can be presented as follows:

1965	24 262.6	+	498.9	=	24 761.5
1970	56 372.6	+	1781.5	=	58 154.1

Table 3.1. Condensed input/output table, Japan, 1965

(million yen)

	Code	Agriculture, forestry and fishing	Mining and quarrying	Manufacturing	Construction	Electricity, gas, water supply and sanitary	Wholesale and retail trade	Transport and communication	Finance, insurance and real estate	Community, government, personal services	Unclassified items	Sub-total	Final demand: Consumption outside households	Final demand: Private consumption expenditures	Final demand: Government consumption expenditures	Final demand: Gross fixed capital formation	Final demand: Increase in stocks	Final demand: Exports	Final demand: Total	Imports	Import duties	Total output (a+h+i+j)
		1	2	3	4	5	6	7	8	9	10	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
Agriculture, forestry and fishing	1	548160	7541	3642027	16050	16	17	12	19	6001	96729	4316572	96582	1052326	374	52179	106828	74370	1382659	-925470	-27346	4746415
Mining and quarrying	2	876	5688	1105090	210098	97074		7989	109	3758	2424	1433106		14767	2151		20373	2366	39657	-833943	-48247	590573
Manufacturing	3	752419	90201	15010551	2982293	135760	423816	592370	56503	779737	354750	21178400	896035	7370121	243006	3204335	390715	2874811	14979023	-1196126	-147879	34813418
Construction	4	26377	6434	93042	6005	43955	58543	26644	248325	62689	462	572476			15837	6051750			6067587			6640063
Electricity, gas, water supply and sanitary services	5	8955	23932	539567	37444	20398	65914	48671	15139	115762	27094	902874	268	386021	18140			3641	408070	-232		1310712
Wholesale and retail trade	6	80145	24253	1282434	414850	10465	137208	78545	7307	155600	47728	2238534	280287	2819209	34324	399013	37391	185479	3755703	-54950		5939287
Transport and communication	7	66635	14690	905049	283090	33380	311526	304983	77803	181098	68915	2247169	26917	945629	97976	55808	14628	221949	1362907	113841		3723917
Finance, insurance and real estate	8	66429	9609	476054	79838	11805	344770	56082	98651	102763	63220	1309221		2533295	91342			2202	2626839	437		3936497
Community, government business and personal services	9	6912	4754	416120	50780	20626	180721	24763	58431	209122	31568	1003797	639526	2969713	2679789			21171	6310199	-27205	-286	7286505
Unclassified items	10	92031	21967	606477	87930	43406	1241	14332	58200	122272	-138	1047718			34258			45426	79684	-81510	-1778	1044114
Sub-total	A	1648937	209069	24076411	4168978	416885	1523755	1154391	620487	1738802	692752	36249867	1939615	18091081	3217197	9763085	569935	3431415	37012328	-3005158	-225536	70031501
Consumption outside households	B	20996	20274	599161	224805	32507	308790	95825	116845	310077	210335	1939615										
Compensation of employees	C	378444	183904	4436356	1461409	200865	1700528	1530822	606324	3271164	-7	13829809										
Operating surplus	D	2298403	79078	3147534	584625	235072	1872878	293110	1772723	1472786	124702	11880911										
Depreciation of fixed capital	E	355659	88869	1371140	146149	294718	255908	631577	572407	390909	-6	4107330										
Indirect taxes less subsidies	F	43976	9379	1182816	54697	130665	277428	38192	167711	102767	16338	2023969										
Total Input (A+B+C+D+E+F)	G	4746415	590573	34813418	6640063	1310712	5939287	3723917	3936497	7286505	1044114	70031501										

Table 3.2. Derivation of net material product from data on value-added, Japan, 1965

(billion yen)

	Code	Gross domestic product	Consumption of fixed assets	Net domestic product (1-2)	Value-added in the non-material sphere	Value of non-material services consumed in the material sphere	Consumption outside households	Net material product (3-4+5+6)
		1	2	3	4	5	6	7
Agriculture, forestry and fishing	1	3076.5	355.7	2720.8		165.3	21.0	2907.1
Mining and quarrying	2	361.2	88.8	272.4		36.4	20.3	329.1
Manufacturing	3	10137.8	1371.1	8766.7		1498.7	599.2	10864.6
Construction	4	2246.9	146.2	2100.7		218.5	224.8	2544.0
Electricity, gas, water supply	5	861.3	294.7	566.6		75.8	32.5	674.9
Wholesale and retail trade	6	4106.7	255.9	3850.8		526.7	308.8	4686.3
Transport and communication	7	2473.7	631.6	1842.1		95.2	95.8	2033.1
Import duties related to material goods	(j)	223.5		223.5				223.5
I. Material sphere		23487.6	3144.0	20343.6		2616.6	1302.4	24262.6
Finance, insurance and real estate	8	3199.2	572.4	2626.8	2626.8			
Community, government, business and personal services	9	5237.7	390.9	4846.8	4846.8			
Unclassified items	10	141.0		141.0	141.0			
Import duties related to non-material services	(j)	2.1		2.1	2.1			
II. Non-material sphere		8580.0	963.3	7616.7	7616.7			
TOTAL (I+II)		32067.6	4107.3	27960.3	7616.7	2616.6	1302.4	24262.6

Table 3.3. Derivation of net material product from data on final uses, Japan, 1965

(billion yen)

Categories of the SNA		Final expenditures on non-material services	Consumption of fixed assets	Material inputs in the non-material sphere	Consumption of fixed assets in the non-material sphere	Material part of consumption outside households	Categories of the MPS	
	1	2	3	4	5	6	7	
Final consumption expenditures of residential households	18091.1	5503.0					12588.1	Personal consumption (1-2)
Other final consumption	3217.2	2805.4		2308.0	963.3	1300.0	4983.1	Other final consumption (1-2+4+5+6)
Gross fixed capital formation	9763.1		4107.3				5655.8	Net fixed capital formation (1-3)
Capital formation in stocks	569.9						569.9	Increase in stocks (1-2)
Exports minus imports	426.3	- 39.5					465.8	Exports minus imports (1-2)
Gross domestic product	32067.6	8268.9	4107.3	2308.0	963.3	1300.0	24262.7	Net material product (1-2-3+4+5+6)

Table 3.4. Derivation of net material product from data on gross output and intermediate consumption, Japan, 1965

(billion yen)

Categories of the SNA		Gross output of the non-material sphere	Intermediate consumption in the non-material sphere	Consumption of non-material services in the material sphere	Consumption of fixed assets in the material sphere	Consumption outside households in the material sphere	Categories of the MPS	
	1	2	3	4	5	6	7	
Gross output	70257.0	12269.2					57987.8	Global product (1-2)
Intermediate consumption	38189.4		3689.2	2616.6	3144.0	1302.4	33725.2	Intermediate material consumption including depreciation (1-3+4-5-6)
Gross domestic product	32067.6	12269.2	3689.2	2616.6	3144.0	1302.4	24262.6	Net material product (1-2+3-4+5+6)

Table 3.5. Condensed input/output table, Japan, 1970

(million yen)

	Code	Agriculture, forestry and fishing	Mining and quarrying	Manufacturing	Construction	Electricity, water supply and sanitary	Wholesale and retail trade	Transport and communication	Finance, insurance and real estate	Community, government, personal services	Unclassified items	Sub-total	Final demand: Consumption outside households	Private consumption expenditures	Government consumption expenditures	Gross fixed capital formation	Increase in stocks	Exports	Total	Imports	Import duties	Total output (a+h+i+j)
		1	2	3	4	5	6	7	8	9	10	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
Agriculture, forestry and fishing	1	910942	3773	5584811	23673					179468	46119	6808786	37063	1763636		94043	4991	90043	1989776	-1638052	-46916	7113594
Mining and quarrying	2	260	3869	2592223	350521	160728		2813	64	1657	44346	3156481		3217	942		58234	6100	68493	-2146099	-119642	959233
Manufacturing	3	1199420	188242	35313982	7205760	360172	1080475	931212	122558	3844781	823198	51069800	759359	13270757	408693	9461356	2103939	6516628	32520732	-3080947	-331350	80178235
Construction	4	52221	7976	196365	22578	81707	86285	62554	692197	132072	9946	1343901			43753	14871122			14914875			16258776
Electricity, gas, water supply and sanitary services	5	12786	23301	1067364	77346	1536	164375	96843	40435	222672	31248	1774762	337	673933	175446			3517	853233	-51		2627944
Wholesale and retail trade	6	104683	22814	3081072	969252	13628	282181	54538	19551	902844	498382	5948945	274721	5808835	45911	1722041	151566	456827	8459901	-119160		14289686
Transport and communication	7	85116	22401	1605615	550060	46842	548531	596930	128651	284910	97821	3966877	15483	2370770	175115	109347	18459	1189962	3879136	-402102		7443911
Finance, insurance and real estate	8	113391	16281	1412409	241048	60450	1356744	259943	243532	278133	260547	4242478		6280987	298287			25226	6604500	-32400		10814578
Community, government business and personal services	9	27360	12634	1793911	384734	49026	544048	126568	274560	633594	106682	3953117	2028137	7554695	4846691			43254	14472777	-93790	-250	18331854
Unclassified items	10	91108	26210	1713245	289448	69660	12536	116511	224443	711776		3254937	48744	5334	167795		22392	213450	457715	-212733	-12	3499906
Sub-total	A	2597287	327501	54360997	10114420	880604	4075175	2247912	1745991	7251907	1918289	85520083	3163844	37732164	6162633	26257909	2359581	8545007	84221138	-7725334	-498170	161517717
Consumption outside households	B	27418	21652	1130519	420665	25649	537294	223188	161091	511234	105134	3163844										
Compensation of employees	C	610739	319847	10701633	2960137	518840	4553689	3107763	1763249	7026477	122213	31684587										
Operating surplus	D	5346979	162152	8162177	1968766	534674	4016672	613744	5431680	2179488	1185972	27602334										
Depreciation of fixed capital	E	628330	166767	3303150	662293	514751	648547	1185154	1423510	886483	112188	9531173										
Indirect taxes less subsidies	F	-97159	-38686	2519759	132495	153426	458309	66120	289057	476265	56110	4015696										
Total input (A+B+C+D+E+F)	G	7113594	959233	80178235	16258776	2627944	14289686	7443911	10814578	18331854	3499906	161517717										

Table 3.6. Derivation of net material product from data on value-added, Japan, 1970

(billion yen)

	Code	Gross domestic product	Consumption of fixed assets	Net domestic product (1-2)	Value-added in the non-material sphere	Value of non-material services consumed in the material sphere	Consumption outside households	Net material product (3-4+5+6)
		1	2	3	4	5	6	7
Agriculture, forestry and fishing	1	4488.9	628.3	3860.6		231.9	27.4	4119.9
Mining and quarrying	2	610.1	166.8	443.3		55.1	21.7	520.1
Manufacturing	3	24686.7	3303.2	21383.5		4919.5	1130.5	27433.5
Construction	4	5723.7	662.3	5061.4		915.1	420.7	6397.2
Electricity, gas, water supply	5	1721.7	514.8	1206.9		179.2	25.0	1411.1
Wholesale and retail trade	6	9677.2	648.5	9028.7		1913.2	537.2	11479.1
Transport and communication	7	4972.8	1185.2	3787.6		503.0	223.2	4513.8
Import duties related to material goods	(j)	497.9	-	497.9				497.9
I. Material sphere		52379.0	7109.1	45269.9		8717.0	2385.7	56372.6
Finance, insurance and real estate	8	8907.5	1423.5	7484.0	7484.0			
Community, government, business and personal services	9	10568.7	886.5	9682.2	9682.2			
Unclassified items	10	1476.5	112.2	1364.3	1364.3			
Import duties related to non-material services	(j)	0.3	-	0.3	0.3			
II. Non-material sphere		20953.0	2422.2	18530.8	18530.8			
TOTAL (I+II)		73332.0	9531.3	63800.7	18530.8	8717.0	2385.7	56372.6

Table 3.7. Derivation of net material product from data on final uses, Japan, 1970

(billion yen)

Categories of the SNA		Final expenditures on non-material services	Consumption of fixed assets	Material inputs in the non-material sphere	Consumption of fixed assets in the non-material sphere	Material part of consumption outside households	Categories of the MPS	
	1	2	3	4	5	6	7	
Final consumption expenditures of residential households	37732.2	13840.9					23891.3	Personal consumption (1-2)
Other final consumption	6162.6	5312.2		8181.3	2422.2	1086.9	12540.8	Other final consumption (1-2+4+5+6)
Gross fixed capital formation	26257.9		9531.3				16726.6	Net fixed capital formation (1-3)
Capital formation in stocks	2359.6	22.4					2337.2	Increase in stocks (1-2)
Exports minus imports	819.7	- 57.0					876.7	Exports minus imports (1-2)
Gross domestic product	73332.0	19118.5	9531.3	8181.3	2422.2	1086.9	56372.6	Net Material product (1-2-3+4+5+6)

Table 3.8. Derivation of net material product from data on gross output and intermediate consumption, Japan, 1970

(billion yen)

Categories of the SNA		Gross output of the non-material sphere	Intermediate consumption in the non-material sphere	Consumption of non-material services in the material sphere	Consumption of fixed assets in the material sphere	Consumption outside households in the material sphere	Categories of the MPS	
	1	2	3	4	5	6	7	
Gross output	162015.9	32646.7					129369.2	Global product (1-2)
Intermediate consumption	88683.9		11693.7	8717.0	7109.1	2385.7	72996.6	Intermediate material consumption including depreciation (1-3-4+5-6)
Gross domestic product	73332.0	32646.7	11693.7	8717.0	7109.1	2385.7	56372.6	Net material product (1-2+3+4-5+6)

4. Austria

Sources of data

2.50 The main source of data is the input/output table for 1964 published in Standardized Input-Output Tables of the ECE Countries for the Years Around 1965. 7/ The rules of standardization of the input/output tables of the participating countries are fully described in that publication and are not repeated here. It should be, however, noted that sectors included in the standardized input/output tables were defined according to the kind of commodity produced and not according to the main activity of the enterprise or other units concerned. The standardized input/output table has been adapted for the intersystem comparisons, by separating the flows of material goods from the flows of non-material services and showing incomes originating in the material sphere separately from those originating in the non-material sphere. Eleven sectors are shown, three of which - namely, "dwellings", "non-material services" and "government and community services" - belong to the non-material sphere.

Derivation of gross domestic product in the conversion tables

2.51 In table 4.2, gross value-added, shown in quadrant III of the condensed input/output table, was increased by import duties shown in a separate row of the input/output table.

2.52 In table 4.4, where gross domestic product is obtained as the difference between gross output and intermediate consumption, gross output is taken equal to the sum of "gross output" shown in the condensed input/output table and import duties, recorded in the separate row of the input/output table.

Derivation of net material product

2.53 The adjustments included in the conversion tables in order to derive net material product are standard and in conformity with the methodology outlined above. Only a few explanatory comments are needed.

2.54 In conversion table 4.4, gross domestic output of non-material services was computed as the sum of gross domestic output of non-material services shown in the input/output table and the corresponding amount of import duties.

2.55 In conversion table 4.3, net exports of non-material services were computed as the difference between exports of non-material services,

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7/ United Nations Statistical Commission and Conference of European Statisticians, Statistical Standards and Studies, No. 30, 1977.

shown in a separate column of quadrant II of the input/output table, and imports of non-material services recorded in the cells at the intersection of the row for imports and the columns relating to non-material activities.

2.56 In conversion table 4.2, unallocated items were arbitrarily classed as non-material activities.

2.57 Since all the adjustments are derived exclusively from the input/output table, strict consistency among the estimates of net material product is achieved in all three conversion tables.

Table 4.1. Condensed input/output table, Austria, 1964

(million schillings)

	Code	Agriculture, forestry and fishing	Mining and quarrying	Manufacturing	Electricity, gas and water	Construction	Trade	Transport and communication	Material services	Dwellings	Non-material services	Government and community services	Unallocated items	Total intermediate consumption	Of which material sphere	Final uses: Private consumption	Final uses: Public consumption	Final uses: Gross fixed capital formation	Final uses: Change in stocks	Final uses: Exports	Final uses: Total final uses	Total
		1	2	3	4	5	6	7	8	9	10	11	12	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
Agriculture, forestry and fishing	1	1029	87	19568	-	54	3	3	1639	-	96	203	-	22682	22383	11151	-	540	1006	999	13696	36378
Mining and quarrying	2	90	1316	3865	657	3139	3	257	121	50	48	397	-	9943	9448	978	-	1340	218	1803	4339	14282
Manufacturing	3	4699	1361	68809	871	6413	3008	3051	5749	194	2980	4764	-	101899	93961	66952	-	27091	4436	33787	132266	234165
Electricity, gas and water	4	161	253	2376	308	149	371	328	262	432	224	489	-	5353	4208	2194	-	504	-	954	3652	9005
Construction	5	146	116	1681	168	834	567	312	427	1807	316	1439	-	7813	4251	1933	-	23915	-	100	25948	33761
Trade	6	726	255	5385	172	1524	704	351	1025	30	891	970	-	11933	10142	24829	-	4632	117	1080	30658	42591
Transport and communication	7	155	333	5421	156	707	2682	2490	237	21	726	967	-	13895	12181	5591	-	977	73	1105	7746	21641
Selected material services	8	-	29	724	3	141	296	242	37	-	281	222	-	1975	1472	14514	-	32	-	7	14553	16528
Dwellings	9	-	13	515	10	100	559	148	49	-	244	184	-	1822	...	6442	-	-	-	-	6442	8264
Non-material services	10	584	286	4835	93	427	1025	326	650	1142	1397	2813	4796	18374	...	8188	-	672	-	722	9582	27956
Government and community services	11	185	56	666	12	75	61	9	7	701	50	-	-	1822	...	2111	29982	348	-	-	32441	34263
Total inputs of goods and services	A	7775	4105	113845	2450	13563	9279	7517	10203	4377	7153	12448	4796	197511	...	144883	29982	60051	5850	40557	281323	478834
of which:																						
Material sphere	B	7006	3750	107829	2335	12961	7634	7034	9497	...	...	...	-	...	158046	128142	17447	59031	5850	39835	...	408351
Fixed capital consumption	C	3906	722	5827	1706	1002	1660	2801	795	4540	871	1580	-	25410	18419							
Compensation of employees	D	3123	3515	35926	2076	10842	10168	10898	2621	-	9237	19875	-	108281	79169							
Indirect taxes less subsidies	E	382	415	8394	112	2045	4912	759	1494	163	1981	320	-	20977	18513							
Other incomes	F	14751	1747	22361	2450	6239	16016	-369	1411	-816	7428	-	-4796	66422	75297							
Gross value added	G	22162	6399	72508	6344	20128	32756	14089	6321	3887	19517	21775	-4796	221090	...							
Gross output (A+G)	H	29937	10504	186353	8794	33691	42035	21606	16524	8264	26670	34223	-	418601	349444							
Imports	I	5901	3630	39780	211	70	556	35	4	-	1283	40	-	51510	50187							
Import duties	J	540	148	8032	-	-	-	-	-	-	3	-	-	8723	8720							
Total (H+I+J)		36378	14282	234165	9005	33761	42591	21641	16528	8264	27956	34263	-	478834	408351							

Table 4.2. Derivation of net material product from data on value-added, Austria, 1964

(million schillings)

	Code	Gross Domestic Product	Consumption of fixed assets	Net Domestic product (1-2)	Value-added in the non-material sphere	Value of non-material services consumed in the material sphere	Net Material Product (3-4+5)
		1	2	3	4	5	6
Agriculture, forestry and fishing	1	22702	3906	18796		769	19565
Mining and quarrying	2	6547	722	5825		355	6180
Manufacturing	3	80540	5827	74713		6016	80729
Electricity, gas and water	4	6344	1706	4638		115	4753
Construction	5	20128	1002	19126		602	19728
Trade	6	32756	1660	31096		1645	32741
Transport and communication	7	14089	2801	11288		483	11771
Selected material services	8	6321	795	5526		706	6232
I. Material sphere		189427	18419	171008		10691	181699
Dwelling	9	3887	4540	- 653	- 653		
Non-material services	10	19520	871	18649	18649		
Government and community services	11	21775	1580	20195	20195		
Unallocated items	12	- 4796	-	- 4796	- 4796		
II. Non-material sphere		40386	6991	33395	33395		
T o t a l (I+II)		229813	25410	204403	33395	10691	181699

Table 4.3. Derivation of net material product from data on final uses, Austria, 1964

(million schillings)

Categories of the SNA		Final expenditures on non-material services	Consumption of fixed assets	Material inputs in the non-material sphere	Consumption of fixed assets in the non-material sphere	Categories of the MPS	
	1	2	3	4	5	6	
Final consumption expenditures of residential households	144883	16741				128142	Personal consumption (1-2)
Other final consumption	29982	29982		17447	6991	24438	Other final consumption (1-2+4+5)
Gross fixed capital formation	60051	1020	25410			33621	Net fixed capital formation (1-5)
Capital formation in stocks	5850					5850	Increase in stocks
Exports minus imports	- 10953	- 601				-10352	Exports minus imports (1-2)
Gross domestic product	229813	47142	25410	17447	6991	181699	Net material product (1-2-3+4+5)

Table 4.4. Derivation of net material product from data on gross output and intermediate consumption, Austria, 1964

(million schillings)

Categories of the SNA		Gross output of the non-material sphere	Intermediate consumption in the non-material sphere	Consumption of non-material services in the material sphere	Consumption of fixed assets in the material sphere	Categories of the MPS	
	1	2	3	4	5	6	
Gross output	427324	69160				358164	Global product (1-2)
Intermediate consumption	197511		28774	10691	18419	176465	Intermediate material consumption including depreciation (1+3-4+5)
Gross domestic product	229813	69160	28774	10691	18419	181699	Net material product (1-2+3+4-5)

5. Finland

Sources of data

2.58 The main source of data for the estimates of net material product is the input/output table of Finland for 1965 published in Standardized Input-Output Tables of the ECE Countries for the Years Around 1965. 8/ That publication contains a description of the standardization rules applied. It should be pointed out that the sectors included in quadrant I of the standardized input/output tables are defined as commodity groups rather than industries. Differences in treatment of non-material services in SNA and in MPS are taken into account in the standardized tables. This means, in particular, that a clear distinction is made in the input/output tables between the flows of material goods and those of non-material services.

2.59 Since in the input/output table of Finland operating surplus was shown on the gross basis - i.e., it was combined with consumption of fixed assets - efforts were undertaken to separate the latter item. The separation was carried out with the help of data on gross and net domestic product at factor cost by industries published in Tilastotiedotus Statistic Rapport, 1976, National Accounts, 1964-1976, published by the Central Statistical Office of Finland 9/. Consumption of fixed assets by major industries was derived by subtracting net domestic product from gross domestic product.

Derivation of gross domestic product in the conversion tables

2.60 In table 5.4 where gross domestic product is computed as the difference between gross output and intermediate consumption, the gross output figure is obtained as the difference between "total resources" shown in the input/output table and imports. The statistical discrepancy shown in the input/output table was included in gross output, in order to achieve consistency with other flows.

8/ United Nations Statistical Commission and Conference of European Statisticians, Statistical Standards and Studies, No. 30, 1977.

9/ Pp. 24-25, 28-29.

2.61 The figures on gross domestic product in all conversion tables differ by the amount of the statistical discrepancy from those shown in the original standardized input/output tables of Finland.

Derivation of net material product

2.62 All adjustments included in the conversion tables are standard and in conformity with the methodology outlined above. A few explanatory notes are given below.

2.63 Gross output of non-material services, shown in table 5.4, was calculated as the difference between "total resources" of non-material services shown in the condensed input/output table and imports of non-material services recorded in a separate row of the input/output table.

2.64 Net exports of non-material services shown in table 5.3 were computed as the difference between exports of non-material services recorded in a separate column of quadrant II of the input/output table and imports of non-material services shown in the cells at the intersection of the columns relating to non-material industries and the row for imports.

2.65 The estimates of net material product derived in the different conversion tables are consistent with each other and differ only by the amount of the statistical discrepancy.

Table 5.1. Condensed input/output table, Finland, 1965

(million MK)

	Code	Agriculture, forestry and fishing	Mining and quarrying	Manufacturing	Electricity, gas and water	Construction	Trade	Transport and communication	Material services	Dwellings	Non-material services	Government and community services	Unallocated items	Total intermediate consumption	Of which material sphere	Final uses: Private consumption	Final uses: Public consumption	Final uses: Gross fixed capital formation	Final uses: Change in stocks	Final uses: Exports	Final uses: Total final uses	Total
		1	2	3	4	5	6	7	8	9	10	11	12	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
Agriculture, forestry and fishing	1	1175.9	3.9	3994.3	1.3	110.0	-	2.3	40.5	120.0	-	117.8	-	5566.0	5328.2	887.0	-	85.5	152.9	182.7	1308.1	6874.1
Mining and quarrying	2	0.5	2.7	370.8	36.1	24.7	-	6.9	0.1	38.5	-	14.8	-	495.1	441.8	4.2	-	-	-31.8	64.0	36.4	531.5
Manufacturing	3	606.6	47.3	6828.6	186.0	1660.5	69.0	683.4	281.0	115.4	287.9	445.8	-	11141.5	10292.9	5790.0	-	2238.8	-18.1	4431.2	12441.8	23583.4
Electricity, gas and water	4	21.8	13.1	546.9	425.1	13.5	15.0	14.9	9.4	234.2	22.8	76.2	-	1392.9	1059.7	26.6	-	9.0	-	1.2	36.8	1429.7
Construction	5	64.9	2.6	85.8	24.5	4.5	20.2	104.8	1.6	115.2	19.5	359.5	-	803.1	308.9	13.9	-	4226.1	-	16.4	4256.4	5059.5
Trade	6	129.1	1.2	105.6	14.8	186.1	9.0	92.4	44.5	66.6	8.4	94.5	-	742.2	572.7	3031.2	-	634.4	-	85.9	3751.5	4493.7
Transport and communication	7	76.4	15.5	805.5	23.1	505.8	72.5	222.8	9.0	137.8	73.0	136.2	-	2077.1	1730.1	1234.4	-	88.0	-22.3	656.9	1957.0	4034.1
Selected material services	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	860.9	-	-	-	-	860.9	860.9
Dwellings	9	-	-	-	-	-	-	-	-	-	-	-	-	-	...	2407.9	-	-	-	-	2407.9	2407.9
Non-material services	10	28.5	0.8	132.9	2.4	96.0	187.5	224.1	30.2	-	47.4	38.2	-	788.0	...	835.3	-	-	-	73.5	908.8	1696.8
Government and community services	11	-	-	-	-	-	-	-	-	-	-	-	-	-		615.2	3792.7	-	-	-	4407.9	4407.9
Unallocated items	12	-	-	0.3	-	0.4	-	-	-	-	0.8	53.4	-	54.9	0.7	-	-	-	-	-	-	54.9
Total inputs of goods and services	A	2093.7	87.1	12870.7	713.3	2601.5	373.2	1281.6	416.3	827.7	459.8	1336.4	-	23061.3	...	15706.1	3792.7	7281.8	80.7	5511.8	32373.1	55434.4
of which: Material sphere	B	2065.2	86.3	12737.8	710.9	2505.5	185.7	1057.5	386.1	...	...	...	-	...	19735.0	11847.7	2538.3	7281.8	80.7	5438.3	...	46921.8
Fixed capital consumption	C	381.8	45.1	917.7	202.3	115.2	153.2	267.0	17.2	204.4	40.4	110.0	...	2454.3								
Compensation of employees	D	2409.8	74.4	3843.2	198.3	1951.3	1362.2	1715.3	224.1	47.6	773.4	2639.9	-	15239.5	11778.6							
Indirect taxes less subsidies	E	44.3	4.7	217.0	11.1	216.6	1962.1	280.2	170.0	21.9	19.4	-	-	2947.3	2906.0							
Other incomes	F	1337.8	56.9	1245.2	238.2	163.7	600.8	389.2	33.4	1306.3	289.1	321.4	-	5982.1	6867.2							
Net value added (D+E+F)	G	3791.9	136.0	5305.4	447.6	2331.6	3925.1	2384.8	427.5	1375.8	1081.9	2961.3	-	24168.9	...							
Gross output (A+C+G)	H	6267.4	268.2	19093.8	1363.2	5048.3	4451.5	3933.4	861.0	2407.9	1582.1	4407.7	-	49684.5	41286.8							
Imports	I	590.3	277.5	4516.9	63.3	-	42.2	86.9	-	-	117.3	-	-	5694.4	5577.1							
Discrepancy	J	16.4	-14.2	-27.3	3.2	11.2	-	13.8	-0.1	-	-2.6	0.2	54.9	55.5	57.9							
Total (H+I+J)		6874.1	531.5	23583.4	1429.7	5059.5	4493.7	4034.1	860.9	2407.9	1696.8	4407.9	54.9	55434.4	46921.8							

Table 5.2. Depreciation of fixed assets, Finland, 1965

(million MK)

	Code	Gross domestic product at factor cost	Net domestic product at factor cost	Depreciation
Agriculture, forestry and fishing	1	4129.4	3747.6	381.8
Mining and quarrying	2	173.1	128.0	45.1
Manufacturing	3	5894.6	4976.9	917.7
Electricity, gas and water	4	638.6	436.3	202.3
Construction	5	2230.2	2115.0	115.2
Trade	6	2688.7	2535.5	153.2
Transport and communication	7	1671.8	1404.8	267.0
Services	8,10	2640.4	2531.3	109.1
Dwelling	9	1558.3	1353.9	204.4
General government	11	943.5	914.3	29.2
Banking and insurance	...	577.0	547.7	29.3
T O T A L		23145.7	20691.3	2454.4

Source: Tilastotiedotus Statistic Rapport. 1976, National Accounts 1964-1976, pp. 24-25, 28-29.

Table 5.3. Derivation of net material product from data on value-added, Finland, 1965

(million MK)

	Code	Gross domestic product	Consumption of fixed assets	Net domestic product (1-2)	Value-added in the non-material sphere	Value of non-material services consumed in the material sphere	Net material product (3-4+5)
		1	2	3	4	5	6
Agriculture, forestry and fishing	1	4173.7	381.8	3791.9		28.5	3820.4
Mining and quarrying	2	181.1	45.1	136.0		0.8	136.8
Manufacturing	3	6223.1	917.7	5305.4		132.9	5438.3
Electricity, gas and water	4	649.9	202.3	447.6		2.4	450.0
Construction	5	2446.8	115.2	2331.6		96.0	2427.6
Trade	6	4078.3	153.2	3925.1		187.5	4112.6
Transport and communication	7	2651.8	267.0	2384.8		224.1	2608.9
Selected material services	8	444.7	17.2	427.5		30.2	457.7
I. Material sphere		20849.4	2099.5	18749.9		702.4	19452.3
Dwelling	9	1580.2	204.4	1375.8	1375.8		
Non-material services	10	1122.3	40.4	1081.9	1081.9		
Government and community services	11	3071.3	110.0	2961.3	2961.3		
II. Non-material sphere		5773.8	354.8	5419.0	5419.0		
T O T A L (I + II)		26623.2	2454.3	24168.9	5419.0	702.4	19452.3

Table 5.4. Derivation of net material product from data on final uses, Finland, 1965

(million MK)

Categories of the SNA		Final expenditures on non-material services	Consumption of fixed assets	Material inputs in the non-material sphere	Consumption of fixed assets in the non-material sphere	Categories of the MPS	
	1	2	3	4	5	6	
Final consumption expenditures of residential households	15706.1	3858.4				11847.7	Personal consumption (1-2)
Other final consumption	3792.7	3792.7		2538.3	354.8	2893.1	Other final consumption (1-2+4+5)
Gross fixed capital formation	7281.8		2454.3			4827.5	Net fixed capital formation (1-3)
Capital formation in stocks	80.7					80.7	Increase in stocks
Exports minus imports	-182.6	-43.8				-138.8	Exports minus imports (1-2)
Gross domestic product	26678.7[x]	7607.3	2454.3	2538.3	354.8	19510.2[x]	Net material product (1-2-3+4+5)

x) Including statistical discrepancy of 55.5 mil. MK. shown in the original input-output table.

Table 5.5. Derivation of net material product from data on gross output and intermediate consumption, Finland, 1965

(million MK)

Categories of the SNA		Gross output of the non-material services	Intermediate consumption in the non-material sphere	Consumption of non-material services in the material sphere	Consumption of fixed assets in the material sphere	Categories of the MPS	
	1	2	3	4	5	6	
Gross output	49740.0	8453.2				41286.8	Global product (1-2)
Intermediate Consumption	23061.3		2623.9	702.4	2099.5	21834.5	Intermediate material consumption including depreciation (1-3-4+5)
Gross domestic product	26678.7[x]	8453.2	2623.9	702.4	2099.5	19452.3	Net material product (1-2+3+4-5)

x) Including statistical discrepancy of 55.5 mil. mk. shown in the original input-output table.

6. Peru

Sources of data

2.66 The basic source of the estimates of net material product is the input/output table published by the National Institute of Planning in its publication Relaciones Interindustriales de la Economía Peruana; Tabla Insumo-Producto, 1969.

2.67 The input/output table embraces all main activities of the national economy and major groups of commodities produced. It should, however, be noted that the estimates of gross domestic product in the input/output table are not identical with those in the national accounts. The detailed original input/output table was condensed into 11 productive sectors consisting of seven branches of the material sphere and four branches of the non-material sphere.

2.68 Additional information from various statistical publications of Dirección Nacional de Estadística y Censos and Banco Central de Reserva has been used to obtain data on selected material services, shown in the original input/output table combined with non-material activities. These adjustments were made outside the conversion tables in order to preserve the consistency among the interrelated items of the conversion tables.

2.69 Since the original table does not show consumption of fixed assets as a separate item, it was assumed that the share of depreciation of fixed assets in gross value-added was constant.

Derivation of gross domestic product in the conversion tables

2.70 Gross output in SNA sense, shown in conversion table 6.4, is computed as the difference between "total output" recorded in the condensed input/output table and imports; the figures on disposition of goods in the input/output tables include both domestic output and imports. Intermediate consumption in SNA sense shown in the same conversion table was taken equal to the "total intermediate consumption" in the condensed input/output table reduced by imports.

Derivation of net material product

2.71 The adjustments included in the conversion tables are standard. A few comments with regard to the calculation of certain adjustments are given below.

2.72 Gross output of non-material services shown in conversion table 6.2 is taken equal to the difference between "total output" of the industries producing non-material services shown in the condensed input/output table and imports of non-material services "transferred" to the industries where

such services are normally produced as characteristic products; data on the latter item are identified in the condensed input/output table.

2.73 Net exports of non-material services is computed as the difference between exports of non-material services shown in a separate column of the final demand section of the condensed input/output table and imports of non-material services recorded in the cells at the intersection of the row for imports and the industries producing non-material services.

2.74 A final estimate of net material product is obtained by adjusting the figures derived in the conversion tables by the data on value-added of selected material services collected from sources other than input/output tables. This estimate, in millions of soles, is as follows:

142 907.3 + 3 379.4 = 146 286.7

Table Condensed input/output table, Peru, 1969

(million soles)

	Code	Agriculture, hunting, forestry and fishing	Mining and quarrying	Manufacturing	Construction	Electricity	Trade	Transport and communication	Education and health	Finance and insurance	Dwellings	Personal services	Total intermediate output	Final demand: Final consumption	Final demand: Gross fixed capital formation	Final demand: Change of stocks	Final demand: Exports	Final demand: Total	Total output (a+f)
		1	2	3	4	5	6	7	8	9	10	11	(a)	(b)	(c)	(d)	(e)	(f)	(g)
Agriculture, hunting, forestry and fishing	1	6896.4		11085.3									17981.7	22328.9		110.2	693.2	23132.3	41114.0
Mining and quarrying	2	56.8	661.6	12584.9	84.8								13388.1			380.6	7021.5	7402.1	20790.2
Manufacturing	3	5748.1	1445.1	20072.4	3937.0	194.6	536.4	4952.6	1559.9	249.0		955.9	37451.0	49712.1	3995.8	1669.3	25781.1	81158.3	118609.3
Construction	4		95.9			3.7	333.6	62.4	47.7		1044.8		1588.1		12060.9			12060.9	13649.0
Electricity	5	0.6	10.1	891.6		12.3	130.3	311.4	72.8	68.2	6.5	108.1	1611.9	1267.0				1267.0	2878.9
Trade	6	346.9	257.5	3658.1	623.3	37.2	946.3	658.4	180.5	96.3		203.0	7007.5	28332.1				28332.1	35339.6
Transport and communication	7		826.9			37.6	6413.2	433.1	37.2	204.6		92.1	8044.7	12095.6				12095.6	20140.3
Education and health	8							3.7					3.7	18464.7				18464.7	18468.4
Finance and insurance	9	167.6	195.7	667.9		27.3	1237.7	743.3	94.1	1163.1	140.7	552.9	5390.3	3336.2				3336.2	8726.5
Dwellings	10													11218.1				11218.1	11218.1
Personal services	11	207.6	1078.7	5401.0		29.5	1337.1	781.7	134.8	440.5	116.1	1159.6	10686.6						10686.6
Sub-total	A	11424.0	4571.5	54361.2	4645.1	342.2	10934.6	7946.6	1927.0	2621.7	1308.1	3071.6	103153.6	146754.7	16056.7	2160.1	33495.8	198467.3	301620.9
Imports	B	920.2	1615.3	18307.0	725.9	114.9	69.0	1394.8	340.0	0.9		105.2	23593.2						
Total intermediate consumption	C	12344.2	6186.8	72668.2	5371.0	457.1	11003.6	9341.4	2267.0	2622.6	1308.1	3176.8	126746.8						
Value added	D	28769.8	14603.4	45941.1	8278.0	2421.8	24336.0	10798.9	16201.4	6103.9	9910.0	7509.8	174874.1						
Total input (C + D)	E	41114.0	20790.2	118609.3	13649.0	2878.9	35339.6	20140.3	18468.4	8726.5	11218.1	10686.6	301620.9						

Table . Derivation of net material product from data on value-added, Peru, 1969

(million soles)

	Code	Gross domestic product	Consumption of fixed assets	Net domestic product (1-2)	Value-added in the non-material sphere	Value of non-material services consumed in the material sphere	Net material product (3-4+5)
		1	2	3	4	5	6
Agriculture, hunting, forestry and fishing	1	28769.8	891.7	27878.1		375.2	28253.3
Mining and quarrying	2	14603.4	452.7	14150.7		1274.4	15425.1
Manufacturing	3	45941.1	1355.2	44585.9		6068.9	50654.8
Construction	4	8278.0	256.6	8021.4		-	8021.4
Electricity	5	2421.8	75.1	2346.7		56.8	2403.5
Trade	6	24336.0	754.4	23581.6		2574.8	26156.4
Transport and communication	7	10798.9	334.8	10464.1		1528.7	11992.8
I. Material sphere		135149.0	4120.5	131028.5		11878.8	142907.3
Education and health	8	16201.4	502.3	15699.1	15699.1		
Finance and insurance	9	6103.9	189.2	5914.7	5914.7		
Dwellings	10	9910.0	307.2	9602.8	9602.8		
Personal services	11	7509.8	232.8	7277.0	7277.0		
II. Non-material sphere		39725.1	1231.5	38493.6	38493.6		
III. Total (I +II)		174874.1	5352.0	169522.1	38493.6	11878.8	142907.3

Table Derivation of net material product from data on final uses, Peru, 1969

(million soles)

Categories of the SNA		Final expenditures on non-material services	Consumption of fixed assets	Material inputs in the non-material sphere	Consumption of fixed assets in the non-material sphere	Categories of the MPS	
	1	2	3	4	5	6	
Final consumption expenditures of residential households	146754.7	33019.0		4726.6	1231.5	119693.8	Personal and other final consumption (1-2+4+5)
Gross fixed capital formation	16056.7		5352.0			10704.7	Net fixed capital formation (1-3)
Capital formation in stocks	2160.1					2160.1	Capital formation in stocks
Exports minus imports	9902.6	-446.1				10348.7	Export minus imports (1-2)
Gross domestic product	174874.1	32572.9	5352.0	4726.6	1231.5	142903.3	Net material product (1-2-3+4+5)

Table Derivation of net material product from data on gross output and intermediate consumption, Peru, 1969

(million soles)

Categories of the SNA		Gross output of the non-material sphere	Intermediate consumption in the non-material sphere	Consumption of non-material services in the material sphere	Consumption of fixed assets in the material sphere	Categories of the MPS	
	1	2	3	4	5	6	
Gross output	278027.7	48653.5				229374.2	Global product (1-2)
Intermediate consumption	103153.6		8928.4	11878.8	4120.5	86466.9	Intermediate material consumption including depreciation (1-3-4+5)
Gross domestic product	174874.1	48653.5	8928.4	11878.8	4120.5	142907.3	Net material product (1-2+3+4-5)

7. Philippines

Sources of data and their primary processing

2.75 Input/output tables compiled by the National Census and Statistical Office, National Economic and Development Authority, and published in The 1961 Interindustry (Input-Output) Accounts of the Philippines and The Statistical Reporter, volume XV, No. 3 (July-September 1971), were the main sources of data for the 1961 and 1965 estimates of net material product of the Philippines.

2.76 The original input/output table for 1961 was condensed into a table of nine sectors according to the major divisions of the CMEA classification by kind of economic activity; two of the nine sectors - namely, "banking, insurance and real estate" and "other services", are considered to belong to the non-material sphere. The original input/output table for 1965 was condensed to 13 sectors, of which the five following sectors belong to non-material sphere: banking and insurance; real estate; government services; private services; unallocated industries.

2.77 In the input/output table for 1965, the rows and column for the government sector in quadrant I are left blank since all intermediate inputs were treated as government final current expenditures, and the gross output of this activity was assumed to be equal to wages and salaries of government employees.

2.78 Additional information on selected material activities combined in the original input/output tables with non-material services was furnished for 1965 by the National Economic and Development Authority of the Philippines. Similar data for 1961 were obtained by extrapolation. The adjustments associated with net output of those selected material activities were made outside the conversion tables - i.e., at the second stage of computation.

Derivation of the gross domestic product in the conversion tables

2.79 The data for SNA categories distinguished in the conversion tables are identifiable in the condensed input/output tables and few explanatory comments are needed.

2.80 The gross output for 1961 in SNA sense shown in conversion table 7.4 is compiled as the sum of:

(a) The total output recorded explicitly in the condensed input/output table;

(b) Net indirect taxes levied on final products shown in a separate row of quadrant IV;

(c) Value-added components for the general government and household sectors recorded in quadrant IV of the condensed input/output table.

2.81 Intermediate consumption shown in conversion table 7.4 is computed as the sum of intermediate input from domestic sources and from imports.

2.82 Gross domestic product by industries of origin for 1961 shown in conversion table 7.2 was taken equal to the sum of the entries relating to profits, compensation of employees, depreciation and net indirect taxes recorded not only in quadrant III but also in quadrant IV of the input/output table. In particular, the gross product of the government sector and the household sector was taken equal to the sum of compensation of employees and consumption of fixed assets shown in quadrant IV of the input/output table.

2.83 Net indirect taxes levied on final product and shown in a separate row of quadrant IV were allocated to manufacturing, because there were no data on the breakdown of those taxes by industry of origin.

2.84 For 1965, all categories of GDP distinguished in the conversion tables can be found in the appropriate rows and columns of the condensed input/output table.

Derivation of the net material product

2.85 Gross output of non-material services shown in conversion table 7.3 is obtained as the sum of the output of the non-material activities shown in the condensed input/output table and components of value-added originating in the government and household sectors shown in quadrant IV of the condensed input/output table.

2.86 Intermediate consumption in the non-material sphere shown in conversion table 7.4 was equal to the sum of intermediate input from domestic sources and imports; both items are identifiable in the condensed input/output table.

2.87 Net exports of non-material services shown in conversion table 7.3 were taken equal to gross exports of non-material services recorded in quadrant II of the condensed input/output table. Owing to lack of data on the commodity structure of imports, it was assumed that imports of non-material services were zero.

2.88 The value of non-material services consumed by households in conversion table 7.3 was taken equal to the final non-material services purchased by households only from domestic sources recorded in quadrant II of the condensed input/output table plus components of value-added originating in the household sector shown in separate rows of quadrant IV; a similar procedure was adopted for computation of other final consumption of non-material services in conversion table 7.3 - i.e., value of non-material services purchased by government and recorded in the condensed

input/output table (quadrant II) was increased by value-added originating in the government sector and shown in quadrant IV of the input/output table.

2.89 Material input in the non-material sphere shown in conversion table 7.3 was taken equal to the sum of the purchases of material goods by industries producing non-material services from both domestic sources and imports.

2.90 The adjustments needed to derive net material product for 1965 are identifiable in the condensed input/output table.

2.91 Final estimates of net material product are obtained by adjusting the NMP figure derived in the conversion tables by value-added originating in selected material activities shown, combined with industries of the non-material sphere in the condensed input/output table. In millions of pesos, they are as follows:

1961	12 888.7	+	943.2	=	13 831.9
1965	15 708.4	+	1 834.5	=	17 542.9

Table 7.1. Condensed input/output table, Philippines, 1961

(million pesos)

	Code	Agriculture, fishing and forestry	Mining	Manufacturing	Construction	Trade	Transport and communication	Electricity, gas and water	Banking, insurance and real estate	Other services	Sub-total	Final demand: Private consumption expenditures	Final demand: Government current expenditures	Final demand: Gross fixed capital formation	Final demand: Change in inventories	Final demand: Exports	Final demand: Total	Total output (a+g)
		1	2	3	4	5	6	7	8	9	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
Agriculture, fishing and forestry	1	75.2	4.1	574.1		5.4				7.1	665.1	2203.3	36.5	100.8	749.2	184.2	3274.0	3939.9
Mining	2		1.0	52.3	6.2		0.3				59.8			7.3	3.6	156.5	167.4	227.2
Manufacturing	3	273.8	16.8	1031.5	38.7	13.9	150.1	27.5	5.6	32.4	1590.3	4914.3	352.2	723.3	448.9	740.4	7179.1	8769.4
Construction	4	20.7	6.7	18.6	13.0		37.8	3.5	0.6	23.7	124.6	195.5	68.6	76.5	58.2		398.8	523.4
Trade	5	183.3	28.9	658.7					38.4		909.3	810.3	29.2	208.7	161.9		1210.1	2119.4
Transport and communication	6	29.7	6.1	93.1	5.8		3.6	2.8	8.6	9.8	159.5	1485.6	34.0	180.7	161.9		1862.2	2021.7
Electricity, gas and water	7	2.1	1.6	90.0	1.2	5.7	1.2	20.9	1.7	10.3	134.7	72.3	87.4	6.1	0.6		166.4	301.1
Banking, insurance and real estate	8	845.9	24.7	810.1	131.8	21.7	78.0	34.2	37.6	80.7	2064.7	994.8	69.2	175.0		122.3	1361.3	3426.0
Other services	9	338.5	10.7	269.0	1.2		22.4	1.6	11.9	32.8	688.1	563.1	49.9	10.0	3.1	108.9	735.0	1423.1
Sub-total	A	1769.2	100.6	3597.4	197.9	46.7	293.4	90.5	104.4	196.8	6396.9	11239.2	727.0	1488.4	1587.4	1312.3	16354.3	22751.2
Imports	B	125.4	17.6	479.1	33.8	9.2	30.9	9.5	4.3	10.1	719.9	446.3	75.1	271.5	124.1	20.0	937.0	1656.9
Indirect taxes less subsidies	C	15.7	9.0	541.8							566.5	252.6	6.7	70.7	51.5		381.5	948.0
Depreciation	D	86.5	20.4	166.6	190.1	36.8	665.2	17.9	6.7	37.0	1227.2	72.7	8.1				80.8	1308.0
Compensation of employees	E	1164.3	54.2	562.9	66.1	268.9	190.6	40.1	80.9	498.2	2926.2	36.8	712.4				749.2	3675.4
Profits	F	778.8	25.4	3421.6	35.5	1757.8	841.6	143.1	3229.7	681.0	10914.5							10914.5
Total input (A+B+C+D+E+F)	G	3939.9	227.2	8769.4	523.4	2119.4	2021.7	301.1	3426.0	1423.1	22751.2	12047.6	1529.3	1830.6	1763.0	1332.3	18502.8	41254.0

Table 7.2. Derivation of net material product from data on value-added, Philippines, 1961

(million pesos)

	Code	Gross domestic product	Consumption of fixed assets	Net domestic product (1 - 2)	Value-added in the non-material sphere	Value of non-material services consumed in the material sphere	Net material product (3-4+5)
		1	2	3	4	5	6
Agriculture, fishing and forestry	1	2045.3	86.5	1958.8		1184.5	3143.3
Mining	2	109.0	20.4	88.6		35.4	124.0
Manufacturing	3	5074.4	166.6	4907.8		1079.1	5986.9
Construction	4	291.7	190.1	101.6		133.0	234.6
Trade	5	2063.5	36.8	2026.7		21.7	2048.4
Transport and communication	6	1697.4	665.2	1032.2		100.4	1132.6
Electricity, gas and water	7	201.1	17.9	183.2		35.8	219.0
I. Material sphere		11482.4	1183.5	10298.9		2589.9	12888.8
Banking, insurance and real estate	8	3317.3	6.7	3310.6	3310.6		
Households		109.5	72.7	36.8	36.8		
Government services		720.5	8.1	712.4	712.4		
Other services	9	1216.2	37.0	1179.2	1179.2		
II. Non-material sphere		5363.5	124.5	5239.0	5239.0		
III. Total (I + II)		16845.9	1308.0	15537.9	5239.0	2589.9	12888.8

Table 7.3. Derivation of net material product from data on final uses, Philippines, 1961

(million pesos)

Categories of the SNA		Final expenditures on non-material services	Consumption of fixed assets	Material inputs in the non-material sphere	Consumption of fixed assets in the non-material sphere	Categories of the MPS	
	1	2	3	4	5	6	
Final consumption expenditures of residential households	12047.6	1667.4				10380.2	Personal consumption (1 - 2)
Other final consumption	1529.3	839.6		152.6	124.5	966.8	Other final consumption (1-2+4+5)
Gross fixed capital formation	1830.6	185.0	1308.0			337.6	Net fixed capital cormation (1-2-3)
Capital formation in stocks	1763.0	3.1				1759.9	Capital formation in stocks (1 - 2)
Exports minus imports	-324.6	231.2				-555.8	Exports minus imports (1 - 2)
Gross domestic product	16845.9	2926.3	1308.0	152.6	124.5	12888.7	Net material product (1-2-3+4+5)

Table 7.4. Derivation of net material product from data on gross output and intermediate consumption, Philippines, 1961

(million pesos)

Categories of the SNA		Gross output of the non-material services	Intermediate consumption in the non-material sphere	Consumption of non-material services in the material sphere	Consumption of fixed assets in the material sphere	Categories of the MPS	
	1	2	3	4	5	6	
Gross output	23963.4	5679.1				18284.3	Global product (1 - 2)
Intermediate consumption	7117.5		315.6	2589.9	1183.5	5395.5	Intermediate material consumption including depreciation (1-3-4+5)
Gross domestic product	16845.9	5679.1	315.6	2589.9	1183.5	12888.8	Net material product (1-2+3+4-5)

Table 7.5. Condensed input/output table, Philippines, 1965

(million pesos)

		Agriculture, fishing and forestry	Mining	Manufacturing	Construction	Electricity, gas and water	Trade	Transport and communication	Storage and warehousing	Banking and insurance	Real estate	Government services	Private services	Unallocated	Total intermediate output	Final demand: Private consumption expenditures	Final demand: Government current expenditures	Final demand: Gross fixed capital formation	Final demand: Change in inventories	Final demand: Exports	Final demand: Imports	Final demand: Total (less imports)	Total output (a+h)
Code		1	2	3	4	5	6	7	8	9	10	11	12	13	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
Agriculture, fishing and forestry	1	236.9	5.9	3115.4	8.0	0.3		9.0					163.4	4.5	3543.4	2363.4	6.2		109.1	1131.0	269.1	3340.6	6884.0
Mining	2	1.0	2.1	292.4	26.6			0.1			0.9		0.6	0.1	328.8	13.7	6.3		3.7	336.0	276.9	82.8	406.6
Manufacturing	3	468.1	87.5	2299.0	722.6	65.9	96.3	307.4	1.2	29.9	65.5		563.2	18.2	4724.8	7436.8	201.8	1488.3	77.7	1166.7	3807.5	6563.8	11288.6
Construction	4		0.3	3.2	26.7	0.8	3.2	0.9	0.1	0.4	38.4		3.7		77.7	3.6	39.3	1825.4				1868.3	1946.0
Electricity, gas and water	5	5.3	3.1	62.1	3.0	21.6	28.4	5.4	2.2	4.1	13.7		35.8	0.4	185.1	123.2	25.0			6.7	1.4	153.5	338.6
Trade	6	109.1	14.2	768.4	125.5	13.8	18.7	59.3	0.1	6.1	12.0		143.0	4.2	1274.4	1916.3	37.6	213.2		367.3		2534.4	3808.8
Trade and communication	7	22.8	9.6	214.1	27.4	6.8	72.7	75.2	0.4	18.5	5.5		56.8	1.7	511.5	569.5	41.8	38.2		181.4	19.4	811.5	1323.0
Storage and warehousing	8	10.0		7.5	0.5	0.7	22.6	3.3							44.6	15.3	3.2					18.5	63.1
Banking and insurance	9	46.8	3.9	101.3	17.6	4.7	65.7	22.5	2.1	8.6	37.9		37.0	0.4	348.5	387.5	93.7			10.1	16.3	475.3	823.8
Real estate	10	40.6	5.7	68.5	7.4	2.7	243.2	9.5	6.1	30.9	22.0		74.1	0.3	511.0	1337.1	6.7	480.3		277.2	52.5	2048.8	2559.8
Government services	11																1559.5					1559.5	1559.5
Private services	12	43.6	14.7	277.0	77.9	12.1	220.0	55.6	1.7	75.0	80.1		271.3	3.7	1132.7	2279.9	75.7			541.5	285.2	2611.9	3744.6
Unallocated	13	10.3	1.5	41.2	3.1	0.6	12.3	5.1	1.2	1.2	0.8		3.2		80.5	160.4	1.6		3.8	202.7	87.6	280.9	361.4
Total intermediate consumption	A	994.5	148.5	7250.1	1046.3	130.0	783.1	553.3	15.1	174.7	276.8		1352.1	33.5	12758.0	16607.0	2098.4	4045.4	194.3	4220.6	4815.9	22349.8	35107.8
Wages and salaries	B	2834.7	93.0	1189.1	470.6	76.3	1310.3	384.2	19.2	260.6	520.7	1559.5	1205.6		9923.8								
Depreciation	C	289.9	26.5	278.8	42.4	31.6	91.9	91.0	3.2	24.1	205.7		99.8		1184.9								
Other value added	D	2772.5	152.1	1995.4	364.6	78.9	1533.5	246.2	24.5	320.5	1446.5		1050.7	17.6	10003.0								
Indirect taxes less subsidies	E	- 7.6	-13.5	575.2	22.1	21.8	90.0	48.3	1.1	43.9	110.1		36.4		927.8								
Statistical discrepancy	F													310.3	310.3								
Total input (A+B+C+D+E+F)	G	6884.0	406.6	11288.6	1946.0	338.6	3808.8	1323.0	63.1	823.8	2559.8	1559.5	3744.6	361.4	35107.8								

Table 7.6. Derivation of net material product from data on value-added, Philippines, 1965

(million pesos)

	Code	Gross domestic product	Consumption of fixed assets	Net domestic product (1 - 2)	Value-added in the non-material sphere	Value of non-material services consumed in the material sphere	Net material product (3-4+5)
		1	2	3	4	5	6
Agriculture, fishing and forestry	1	5889.5	289.9	5599.6		141.3	5740.9
Mining	2	258.1	26.5	231.6		25.8	257.4
Manufacturing	3	4038.5	278.8	3759.7		488.0	4247.7
Construction	4	899.7	42.4	857.3		106.0	963.3
Electricity, gas and water	5	208.6	31.6	177.0		20.1	197.1
Trade	6	3025.7	91.9	2933.8		541.2	3475.0
Transport and communication	7	769.4	91.0	678.4		92.7	771.1
Storage and warehousing	8	48.0	3.2	44.8		11.1	55.9
I. Material sphere		15137.5	855.3	14282.2		1426.2	15708.4
Banking and insurance	9	649.1	24.1	625.0	625.0		
Real estate	10	2283.0	205.7	2077.3	2077.3		
Government services	11	1559.5		1559.5	1559.5		
Private services		2392.8	99.8	2293.0	2293.0		
Unallocated	13	327.9		327.9	327.9		
II. Non-material sphere		7212.3	329.6	6882.7	6882.7		
III. Total (I + II)		22349.8	1184.9	21164.9	6882.7	1426.2	15708.4

Table 7.7. Derivation of net material product from data on final uses, Philippines, 1965

(million pesos)

Categories of the SNA	1	Final expenditures on non-material services 2	Consumption of fixed assets 3	Material inputs in the non-material sphere 4	Consumption of fixed assets in the non-material sphere 5	6	Categories of the MPS
Final consumption expenditures of residential households	16607.0	4164.9				12442.1	Personal consumption (1-2)
Other final consumption	2098.4	1737.2		1190.0	329.6	1880.8	Other final consumption (1-2+4+5)
Gross fixed capital formation	4045.4	480.3	1184.9			2380.2	Net fixed capital formation (1-3)
Capital formation in stocks	194.3	3.8				190.5	Capital formation in stocks
Exports minus imports	-595.3	589.9				-1185.2	Exports minus imports (1-2)
Gross domestic product	22349.8	6976.1	1184.9	1190.0	329.6	15708.4	Net material product (1-2-3+4+5)

Table 7.8. Derivation of net material product from data on gross output and intermediate consumption, Philippines, 1965

(million pesos)

Categories of the SNA		Gross output of the non-material services	Intermediate consumption in the non-material sphere	Consumption of non-material services in the material sphere	Consumption of fixed assets in the material sphere	Categories of the MPS	
	1	2	3	4	5	6	
Gross output	35107.8	9049.1				26058.7	Global product (1-2)
Intermediate consumption	12758.0		1837.1	1426.2	855.3	10350.0	Intermediate material consumption including depreciation (1-3-4+5)
Gross domestic product	22349.8	9049.1	1837.1	1426.2	855.3	15708.7	Net material product (1-2+3+4-5)

8. Zambia

Sources of data

2.92 The main sources of data for derivation of the estimates of net material product of Zambia were the input/output tables (tables 16a and 16b) and (for 1971) also the commodity balance (tables 5.6 and 5.7) in the special publications, National Accounts and Input-Output Tables, 1969, and 1971. 10/ Certain other supporting tables in those publications were also used.

2.93 The original input/output tables for 1969 and 1971 were condensed into tables of 17 sectors, 10 of which relate to the non-material sphere. It proved to be impossible to separate from "personal and household services" material services such as dyeing, cleaning, repairs etc. Unspecified items distinguished in the original input/output tables were arbitrarily allocated to the non-material sphere.

Derivation of gross domestic product

2.94 It was not possible to obtain information needed to reclassify by industry of origin customs duties relating to final products and shown in quadrant IV of the input/output table for 1969. Therefore, it was assumed that all those customs duties related to material goods; they are arbitrarily allocated to gross domestic product of trade in conversion table 8.2. Gross output for 1969 in the SNA sense shown in conversion table 8.4 is computed as the sum of "total gross output" shown in the condensed input/output table and customs duties recorded in quadrant IV of the input/output table. Intermediate consumption in the SNA sense for 1969 shown in conversion table 8.4 is computed as the sum of intermediate input from domestic sources and from imports.

2.95 Gross domestic product for 1971 was derived from appropriate categories of the condensed input/output table supplemented by data in table 8.5a, entitled "supply and disposition of goods and services". The latter source contains data on imports not shown explicitly in the input/output table, and on import duties. Gross domestic product derived from components of value-added shown in the input/output table was adjusted upwards by the amount of customs duties. A similar adjustment was introduced for gross output of goods and services in conversion table 8.8 where gross domestic product is obtained as the difference between gross output and intermediate consumption. In conversion table 8.7 where gross domestic product is shown by categories of final demand, net exports were derived from data contained in the table "Supply and disposition of goods and services".

10/ Government of Zambia, Central Statistical Office.

Derivation of net material product

2.96 The adjustments included in the conversion tables are standard. Some explanatory notes relating to the computation of certain adjustments are given below.

Calculations for 1969

2.97 The value of non-material services consumed by enterprises of the material sphere is defined in table 8.2 to include both domestically produced and imported services. Data on the latter item were extracted from table 16b, "Input-output table, imports", published in National Accounts and Input-Output Tables, 1969. The data on imports of non-material services by industries and sectors of final demand are shown in a separate line in the condensed input/output table.

2.98 Material input in the non-material sphere shown in conversion table 8.3 is computed as the sum of material consumption from both domestic sources and imports.

Calculations for 1971

2.99 Two supporting tables (tables 8.9 and 8.10) were compiled to estimate cost structure of secondary output (material goods) produced by non-material activities and of secondary output (non-material services) produced by industries of the material sphere. Data on gross output of subsidiary activities shown in those tables were extracted from table 8.5a, "Supply and disposition of goods and services". It was assumed that the cost structure of secondary output was similar to that of the industries which produced such products as their principal output. The data in tables 8.9 and 8.10 were used to adjust the original input/output table data on value-added by industry to a commodity basis. Thus, value-added originating in non-material services shown in conversion table 8.6 includes subsidiary non-material output of industries of the material sphere and excludes material subsidiary output of industries of the non-material sphere. The adjustments relating to material goods produced by non-material services, and vice versa, are shown explicitly in conversion tables 8.7 and 8.8.

2.100 Purchases of non-material services by industries of the material sphere shown in conversion table 8.6 are computed as the sum of appropriate figures in the condensed input/output table 8.5 and consumption of non-material services by subsidiary material activities of non-material industries (see table 8.9).

2.101 Input of material goods by industries of the non-material sphere shown in conversion table 8.7 is computed as the sum of appropriate figures in the condensed input/output table and material input into subsidiary non-material activities of industries of the material sphere, less material input into subsidiary material activities; those data are shown in tables 8.9 and 8.10. It should be noted that material input includes imports of

"other goods and services" by government services because it was assumed that they consist exclusively of material goods. That item is shown in table 8.5 in the cell at the intersection of row B and column "b".

2.102 Gross output of non-material services shown in conversion table 8.8 is computed as the gross output of non-material industries shown in the condensed input/output table, increased by import duties on non-material services and gross output of subsidiary non-material activities of material industries, and reduced by gross output of subsidiary material activities of non-material industries.

2.103 Final expenditures on non-material services shown in conversion table 8.7 is computed as the difference between final consumption of producers of government services (see table 8.5) and the material part of "other goods and services" produced by general government; the latter item is shown in table 8.5a.

2.104 Final expenditures on non-material services by households shown in conversion table 8.7 is computed as the sum of purchases of non-material services (commodities), and consumption by households of "other goods and services", except for the direct purchases of goods and services by residents abroad. It was assumed that the latter item consists exclusively of material goods. Detailed data for compilation of final consumption of non-material services by households are extracted from table 8.5a.

2.105 Net exports of non-material services were computed as the difference between exports and imports of non-material services (commodities) shown in table 8.5a; exports and imports of "other goods and services" were disregarded because it was arbitrarily assumed that they consisted exclusively of material goods.

Table 8.1. Condensed input/output table, Zambia, 1969

(kwacha million)

	Code	Agriculture, forestry and fishing	Mining and quarrying	Manufacturing	Electricity, gas and water	Trade	Construction	Hotels and restaurants	Transport, communication and storage	Finance and insurance	Real estate	Business services	Government administration	Education and health	Recreational and non-business services	Personal and household services	Unspecified items	Total intermediate output	Final demand: Private consumption	Final demand: Government consumption	Final demand: Gross fixed capital formation	Final demand: Change in stocks	Final demand: Exports	Final demand: Total	Total output (a+g)
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
Agriculture, forestry and fishing	1	0.14	2.11	13.68									0.57				0.60	17.10	58.06	8.40	0.04	1.30	5.21	73.01	90.11
Mining and quarrying	2	0.19	27.77	1.85	1.96		1.10		0.05				0.03				0.40	33.35	0.09	0.90	30.73	-62.20	820.10	789.62	822.97
Manufacturing	3	5.00	17.19	30.23	2.11	4.17	16.45	3.79	8.60	0.97	3.01	0.60	3.01	6.34	0.96	1.23	1.58	105.24	126.30		5.33	6.47	2.79	140.90	246.13
Electricity, gas and water	4	1.20	16.81	2.02	0.03	2.25	0.29	0.32	2.56	1.00	0.19	0.10	1.60	1.28	0.17	0.33	4.38	34.53	3.71					3.71	38.24
Trade	5	1.69	32.52	17.78	0.16	8.93	4.04	0.73	0.19	0.35	1.20	0.50	0.62	2.94	0.60	0.40	6.75	79.40	48.60		25.00	2.70		76.30	155.70
Construction	6	0.41	25.22	2.63	0.20	1.65	10.51	0.36	2.18	0.37	2.48	0.39	0.90	1.05	0.15	0.02	10.60	59.12	0.02		87.29	-0.10		87.21	146.33
Hotels and restaurants	7		2.00	0.10		0.53		0.25	0.15	0.25	0.05	0.10	1.10	0.50	0.01	0.02	0.40	5.46	8.33				4.65	12.98	18.44
Transport, communication and storage	8	0.45	5.47	5.15	0.12	20.37	2.97	0.50	3.66	0.89	1.03	2.25	1.57	1.84	0.29	0.23	2.55	49.34	13.78	1.40			15.65	30.83	80.17
Finance and insurance	9	0.08	20.35	1.27	0.05	2.42	2.00	0.20	1.76	12.72	0.58	0.89	0.24	0.33		0.06	3.00	45.95	2.61				2.30	4.91	50.86
Real estate	10	0.50	0.23	1.99	0.08	9.32	1.48	0.63	4.05	0.56	0.67	1.08		0.56	0.23	0.11	0.30	21.79	22.32					22.32	44.11
Business services	11		5.96	3.61	0.13	1.62	2.85		0.37					0.58	1.17	0.12	2.37	18.78	1.10					1.10	19.88
Government administration	12																5.00	5.00		64.00				64.00	69.00
Education and health	13																1.20	1.20	19.99	51.70				71.69	72.89
Recreational and non-business services	14													0.68			2.46	3.14	2.87	4.60				7.47	10.61
Personal and household services	15		0.39	0.05	0.01		0.05	0.01	0.04	0.01	0.06	0.01						0.63	15.72					15.72	16.35
Unspecified items	16	2.01	22.20	8.81		4.35	0.13		3.50	3.54	2.64	0.40	5.70	1.20	3.48	0.29		58.25	0.02		3.00			3.02	61.27
Total intermediate consumption from domestic supplies 1/	A	11.67	178.22	89.17	4.85	55.61	41.87	6.79	27.11	20.66	11.91	6.32	15.34	17.30	7.06	2.81	41.59	538.27	323.53	131.00	151.39	-51.83	850.70	1404.79	1943.06
Compensation of employees	B	10.10	93.93	39.96	3.67	43.13	48.01	3.66	30.53	8.36	3.79	7.16	43.20	43.62	2.53	13.16		394.81							394.81
Consumption of fixed capital formation	C	5.50	22.28	7.86	4.40	4.40	10.84	0.59	8.73	1.90	7.94	0.68		0.86	0.08	0.20		76.26							76.26
Customs duties	D	0.14	0.27	0.88		0.09	0.43		1.11								0.29	3.21	22.96		3.67	1.13		27.76	30.97
Royalties, excise duties and other indirect taxes	E		217.88	31.87	0.28	1.00	0.22				0.79							252.04							252.04
Subsidies	F	5.24		1.08	0.02	5.12	0.12	0.05	8.09		1.99							21.71							21.71
Operating surplus	G	58.06	281.39	34.37	5.84	48.93	8.08	7.45	11.81	19.94	21.67	5.71		3.58	0.77	0.18		507.78							507.78
Imports	H	9.28	27.97	44.74	19.23	7.66	37.00		8.96			0.01	10.46	7.54	0.16		19.39	192.40	111.66		98.54	11.30	12.00	233.50	425.90
Of which Services	I		6.40			2.70	0.20		0.70				4.83	2.50	0.04		9.20	26.57	10.80		7.00				44.37
Total input 2/ (A+B+C+D+E+F+G+H)	J	90.11	822.97	246.13	38.24	155.70	146.33	18.44	80.17	50.86	44.11	19.88	69.00	72.89	10.61	16.35	61.27	1943.06	458.15	131.00	253.60	-39.40	862.70	1666.05	3609.11

1/ Excluding customs duties on intermediate consumption.
2/ There is a small discrepancy in the original input-output table between "total input" and "total output" figures.

Table 8.2. Derivation of net material product from data on value-added, Zambia, 1969

(kwacha million)

	Gross domestic product	Consumption of fixed assets	Net domestic product (1-2)	Value-added in the non-material sphere	Value of non-material services consumed in the material sphere	Net material product (3-4+5)
	1	2	3	4	5	6
Agriculture, forestry and fishing	69.16	5.50	63.66		2.59	66.25
Mining and quarrying	616.78	22.28	594.50		57.53	652.03
Manufacturing	112.22	7.86	104.36		15.83	120.19
Electricity, gas and water	14.16	4.40	9.76		0.27	10.03
Trade	120.20 1/	4.40	115.80		20.94	136.74
Construction	67.46	10.84	56.62		6.71	63.33
Transport and communication	44.10	8.73	35.37		10.57	45.94
I. MATERIAL SPHERE	1044.08	64.01	980.07		114.44	1094.51
Hotels and restaurants	11.65	0.59	11.06	11.06		
Finance and insurance	30.20	1.90	28.30	28.30		
Real estate	32.20	7.94	24.26	24.26		
Business services	13.55	0.68	12.87	12.87		
Government administration	43.20	-	43.20	43.20		
Education and health	48.05	0.86	47.19	47.19		
Recreation and non-business services	3.39	0.08	3.31	3.31		
Personal and household services	13.54	0.20	13.34	13.34		
Unspecified items	0.29	-	0.29	0.29		
II. NON-MATERIAL SPHERE	196.07	12.25	183.82	183.82		
III. TOTAL (I+II)	1240.15	76.26	1163.89	183.82	114.44	1094.51

1/ Including customs duties on final demand, while custom duties paid on intermediate consumption have been included in the gross domestic product of the purchasing sectors.

Table 8.3. Derivation of net material product from data on final uses, Zambia, 1969

(kwacha million)

Categories of the SNA		Final expenditures on non-material services	Consumption of fixed assets	Material inputs in the non-material sphere	Consumption of fixed assets in the non-material sphere	Categories of the MPS	
	1	2	3	4	5	6	
Final consumption expenditures of residential households	458.15	83.76				374.39	Personal consumption (1-2)
Other final consumption	131.00	120.30		95.01	12.25	117.96	Other final consumption (1-2+4+5)
Gross fixed capital formation	253.60	10.00	76.26			167.34	Net fixed capital formation (1-2-3)
Capital formation in stocks	-39.40					-39.40	Capital formation in stocks
Exports minus imports	436.80	-37.42				474.22	Exports minus imports (1-2)
GROSS DOMESTIC PRODUCT	1240.15	176.64	76.26	95.01	12.25	1094.51	NET MATERIAL PRODUCT (1-2-3+4+5)

Table 8.4. Derivation of net material product from data on gross output and intermediate consumption, Zambia, 1969

(kwacha million)

Categories of the SNA		Gross output of the non-material sphere	Intermediate consumption in the non-material sphere	Consumption of non-material services in the material sphere	Consumption of fixed assets in the material sphere	Categories of the MPS	
	1	2	3	4	5	6	
Gross output	1970.82 1/	363.41				1607.41	Global product (1-2)
Intermediate consumption	730.67 2/		167.34	114.44	64.01	512.90	Intermediate material consumption including depreciation (1-3-4+5)
Gross domestic product	1240.15	363.41	167.34	114.44	64.01	1094.51	Net material product (1-2+3+4-5)

1/ Including customs duties on final demand.

2/ Excluding customs duties on intermediate consumption.

Table 8.5. Condensed input/output table, Zambia, 1971

(kwacha million)

	Code	Agriculture, forestry and fishing	Mining and quarrying	Manufacturing	Electricity, gas and water	Trade	Construction	Hotels and restaurants	Transport and communication	Finance and insurance	Real estate	Business services	Education and health	Recreation and non-business services	Personal and household services	Intermediate consumption: All industries	Intermediate consumption: Producers of government services	Intermediate consumption: Producers of private non-profit services	Final demand: Private final consumption expenditure	Final demand: Government final consumption expenditure	Final demand: Increase in stocks	Final demand: Fixed capital formation	Final demand: Exports	Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
Agriculture, forestry and fishing	1	5.2	0.7	30.4	-	1.0	-	0.5	-	-	-	-	-	-	-	37.8	3.2	0.1	135.5	-	17.4	-	6.6	200.6
Mining and quarrying	2	-	20.6	7.0	0.5	0.9	6.1	-	-	-	0.6	-	-	-	-	35.7	-	-	0.2	-	4.5	-	456.2	496.6
Manufacturing	3	17.2	97.1	99.1	1.1	35.9	48.3	2.5	24.6	2.1	10.7	3.4	0.2	-	1.9	344.1	54.9	3.8	196.5	-	27.9	136.1	8.2	771.5
Electricity, gas and water	4	-	12.8	2.0	0.3	0.8	0.4	0.3	0.2	0.2	0.1	-	-	-	0.1	17.2	1.9	-	6.3	-	-	-	0.2	25.6
Trade	5	4.0	37.3	17.1	0.7	11.2	13.0	0.3	9.4	0.9	2.6	0.7	-	-	0.9	98.1	14.1	1.3	41.6	-	2.2	52.1	-	209.4
Construction	6	0.6	5.7	0.3	-	0.6	25.2	-	4.0	0.1	0.8	-	-	-	-	37.3	11.0	-	-	-	-5.0	168.6	0.2	212.1
Hotels and restaurants	7	-	-	-	-	2.2	-	0.1	1.4	0.5	0.1	0.4	-	-	0.1	4.8	6.5	-	6.2	-	-	-	-	17.5
Transport and communication	8	1.3	10.9	11.3	0.2	5.5	6.8	0.1	7.9	1.4	0.8	1.4	-	-	0.1	47.7	13.5	0.3	30.3	-	0.4	4.5	18.9	115.6
Finance and insurance	9	1.9	13.8	9.7	0.9	4.7	5.8	0.3	2.9	3.5	1.1	0.6	-	0.1	0.2	45.5	0.2	-	4.9	-	-	-	1.0	51.6
Real estate	10	-	0.9	2.5	0.4	6.7	0.7	0.2	1.6	-	1.6	1.3	-	0.1	0.3	16.3	0.1	-	45.5	-	-	-	-	61.9
Business services	11	1.8	5.2	6.9	0.2	9.5	2.9	0.5	2.2	0.8	1.0	1.5	0.1	0.2	0.2	33.0	0.6	0.3	0.2	-	-	8.0	2.2	44.3
Education and health	12	-	-	-	-	0.2	-	-	-	0.1	-	-	0.1	-	-	0.4	0.8	-	0.8	-	-	-	-	2.0
Recreation and non-business services	13	-	-	-	-	-	-	-	-	-	-	-	-	1.1	-	1.1	0.5	-	1.3	-	-	-	-	2.9
Personal and household services	14	-	1.8	-	0.2	10.3	0.2	0.1	1.3	0.1	0.6	0.3	-	-	0.1	15.0	8.0	0.1	1.8	-	-	-	0.2	25.1
Unspecified items	15	-	0.7	2.6	-	1.2	2.5	-	0.4	0.1	2.0	0.1	-	-	-	9.6	-	0.4	-	-	-	-	0.2	10.2
Total consumption of commodities	A	32.0	207.5	188.9	4.5	90.7	111.9	4.9	55.9	9.8	22.0	9.7	0.4	1.5	3.9	743.6	115.3	6.3	471.1	-	47.4	369.3	493.9	2246.9
Consumption of other goods and services	B	-	2.0	-	-	-	0.7	-	0.1	-	-	-	-	-	-	2.8	3.3	-	42.9	272.6	-	-	6.7	328.3
Total intermediate consumption	C	32.0	209.5	188.9	4.5	90.7	112.6	4.9	56.0	9.8	22.0	9.7	0.4	1.5	3.9	746.4	118.6	6.3	514.0	272.6	47.4	369.3	500.6	2575.2
Compensation of employees	D	17.5	126.1	54.6	5.7	56.3	61.2	5.4	44.4	12.2	4.4	12.2	0.2	0.4	2.6	403.2	136.3	23.6	-	-	-	-	-	563.1
Operating surplus	E	120.1	58.6	27.9	6.9	60.0	10.6	6.4	8.8	27.5	25.4	2.1	0.3	0.1	1.9	356.6	-	-	-	-	-	-	-	356.6
Consumption of fixed capital	F	0.5	73.4	14.9	4.6	6.7	12.5	0.3	10.9	1.4	9.5	0.8	-	0.1	0.3	135.9	30.1	0.3	-	-	-	-	-	166.3
Indirect taxes, net	G	-3.3	33.9	40.0	0.4	-11.5	0.2	-	-3.0	-0.4	-0.6	-	-	-	-	55.7	-	-	-	-	-	-	-	55.7
Total input (C+D+E+F+G)	H	166.8	501.5	326.2	22.1	202.2	197.1	17.0	117.1	50.5	60.7	24.8	0.9	2.1	8.7	1697.7	285.0	30.2	514.0	272.6	47.4	369.3	500.6	3716.8

Table 8.5a. Supply and disposition of goods and services, Zambia, 1971

(kwacha million)

	Code	Supply of goods and services: Domestically produced according to sectors: Agriculture, forestry and fishing	Mining and quarrying	Manufacturing	Electricity, gas and water	Trade	Construction	Hotels and restaurants	Transport and communications	Finance and insurance	Real estate	Business services	Education and health	Recreation and non-business services	Personal and household services	Public administration	Sanitary and related services	Total domestically produced	Imported: C.I.F. values	Import duties	Total supply and disposition (producers' values)	Disposition of goods and services (producers' values): Intermediate consumption, industries	Intermediate consumption, producers of government services	Intermediate consumption, producers of private non-profit services	Private final consumption expenditures	Government consumption expenditures	Increase in stocks	Gross fixed capital formation	Export F.O.B.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
A. Commodities																														
Agriculture, forestry and fishing	1	166.8	-	-	-	0.9	-	-	-	-	0.6	-	-	-	-	-	-	168.3	32.3	-	200.6	37.8	3.2	0.1	135.5	-	17.4	-	6.6
Mining and quarrying	2	-	484.7	0.5	-	-	-	-	6.3	-	-	-	-	-	-	-	-	491.5	5.1	-	496.6	35.7	-	-	0.2	-	4.5	-	456.2
Manufacturing	3	-	0.1	310.9	-	9.9	-	-	0.1	-	0.1	-	-	-	-	-	-	321.1	414.1	36.3	771.5	344.1	54.9	3.8	196.5	-	27.9	136.1	8.2
Electricity, gas and water	4	-	3.7	-	9.0	-	0.3	-	-	-	-	-	-	-	-	-	-	13.0	12.6	-	25.6	17.2	1.9	-	6.3	-	-	-	0.2
Trade	5	-	-	12.1	13.1 2/	181.9	1.5	-	0.1	-	-	0.1	-	-	0.6	-	-	209.4	-	-	209.4	98.1	14.1	1.3	41.6	-	2.2	52.1	-
Construction 1/	6	2.7	9.4	1.4	-	0.1	195.1	-	0.1	-	-	-	2.2	-	0.5	0.6	-	212.1	-	-	212.1	37.3	11.0	-	-	-	-5.0	168.6	0.2
Hotels and restaurants	7	-	-	-	-	-	-	16.7	0.8	-	-	-	-	-	-	-	-	17.5	-	-	17.5	4.8	6.5	-	6.2	-	-	-	-
Transport and communications	8	-	0.2	-	-	-	-	-	101.6	-	-	-	-	-	-	-	-	101.8	13.8	-	115.6	47.7	13.5	0.3	30.3	-	0.4	4.5	18.9
Finance and insurance	9	-	-	-	-	-	-	-	-	49.6	-	-	-	-	-	-	-	49.6	2.0	-	51.6	45.5	0.2	-	4.9	-	-	-	1.0
Real estate	10	-	-	0.1	-	-	0.6	0.3	0.3	0.9	59.7	-	-	-	-	-	-	61.9	-	-	61.9	16.3	0.1	-	45.5	-	-	-	-
Business services	11	-	3.4	0.5	-	0.5	-	-	-	-	-	24.7	-	-	-	-	-	29.1	15.2	-	44.3	33.0	0.6	0.3	0.2	-	-	8.0	2.2
Education and health	12	-	-	-	-	-	-	-	-	-	-	-	0.9	-	-	-	-	0.9	1.1	-	2.0	0.4	0.8	-	0.8	-	-	-	-
Recreation and non-business services	13	-	-	-	-	-	-	-	-	-	-	-	-	2.1	-	-	-	2.1	0.6	0.2	2.9	1.1	0.5	-	1.3	-	-	-	-
Personal and household services	14	-	-	0.6	-	8.7	0.1	-	8.0	-	-	-	-	-	7.6	-	-	25.0	0.1	-	25.1	15.0	8.0	0.1	1.8	-	-	-	0.2
Unspecified items	15	-	-	0.2	-	-	0.3	-	-	-	0.3	-	-	-	-	-	-	0.8	9.2	0.2	10.2	9.6	-	0.4	-	-	-	-	0.2
Total commodities	A	169.5	501.5	326.3	22.1	202.0	197.9	17.0	117.3	50.5	60.7	24.8	3.1	2.1	8.7	0.6	-	1704.1	506.1	36.7	2246.9	743.6	115.3	6.3	471.1	-	47.4	369.3	493.9
B. Other goods and services																														
Produced by government services	B	15.5	1.6	-	-	-	15.6	-	9.9	-	-	-	83.2	6.1	-	143.7	2.9	278.5	x	x	278.5	2.8	-	-	3.1	272.6	x	x	x
Produced by private non-profit services	C	-	-	-	-	-	-	-	-	-	-	-	11.2	4.7	-	-	-	15.9	x	x	15.9	-	-	x	15.9	x	x	x	x
Domestic services of households	D	-	-	-	-	-	-	-	x	x	x	x	x	x	14.3	x	x	14.3	x	x	14.3	x	x	x	14.3	x	x	x	x
Direct purchases abroad by government services	E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	x	3.3	x	3.3	x	3.3	x	x	x	x	x	x
Direct purchases abroad by resident households	F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Less Direct purchases by non-residents	G	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Households in the domestic market	H	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	x	16.3	-	16.3	x	x	x	9.6	x	x	x	6.7
Total goods and services	I	185.0	503.1	326.3	22.1	202.0	213.5	17.0	127.2	50.5	60.7	24.8	97.5	12.9	23.0	144.3	2.9	2012.8	525.7	36.7	2575.2	746.4	118.6	6.3	514.0	272.6	47.4	369.3	500.6

- The figures which appear in the commodities - part of the table (Part a) indicate "Household final consumption expenditure in domestic market (note the direct purchases abroad - figures at the bottom of the table).

1/ This indicate K' 6.4 million commodities produced by government services which are supplied as follows: agriculture, etc.: 2.7; construction: 0.8; public administration: 0.6; education: 0.7; and health: 1.5; other transport: 0.1.

2/ Distribution of electricity.

Table 8.6. Derivation of net material product from data on value-added by sector, with adjustments for services produced in sectors mainly producing goods and vice versa, Zambia, 1971

(kwacha million)

	Code	Gross domestic product	Consumption of fixed assets	Net domestic product	Value-added in the non-material sphere	Value of non-material services consumed in the material sphere	Net material product (3-4+5)
		1	2	3	4	5	6
Agriculture, forestry and fishing	1	134.8	0.5	134.3		3.7	138.0
Mining and quarrying	2	292.0	73.4	218.6		24.4	243.0
Manufacturing	3	137.3	14.9	122.4		21.7	144.1
Electricity, gas and water	4	17.6	4.6	13.0		1.7	14.7
Trade	5	111.5	6.7	104.8		34.8	139.6
Construction	6	84.5	12.5	72.0		12.8	84.8
Transport and communication	7	61.1	10.9	50.2		9.9	60.1
Custom duties on material production		36.3		36.3			36.3
Production of goods by services sectors 1/		29	2.6	26.7		2.0	28.7
Production of services by goods producing sectors		-13.3	-0.8	-12.5		-2.6	-15.1
I. MATERIAL SPHERE		891.1	125.3	765.8		108.4	874.2
Hotels and restaurants		12.1	0.3	11.8	11.8		
Finance and insurance		40.7	1.4	39.3	39.3		
Real estate		38.7	9.5	29.2	29.2		
Business services		15.1	0.8	14.3	14.3		
Education and health		0.5	-	0.5	0.5		
Recreation and non-business services		0.6	0.1	0.5	0.5		
Personal and household services		4.8	0.3	4.5	4.5		
Producers of government services		166.4	30.1	136.3	136.3		
Producers of private non-profit services		23.9	0.3	23.6	23.6		
Other custom duties		0.4	-	0.4	0.4		
Production of goods by services sectors 1/		-29.3	-2.6	-26.7	-26.7		
Production of services by goods producing sectors 2/		13.3	0.8	12.5	12.5		
II. NON-MATERIAL SPHERE		287.2	41.0	246.2	246.2		
III. TOTAL (I+II)		1178.3	166.3	1012.0	246.2	108.4	874.2

1/ see table 8.10.

2/ see table 8.9.

Table 8.7. Derivation of net material product from characteristic demand data, Zambia, 1971

(kwacha million)

Categories of the SNA		Final expenditures on non-material services 1/	Consumption of fixed assets	Material inputs in the non-material sphere 1)	Consumption of fixed assets in the non-material sphere	Categories of the MPS	
	1	2	3	4	5	6	
Private final consumption	514.0	94.0				420.0	Personal consumption (1-2)
Other final consumption	272.6	230.0		128.7	41.0 2/	212.3	Other final consumption (1-2+4+5)
Gross fixed capital formation	369.3	8.0	166.3			195.0	Net fixed capital formation (1-2-3)
Capital formation in stocks	47.4					47.4	Increase in stocks
Exports minus imports	-25.1	-24.6				-0.5	Exports minus imports (1-2)
GROSS DOMESTIC PRODUCT	1178.2	307.4	166.3	128.7	41.0	874.2	NET MATERIAL PRODUCT (1-2-3+4+5)

1/ Based on specification of demand according to characteristic products in the material sphere (see table 8.6 for type of material products)

2/ Taken from table 8.6.

Table 8.8. Derivation of net material product from data on gross output and intermediate input by sector, with adjustments for services produced in sectors mainly producing goods and *vice versa*, Zambia, 1971

(kwacha million)

Categories of SNA		Gross output of the non-material sphere 2/	Intermediate consumption in the non-material sphere 2/	Consumption of non-material services in the material sphere 2/4/	Consumption of fixed assets in the material sphere 2/4/	Categories of the SNA	
	1	2	3	4	5	6	
Gross output:							
- by sectors	2049.6 1/	480.3 1/					Global product (1-2)
- of goods produced by services sectors 5/		-50.2				1596.2	
- of services produced by goods producing sectors 6/		23.3					
Intermediate consumption:							
- by sectors	871.3		177.1 3/	109.0	123.5		Intermediate material consumption including depreciation (1-3-4+5)
- of goods produced by services sectors 5/			-20.9	2.0	2.6	722.0	
- of services produced by goods producing sectors 6/			10.0	-2.6	-0.8		
GROSS DOMESTIC PRODUCT	1178.3	453.4	166.2	108.4	125.3	874.2	NET MATERIAL PRODUCT (1-2+3+4-5)

1/ Including custom duties.

2/ See table 8.6 for sectors belonging to the material sphere and to the non-material sphere.

3/ Implicit from gross output-sectors (column 2) and gross domestic product-sectors (table 8.6).

4/ See table 8.6.

5/ See table 8.10.

6/ See table 8.9.

Table 8.9. Cost structure of gross output of non-material services (non-characteristic products) produced by the material sphere, Zambia, 1971

(kwacha million)

	Real estate	Business services	Personal household services	TOTAL
Agriculture, forestry and fishing				
Mining and quarrying				
Manufacturing	0.3	0.6	3.8	4.7
Electricity, gas and water			0.2	0.2
Trade	0.2	0.1	1.8	2.1
Construction				
Hotels and restaurants		0.1	0.2	0.3
Transport and communication		0.2	0.2	0.4
Finance and insurance		0.1	0.4	0.5
Real estate		0.2	0.6	0.8
Business services		0.3	0.4	0.7
Education and health				
Recreation and non-business services				
Personal and household services		0.1	0.2	0.3
Unspecified items				
TOTAL INTERMEDIATE CONSUMPTION	0.5	1.7	7.8	10.0
Compensation of employees	0.1	2.2	5.2	7.5
Operating surplus	0.8	0.4	3.8	5.0
Consumption of fixed capital	0.1	0.1	0.6	0.8
Indirect taxes, net				
GROSS OUTPUT	1.5	4.4	17.4	23.3

Table 8.10. Cost structure of gross output of material goods (non-characteristic products) produced by the non-material sphere, Zambia 1971

(kwacha million)

	Agriculture forestry and fishing	Mining and quarrying	Construction	Transport and communication	TOTAL
Agriculture, forestry and fishing	0.5				0.5
Mining and quarrying		0.2	0.7		0.9
Manufacturing	1.7	0.3	5.7	2.1	9.8
Electricity, gas and water					
Trade	0.4	0.1	1.5	0.8	2.8
Construction			3.0	0.3	3.3
Hotels and restaurants				0.1	0.1
Transport and communication	0.1		0.7	0.7	1.5
Finance and insurance	0.1		0.6	0.2	0.9
Real estate				0.1	0.1
Business services	0.1		0.4	0.3	0.8
Education and health					
Recreation and non-business services					
Personal and household services				0.1	0.1
Unspecified items			0.1		0.1
TOTAL INTERMEDIATE CONSUMPTION	2.9	0.6	12.7	4.7	20.9
Compensation of employees	1.7	0.4	7.2	3.6	12.9
Operating surplus	12.0	0.2	1.2	0.7	14.1
Consumption of fixed capital		0.3	1.4	0.9	2.6
Indirect taxes, net	-0.4	0.1			-0.3
GROSS OUTPUT	16.2	1.6	22.5	9.9	50.2

Centrally planned economies

9. Hungary

Sources of data

2.106 The basic sources used in the derivation of the estimates of GDP are "Input-output tables of the Hungarian national economy" for 1972 and 1976, which appear in the special publications of the Hungarian Central Statistical Office, Agazati Kapesolatok Merlege. The tables give data for various kinds of activity of the material and non-material spheres of the economy, drawing a clear distinction between the spheres.

2.107 The estimates of net material product of Hungary contained in the input/output tables are identical to those in the conventional balances of the national economy. The computation of net material product is based in principle on the methods approved by the CMEA Standing Commission on Statistics, described in Basic Principles of the System of Balances of the National Economy 11/. Hungarian practice differs from those methods in certain details, but for purposes of international comparison, the Hungarian Central Statistical Office eliminates the significant deviations. The data prepared in accordance with the CMEA recommendations are regularly published in the annual publication entitled National Accounts and Balances and in the Statistical Yearbook of CMEA.

2.108 In addition, the Hungarian Central Statistical Office regularly carries out calculations showing the performance of non-material activities. The methods used in making those calculations are essentially in conformity with SNA. Input/output tables are compiled both for the material sphere and for non-material activities. The above publications serve as a basis for the estimates of GDP included here, which were prepared by the Hungarian Central Statistical Office in collaboration with the Statistical Office, United Nations Secretariat.

2.109 It should be noted that in 1976 the Hungarian Central Statistical Office introduced some methodological changes into its system of balances of national economy. The data have been revised according to the new methodology back to 1970.

2.110 In addition to the above-mentioned publications, the Central Statistical Office made use of condensed input/output tables which embrace industries of both the material and non-material spheres, and of data on business travel expenditures, purchases by enterprises for recreational and cultural services to employees, losses in fixed assets and in stocks, change in stocks of uncompleted investments, the net direct exports of

11/ Studies in Methods, Series F, No. 17 (United Nations publication, Sales No. E.71.XVII.10).

households, contribution to social insurance by enterprises, and net income of unincorporated enterprises.

Derivation of gross domestic product

2.111 The breakdown of net material product and gross domestic product by kind of economic activity in conversion tables 9.2 - 9.11 is shown only at a highly aggregative level. At that level, efforts were made to ensure comparability of data with regard to the scope of the branches of the economy. A reclassification of certain activities is necessary at the level of major divisions. A number of such corrections would have been necessary in principle, but considering the weight of certain activities, only two groups of activities were reallocated. The first group is logging, and the second, architectural and similar services, which belong to different major divisions in MPS and in SNA. As a consequence, the Hungarian data converted to SNA concepts are classified according to the major divisions of the ISIC only approximately.

2.112 The adjustments included in the conversion tables are in conformity with the conceptual principles of the intersystem comparisons outlined above. Only relatively insignificant conceptual differences were neglected - e.g., the differences in the valuation of the consumption of fixed assets. Exports and imports of non-material services are negligible in Hungary and almost counterbalance each other. Therefore, those items were disregarded in the conversion procedure. In most cases, adjustments included in the conversion tables can be identified in the condensed input/output tables.

2.113 In table 9.9, all business travel expenditures in both spheres were deducted from final material consumption because it was assumed that the non-material component of those expenditures was negligible. The adjustment for purchases by enterprises for recreational, cultural etc., services to employees embraces not only the material part of those expenditures, as it normally should, but also non-material services. The latter are excluded because gross output of non-material services used for final consumption (see col. 2) has been computed, including those purchases of non-material services which in SNA are treated as intermediate input. Similar explanatory notes apply to the adjustments in table 9.3.

2.114 In addition to derivation of gross domestic product, estimates of total consumption of the population of Hungary were prepared for 1972 and 1976. Tables 9.4 and 9.10, where those estimates are presented, are arranged in such a way that the relationship between total consumption of the population and other categories of final consumption of households, both in the MPS and SNA sense, can be traced.

2.115 The estimates of gross domestic product of Hungary derived in the conversion tables are preliminary. They may be revised in the light of the experience obtained in the course of the bilateral work carried out by Hungary and France in the field of MPS/SNA links. 12/

12/ The two countries were engaged in a bilateral calculation demonstrating conversion of GDP into categories of MPS, and vice versa.

Table 9.1. Condensed input/output table, Hungary, 1972

/Million forints/

	Code	Industry	from which: Logging	Construction	Agriculture and forestry	Transport and communication	Distributive trade	Other material production	Imports	MATERIAL SPHERE TOTAL	Communal and financial services	Other non-material services	NON-MATERIAL SPHERE TOTAL	TOTAL INTERMEDIATE OUTPUT	Final Use: Final Consumption of population	Final Use: Other final consumption	Final Use: Gross fixed capital formation	Final Use: Increase in stocks	Final Use: Replacement of losses	Final Use: Exports	Final Use: Total	TOTAL OUTPUT
	Code	01		02	03+04	05+06	07	08	G	A	09+14	from 10 to 16 /exc.14/	B	C	a	b	c	d	e	f	g	/C+g/
Industry	01	143717	/2256/	28865	20006	6062	6939	663		206252	2731	14966	17697	223949	95037	4194	20733	573	1500	107603	229640	453589
from which: Logging		/2511/	.	/338/	/458/	/333/	/363/	/9/		/4012/	/38/	/30/	/68/	/4080/	/320/		/600/	/3/		/769/	/1692/	/5772/
Construction	02	3516	/31/	704	587	137	861	64		5869	2778	1334	4112	9981	1906	3576	59860	7397	1100	296	74135	84116
Agriculture and forestry	03+04	48822	/64/	1069	31734	45	239	7		81916	402	141	543	82459	21576	1000	931	2021	1400	15807	42735	125194
Transport and communication	05+06	12518	/220/	7007	589	1097	3705	82		24998	298	1485	1783	26781	7072	279	182	135	300	4128	12096	38877
Distributive trade	07	21910	/210/	3887	1666	1763	617	47		29890	697	3473	4170	34060	37651		3900	1173	800	5346	48870	82930
Other material production	08	+ 350	/10/	189	35	25	167	15		781	260	110	370	1151	200	589	3352	0		215	4356	5507
Imports	G	65935	/414/	4556	7522	4216	2347	250		84826	488	1520	2008	86834	14751	62	18910	8081			41804	128638
MATERIAL SPHERE TOTAL	A	296768	/3205/	46277	62139	13345	14875	1128	-	434532	7654	23029	30683	465215	178193	9700	107868	19380	5100	133395	453636	918851
Communal and financial services	09+14	2448	/18/	450	725	302	1918	80	-	5923	1854	1068	2922	8845	12001	2568	0	0	0	0	14569	23414
Other non-material services	10+11+12+ +13+15+16	2678	/17/	273	470	198	225	71	-	3915	85	1366	1451	5366	31113	20543	0	0	0	0	51656	57022
NON-MATERIAL SPHERE TOTAL	B	5126	/35/	723	1195	500	2143	151	-	9838	1939	2434	4373	14211	43114	23111	0	0	0	0	66225	80436
TOTAL INTERMEDIATE CONSUMPTION	C	301894	/3240/	47000	63334	13845	17018	1279	-	444370	9593	25463	35056	479426	221307	32811	107868	19380	5100	133395	519861	999287
Consumption of fixed assets	D	17879	/199/	1662	6515	7059	1195	608	-	34918	5120	3119	8239	43157								
Primary income of population	E	55546	/1541/	19013	48125	11631	13177	1661	-	149153	4826	25579	30405	179558								
Primary income of enterprises	F	78270	/792/	16441	7220	6342	51540	1959		161772	3895	2861	6736	168508								
Imports	G	-	-	-	-	-	-	-	128638	128638	-	-	-	128638								
TOTAL INPUT	C+D+E+F+G	453589	/5772/	84116	125194	38877	82930	5507	128638	918851	23414	57022	80436	999287								

Memorandum items:

Net income of unincorporated enterprises	Part of E	1782	-	3423	25675	239	747	155	-	32021	-	-	-	
Contribution to social insurance	Part of F	7703	/231/	2100	2231	1707	1774	220		15735	483	1845	2328	18063
Business travel expenditures	Part of E	1284	0	670	312	433	753	50		3502	168	480	648	4150
Representational etc. expenditures	Part of F	616	0	76	169	129	81	0		1071	32	5	37	1108
Losses in stocks	Part of A	1249	0	118	372	289	672	0		2700	0	0	0	2700
National income /net material product/	B+E+F	138942	/2368/	36177	56540	18473	66860	3771		320763				

Derivation of final material consumption

	Consumption of population	Other consumption	Total material cons.
Directly from mat.branches	178193	9700	187893
Material cons.in the non-material sphere	17722	12961	30683
Cons.of fixed capital in non-material sphere	6436	1803	8239
Final material consumption total	202351	24464	226815

From final consumption of the population:

a/ Direct exports /net/ 3936 million forints
b/ Financed by government 30712 million forints

Table 9.2. Derivation of gross domestic product from data on net material product according to kind of activity,

Hungary, 1972

/Million forints/

Kind of activity, according to MPS classification	Code	Net material product (MPS)	Re-allocation between major diviations a/	Net material product according to SNA classification	Value added, net in the non-material sphere	Value of non-material services, consumed by the material sphere	Business travel expenditures	Purchases by enterprises for recreational, cultural etc. services to employees	Losses in stocks	Net domestic product /3+4-5-6-7-8/	Consumption of fixed assets	Gross domestic product /SNA/ /9+10/	Kind of activity according to SNA classification
		1	2	3	4	5	6	7	8	9	10	11	
Industry	/01/	138 942	- 2 368	136 609	-	5 126	1 284	616	1 249	128 334	17 680 c/	145 979	Mining, manufactoring, electricity, gas and water /2,3,4/
Construction	/02/	36 177	-	36 177	-	723	670	76	118	34 590	1 662	36 252	Construction /5/
Agriculture and forestry	/03+04/	56 540	+ 2 368	58 873	-	1 195	312	169	372	56 825	6 714 c/	63 574	Agriculture and forestry /1/
Transport and communication	/05,06/	18 473	-	18 473	-	500	433	129	289	17 122	7 059	24 181	Transport and communication /7/
Trade	/07/	66 860	-	66 860	-	2 143	753	81	672	63 211	1 195	64 406	Wholesale and retail trade /6/
Other material production	/08/	3 771	- 3 771	-	-	-	-	-	-	-	-	-	
I. Material sphere		320 763	- 3 771	316 992	-	9 687	3 452	1 071	2 700	300 082	34 310	334 392	I. Material sphere
Housing, personal, financial and business services /09,14/		-	+ 3 771	3 771 b/	8 701	151 b/	218 b/	32	-	12 071	5 728 b/	17 799	Financing, insurance real estate and business services, and personal services /8+95/
Other non-material services /10,11,12,13,15,16/		-	-	-	28 440	-	480	5	-	27 955	3 119	31 074	Community, and social services, exept personal services /9, exept 95/
II. Non-material sphere		-	+ 3 771	3 771	37 141	151	698	37	-	40 026	8 847	48 873	II. Non-material sphere
III. Total /I+II/		320 763	-	320 763	37 141	9 838	4 150	1 108	2 700	340 108	43 157	383 265	III. Total /I+II/

a/ Re-allocated are the net value of forestry from industry to the branch of agriculture and forestry, and the net value of architectural and similar services from other material production to business services.

b/ Including the relevant items of "other material production"

c/ Re-allocated are the consumption of fixed assets in "Logging"

Table 9.3. Derivation of gross domestic product from data on net material product according to categories of final use, Hungary, 1972

/Million forints/

Categories of the MPS	1	Final use of material services 2	Consumption of fixed assets 3	Intermediate material consumption in non-material sphere 4	Consumption of fixed assets in the non-material sphere 5	Business travel expenditures 6	Purchases by enterprises for recreational, cultural etc. services to employees 7	Direct exports to households less direct imports 8	Re-allocation of consumption of the population financed by government 9	Increase of incompleted fixed capital formation 10	Losses in fixed assets and stocks 11	Categories of the SNA 12	
Final /material/ consumption of the population	202 351	43 114	-	17 722	6 436	4 150	1 108	/-3 936/	/-30 712/			181 401	Final consumption expenditure of residential households /1+2-4-5-6-7+8+9/
Other final consumption	24 464	23 111		12 961	1 803				30 712			63 523	Final consumption expenditure of government /1+2-4-5+9/
Net fixed capital formation	64 711		43 157							8 304	2 400	118 572	Gross fixed capital formation /1+3+10+11/
Capital formation in stocks	19 380									/-8 304/		11 076	Capital formation in stocks /1+10/
Losses in assets	5 100										/-5 100/		-
Exports minus imports	4 757							3 936				8 693	Exports minus imports /1+8/
Net material product	320 763	66 225	43 157	30 683	8 239	4 150	1 108	-	-	-	/-2 700/	383 265	Gross domestic product /1+2+3-4-5-6-7+11/

Table 9.4. Derivation of gross domestic product from data on gross output and intermediate consumption, Hungary, 1972

/Million forints/

Categories of the MPS		Gross output of the non-material sphere	Intermediate consumption in the non-material sphere	Consumption of non-material services in the material sphere	Consumption of fixed assets in the material sphere	Business travel expenditures	Losses in stocks	Purchases by enterprises for recreational, cultural etc. services to employees	Categories of the SNA	
	1	2	3	4	5	6	7	8	9	
Global product	790 213	80 436						1 108	869 541	Gross output (1+2-8)
Intermediate material consumption including depreciation	469 450		35 056	9 838	34 918	4 150	2 700		486 276	Intermediate consumption (1+3+4-5+6+7)
Net material product	320 763	80 436	35 056	9 838	34 918	4 150	2 700	1 108	383 265	Gross domestic product (1+2-3-4+5-6-7-8)

Table 9.5. Derivation of gross domestic product from data on net material product according to types of primary incomes, Hungary, 1972

/Million forints/

Categories of the MPS	1	Wages and salaries in the non-material sphere 2	Operating surplus including indirect taxes, net, in the non-material sphere 3	Consumption of non-material services in the material sphere 4	Business travel expenditures 5	Losses in stocks 6	Purchases by enterprises for recreational, cultural etc. services to employees 7	Employers' contributions to social insurance 8	Net income of unincorporated enterprises in the material sphere 9	Consumption of fixed capital 10	Categories of the SNA 11	
Primary incomes of population	149 153	30 405[c/]	-	-	4 150	-	-	18 063	/-32 021/	-	161 450	Conpensation of employees /1+2-5+8+9/
Primary incomes of enterprises	171 610	-	6 736[a/b/]	9 838	-	2 700	1 108	/-18 063/[b/]	32 021[d/]	-	178 658	Operating surplus including indirect taxes, net /1+3-4-6-7+8+9/
										43 157	43 157	Consumption of fixed capital
Net material product	320 763	30 405	6 736	9 838	4 150	2 700	1 108	-	-	43 157	383 265	Gross domestic product /1+2+3-4-5-6-7+8+9+10/

a/ Including net income of unincorporated enterprises in the non-material sphere
b/ Including employers contributions to social insurance in the non-material sphere
c/ Net of employers contributions to social insurance
d/ Excluding net income of unincorporated enterprises in the non-material sphere

Table 9.6. Total consumption of the population, Hungary, 1972

	Number of column in table 2, row 1	Million forints
Final material consumption of the population according to MPS	1	202 351
Plus: Value of non-material services consumed by the population	2	+ 43 114
Less: Intermediate consumption in the units of non-material sphere serving households	4	- 17 722
Less: Consumption of fixed assets in units of non-material sphere serving households	5	- 6 436
TOTAL CONSUMPTION OF THE POPULATION in the domestic market		221 307
Less: Direct exports minus direct imports of households	8	- 3 936
Less: Consumption of the population financed by government and non-profit institutions	9	- 30 712
Less: Business travel expenditure	6	- 4 150
Less: Purchases by enterprises for recreational, cultural etc. services to employees	7	- 1 108
Final consumption expenditure of residential households according to SNA	12	181 401

Table 9.7. Condensed input/output table, Hungary, 1976

/Thousand million forint/

	Code	Industry	from which: Logging	Construction	Agriculture and forestry	Transport and communication	Distributive trade	Other material production	Imports	MATERIAL SPHERE TOTAL	Communal and financial services	Other non-material services	NON-MATERIAL SPHERE TOTAL	TOTAL INTERMEDIATE OUTPUT	Final Use: Final consumption of population	Final Use: Other final consumption	Final Use: Gross fixed capital formation	Final Use: Increase in stocks	Final Use: Replacement of losses	Final Use: Exports	Final Use: Total	TOTAL OUTPUT
	Code	01		02	03+04	05+06	07	08	G	A	09+14	from 10 to 16 /exc.14/	B	C	a	b	c	d	e	f	g	/C+g/
Industry	01								-	343.0	3.8	16.7	20.5	363.5	126.7	4.9	25.8	15.4	2.0	165.7	340.5	704.0
from which: Logging									/-/	/5.3/	/0.1/	/-/	/0.1/	/5.4/	/0.8/	/-/	/0.3/	/0.1/	/-/	/1.1/	/2.3/	/7.7/
Construction	02								-	15.7	3.3	2.2	5.5	21.2	0.3	5.6	83.1	8.8	1.2	0.6	99.6	120.8
Agriculture and forestry	03+04								-	97.2	0.9	1.2	2.1	99.3	42.0	0.7	2.0	1.7	3.0	24.8	74.2	173.5
Transport and communication	05+06								-	33.5	0.7	1.1	1.8	35.3	10.0	0.5	2.7	0.2	0.8	5.7	19.9	55.2
Distributive trade	07								-	36.3	2.2	5.4	7.6	43.9	40.7	-	4.5	3.6	0.2	4.7	53.7	97.6
Other material production	08								-	1.6	0.5	0.5	1.0	2.6	-	1.8	4.2	0.5	-	0.4	6.9	9.5
Imports	G	115.1	/0.5/	8.6	12.3	7.0	5.2	0.3	-	148.5	2.1	4.9	7.0	155.5	25.2	0.3	32.6	10.7	-	-	68.8	224.3
MATERIAL SPHERE TOTAL	A	469.3	/4.1/	69.3	93.2	20.5	21.6	1.9	-	675.8	13.5	32.0	45.5	721.3	244.9	13.8	154.9	40.9	7.2	201.9	663.6	1384.9
Communal and financial services	09+14	3.9	/-/	0.7	1.2	0.6	2.6	0.1	-	9.1	2.3	1.4	3.7	12.8	17.1	3.3	-	-	-	-	-	33.2
Other non-material services	10+11+12+ +13+15+16	4.1	/0.1/	0.4	0.9	0.5	0.3	0.1	-	6.3	0.2	1.6	1.8	8.1	44.0	26.6	-	-	-	-	-	78.7
NON-MATERIAL SPHERE TOTAL	B	8.0	/0.1/	1.1	2.1	1.1	2.9	0.2	-	15.4	2.5	3.0	5.5	20.9	61.1	29.9	-	-	-	-	91.0	111.9
TOTAL INTERMEDIATE CONSUMPTION	C	477.3	/4.2/	70.4	95.3	21.6	24.5	2.1	-	691.2	16.0	35.0	51.0	742.2	306.0	43.7	154.9	40.9	7.2	201.9	754.6	1496.8
Consumption of fixed assets	D	24.6	/0.3/	2.4	11.3	9.0	1.8	0.8	-	49.9	7.5	4.4	11.9	61.8								
Primary income of population	E	75.7	/1.9/	25.6	54.5	16.2	18.5	2.6	-	193.1	7.8	36.6	44.4	237.5								
Primary income of enterprises	F	126.4	/1.3/	22.4	12.4	8.4	52.8	4.0	-	226.4	1.9	2.7	4.6	231.0								
Imports	G	-	/-/	-	-	-	-	-	224.3	224.3	-	-	-	224.3								
TOTAL INPUT	C+D+E+F+G	704.0	/7.7/	120.8	173.5	55.2	97.6	9.5	224.3	1384.9	33.2	78.7	111.9	1496.8								

Memorandum items:

Net income of unincorporated enterprises	Part of E	1.8	/-/	4.2	29.5	0.2	1.3	-	-	37.0	-	-	-	37.0
Contribution to social insurance	Part of F	13.8	/0.3/	3.7	3.1	3.0	3.1	0.4	-	27.1	1.0	2.7	3.7	30.8
Business travel expenditures	Part of E	1.8	-	0.9	0.5	0.6	1.1	-	-	4.9	0.2	0.6	0.8	5.7
Recreational etc. expenditures	Part of F	0.9	-	0.1	0.3	0.2	0.2	-	-	1.7	0.1	-	0.1	1.8
Losses in stocks	Part of A	1.5	-	0.2	0.8	0.6	1.2	-	-	4.2	-	-	-	4.2
National incomes /net material product/	B+E+F	210.1	/3.3/	49.1	69.0	25.7	74.2	6.8	-	434.9				

Derivation of final material consumption

	Consumption of population	Other consumption	Total material cons.
Directly from mat.branches	244.9	13.8	258.7
Material cons.in the non-material sphere	28.2	17.3	45.5
Cons.of fixed capital in non-material sphere	8.9	3.0	11.9
Final material consumption total	282.0	34.1	316.1

From final consumption of the population:

a/ Direct exports /net/ 3.2 thousand million forint
b/ Financed by government 41.5 -"-

Table 9.8. Derivation of gross domestic product from data on net material product according to kind of activity, Hungary, 1976

/Thousand million forint/

Kind of activity, according to MPS classification	Code	Net material product (MPS)	Re-allocation between major deviations a/	Net material product according to SNA classifications	Value added, net in the non-material sphere	Value of non-material services, consumed by the material sphere	Business travel expenditures	Purchases by enterprises for recreational, cultural etc. services to employees	Losses in stocks	Net domestic product /3+4-5-6-7-8/	Consumption of fixed assets	Gross domestic product /SNA/ /9+10/	Kind of activity according to SNA classification
		1	2	3	4	5	6	7	8	9	10	11	
Industry	/01/	210.1	- 3.2	206.9	-	8.0	1.8	0.9	1.5	194.7	24.6 c/	219.3	Mining, manufacturing, electricity, gas and water /2,3,4/
Construction	/02/	49.1	-	49.1	-	1.1	0.9	0.1	0.2	46.8	2.4	49.2	Construction /5/
Agriculture and forestry	/03+04/	69.0	+ 3.2	72.2	-	2.1	0.5	0.3	0.8	68.5	11.3 c/	79.8	Agriculture and forestry /1/
Transport and communication	/05,06/	25.7	-	25.7	-	1.1	0.6	0.2	0.5	23.3	9.0	32.3	Transport and communication /7/
Trade	/07/	74.2	-	74.2	-	2.9	1.1	0.2	1.2	68.8	1.8	70.6	Wholesale and retail trade /6/
Other material production	/08/	6.8	- 6.8	-	-	-	-	-	-	-	-	-	
I. Material sphere		434.9	- 6.8	428.1	-	15.2	4.9	1.7	4.2	402.1	49.1	451.2	I. Material sphere
Housing, personal, financial and business services	/09,14/	-	+ 6.8	6.8 b/	9.6	0.2 b/	0.2 b/	0.1	-	15.9	8.3 b/	24.2	Financing, insurance real estate and business services, and personal services /8+95/
Other non-material services	/10,11,12,13,15,16/	-	-	-	39.4	-	0.6	-	-	38.8	4.4	43.2	Community, and social services, except personal services /9, except 95/
II. Non-material sphere		-	+ 6.8	6.8	49.0	0.2	0.8	0.1	-	54.7	12.7	67.4	II. Non-material sphere
III. Total /I+II/		434.9	-	434.9	49.0	15.4	5.7	1.8	4.2	456.8	61.8	518.6	III. Total /I+II/

a/ Re-allocated are the net value of forestry from industry to the branch of agriculture and forestry, and the net value of architectural and similar services from other material production to business services.

b/ Including the relevant items of "other material production".

c/ Re-allocated are the consumption of fixed assets in "Logging".

Table 9.9. Derivation of gross domestic product from data on net material product, according to categories of final use, Hungary, 1976

/Thousand million forint/

Categories of the MPS	1	Final use of non-material services 2	Consumption of fixed assets 3	Intermediate material consumption in the material sphere 4	Consumption of fixed assets in the non-material sphere 5	Business travel expenditures 6	Purchases by enterprises for recreational cultural etc. services to employees 7	Direct exports to households less direct imports 8	Re-allocation of consumption of the population financed by government 9	Increase of incompleted fixed capital formation 10	Losses in fixed assets and stocks 11	Categories of the SNA 12	
Final /material/ consumption of the population	282.0	61.1	-	28.2	8.9	5.7	1.8	/- 3.2/	/- 41.5/			253.8	Final consumption expenditure of residential households /1+2-4-5-6-7+8+9/
Other final consumption	34.1	29.9		17.3	3.0				41.5			85.2	Final consumption expenditure of government /1+2-4-5+9/
Net fixed capital formation	93.1		61.8							14.0	3.0	171.9	Gross fixed capital formation /1+3+10+11/
Capital formation in stocks	40.9									/-14.0/		26.9	Capital formation in stocks /1+10/
Losses in assets	7.2										/- 7.2/	-	-
Exports minus imports	- 22.4							+ 3.2				- 19.2	Exports minus imports /1+8/
Net material product	434.9	91.0	61.8	45.5	11.9	5.7	1.8	-	-	-	/- 4.2/	518.6	Gross domestic product /1+2+3-4-5-6-7+11/

Table 9.10. Derivation of gross domestic product from data on gross output and intermediate consumption, Hungary, 1976

/Thousand million forint/

Categories of the MPS		Gross output of the non-material sphere	Intermediate consumption in the non-material sphere	Consumption of non-material services in the material sphere	Consumption of fixed assets in the material sphere	Business travel expenditures	Losses in stocks	Purchases by enterprises for recreational, cultural etc. services to employees		Categories of the SNA
	1	2	3	4	5	6	7	8	9	
Global product	1160.6	111.9						1.8	1270.7	Gross output (1+2-8)
Intermediate material consumption including depreciation	725.7		51.0	15.4	49.9	5.7	4.2		752.1	Intermediate consumption (1+3+4-5+6+7)
Net material product	434.9	111.9	51.0	15.4	49.9	5.7	4.2	1.8	518.6	Gross domestic product (1+2-3-4+5-6-7-8)

Table 9.11. Derivation of gross domestic product from data on net material product according to types of primary incomes, Hungary, 1976

/Thousand million forint/

Categories of the MPS	1	2	3	4	5	6	7	8	9	10	11	Categories of the SNA
		Wages and salaries in the non-material sphere	Operating surplus including indirect taxes, net, in the non-material sphere	Consumption of non-material services in the material sphere	Business travel expenditures	Losses in stocks	Purchases by enterprises for recreational, cultural etc. services to employees	Employers' contributions to social insurance	Net income of unincorporated enterprises in the material sphere	Consumption of fixed capital		
Primary incomes of population	193.1	44.4 c/	-	-	5.7	-	-	30.8	/-37.0/	-	225.6	Compensation of employees /1+2-5+8+9/
Primary incomes of enterprises	241.8	-	4.6 a/b/	15.4	-	4.2	1.8	/-30.8/ b/	37.0 d/	-	231.2	Operating surplus including indirect taxes, net /1+3-4-6-7+8+9/
										61.8	61.8	Consumption of fixed capital
Net material product	434.9	44.4	4.6	15.4	5.7	4.2	1.8	-	-	61.8	518.6	Gross domestic product /1+2+3-4-5-6-7+8+9+10/

a/ Including net income of unincorporated enterprises in the non-material sphere
b/ Including employers contributions to social insurance in the non-material sphere
c/ Net of employers contributions to social insurance
d/ Excluding net income of unincorporated enterprises in the non-material sphere

Table 9.12. Total consumption of the population, Hungary, 1976

		Number of column in table 2, row 1	Thousand million forint
Final material consumption of the population according to MPS		1	282.0
Plus:	Value of non-material services consumed by the population	2	+ 61.1
Less:	Intermediate consumption in the units of non-material sphere serving households	4	- 28.2
Less:	Consumption of fixed assets in the units of non-material services serving households	5	- 8.9
TOTAL CONSUMPTION OF THE POPULATION in the domestic market			306.0
Less:	Direct exports minus direct imports of households	8	- 3.2
Less:	Consumption of the population financed by government and non-profit institutions	9	- 41.5
Less:	Business travel expenditure	6	- 5.7
Less:	Purchases by enterprises for recreational, cultural etc. services to employees	7	- 1.8
Final consumption expenditure of residential households according to SNA		12	253.8

10. Yugoslavia

Sources of data

2.116 Input/output tables compiled by the Federal Institute for Statistics and published in "Inter-industry relations of the Yugoslav economy in 1962", 13/ and "Economic balances of Yugoslavia, 1974" 14/ were the main sources of information for conversion of MPS net material product into SNA gross domestic product for Yugoslavia.

2.117 The original input/output tables of Yugoslavia did not contain information on the disposition and cost structure of non-material services. In 1962 the Federal Institute for Statistics extended the input/output tables to include those services by adding a row and a column for the non-material sphere as a whole. The extension, of course, affected the data on value-added of material industries as well as final demand for material goods. The 1962 and 1970 input/output tables were supplemented by data on government outlays (net value-added and consumption of fixed assets) which were not incorporated in the condensed input/output tables themselves but were shown in footnotes. In addition, the Federal Institute for Statistics furnished data on the cost structure of the motion picture industry, restaurants and other eating and drinking places, and other material activities which were originally included in non-material services.

2.118 Beginning in 1966, financial accounts were established by the Federal Institute for Statistics and attached to the economic balances of Yugoslavia. Those accounts contain information on the population (education, public health etc.) and on units which meet the collective needs of the society as a whole (finance and insurance, administration and defence etc.). Although the 1970 input/output table related to the material sphere only, it has been extended for intersystem comparison purposes by including non-material services on the basis of the financial accounts. The distribution of non-material services among the branches of the economy was made pro rata in the same proportion as 1962 data supplied by the Federal Institute for Statistics.

Derivation of gross domestic product

2.119 All adjustments included in the conversion tables are standard. Only a few remarks are believed to be necessary.

2.120 Figures on value-added in the material sphere (see col. 3, table 10.2)

13/ Studies, Analyses and Reviews (Belgrade, 1966).
14/ Ibid. (1976).

were extracted from the input/output table but supplemented by net value-added originating in the general government, shown in the footnote to the input/output table for 1962.

2.121 Final consumption of non-material services by general government shown in table 10.3 was taken to be equal to the sum of the following items:

(a) "Other final consumption", shown in the condensed input/output table;

(b) Value-added, including depreciation of fixed assets, originating in the general government (shown in the footnote to the condensed input/output table).

2.122 Gross output of non-material services shown in table 10.4 was taken to be equal to the sum of:

(a) Final expenditures on non-material services, shown in table 10.3;

(b) Intermediate consumption of non-material services by the material sphere, shown in table 10.2;

(c) Intermediate consumption of non-material services by the non-material sphere, shown in the condensed input/output table (see col. 9 and col. "c").

2.123 Material inputs in the non-material sphere, shown in table 10.3, were taken to be equal to the intermediate consumption by industries of the non-material sphere (see condensed input/output table 10.1, col. 9 and "c"), reduced by purchases of non-material services by the non-material sphere.

2.124 Similar explanatory notes relate to the derivation of the estimates for 1970 in conversion tables 10.6, 10.7 and 10.8.

Table 10.1. Condensed input/output table, Yugoslavia, 1962

(million dinars)

		Mining, quarrying and manufacturing	Agriculture	Forestry	Construction	Transport and communication	Trade and catering	Servicing arts and crafts	Other material production	Non-material services	Total intermediate output	Final demand: Personal consumption	Final demand: Other final consumption	Final demand: Gross fixed capital formation	Final demand: Increase in stocks	Final demand: Exports	Final demand: Total	Total output (a+g)
		1	2	3	4	5	6	7	8	9	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
Mining, quarrying and manufacturing	1	18455	814	46	2535	1184	736	438	108	145	24461	9214	1478	4636	1783	5503	22614	47075
Agriculture	2	2301	5231	36		1	401				7970	6958	240		69	727	7994	15964
Forestry	3	791	5	5	67	1	13	4	2	1	889	204	10	7		88	309	1198
Construction	4	161	13	12	1375	262	31	4	7	32	1897		205	6558		4	6767	8664
Transport and communication	5	1061	113	25	399	329	123	12	12	26	2100	1509	166	67	35	1098	2875	4975
Trade and catering	6	715	143	7	205	64	56	107	10	22	1329	3788	141	395	61	516	4901	6230
Servicing arts and crafts	7	316	90	10	89	86	71	16	7	14	699	507	95	26	12		640	1339
Other material production	8	411	2	1	21	11	29	4	3	28	510	116	184		10	32	342	852
Non-material services	9	327	147	12	62	150	256	7	7	70	1038	390	332				722	1760
Sub-total	A	24538	6558	154	4753	2088	1716	592	156	338	40893	22686	2851	11689	1970	7968	47164	88057
Consumption of fixed assets	B	1495	427	115	213	548	161	21	23	34	3037							
Value added, net	C	14244	7142	897	3698	2135	4353	727	577	1385	35158							
Gross output (A+B+C)	D	40277	14127	1166	8664	4772	6230	1339	756	1757	79088							
Decrease in stocks	E	120	376	21							517							
Imports	F	6678	1461	11		203			96	3	8452							
Total (C+E+F)	G	47075	15964	1198	8664	4975	6230	1339	852	1760	88057							

Other data for: government outlays - depreciation 137, value added, net, 4903.

Table 10.2. Derivation of gross domestic product from data on value-added, Yugoslavia, 1962

(million dinars)

	Code	Net material product	Value of non-material services consumed in the material sphere	Value-added in the non-material sphere	Net domestic product (1-2+3)	Consumption of fixed assets	Gross domestic product (4+5)
		1	2	3	4	5	6
Mining, quarrying and manufacturing	1	14571	327		14244	1495	15739
Agriculture	2	7289	147		7142	427	7569
Forestry	3	909	12		897	115	1012
Construction	4	3760	62		3698	213	3911
Transport and communication	5	2285	150		2135	548	2683
Trade and catering	6	4609	256		4353	161	4514
Servicing arts and crafts	7	734	7		727	21	748
Other material production	8	584	7		577	23	600
I. Material sphere		34741	968		33773	3003	36776
II. Non-material sphere	9	-	-	6288	6288	191	6479
III. Total (I+II)		34741	968	6288	40061	3194	43255

Table 10.3. Derivation of gross domestic product from data on final uses, Yugoslavia, 1962

(million dinars)

Categories of the MPS		Final expenditures on non-material services	Consumption of fixed assets	Material inputs in the non-material sphere	Consumption of fixed assets in the non-material sphere	Categories of the SNA	
	1	2	3	4	5	6	
Personal consumption	22296	390				22686	Final consumption expenditures of residential households (1+2)
Other final consumption	2978	7911		2787	191	7911	Other final consumption (1+2-4-5)
Net fixed capital formation	8495		3194			11689	Gross fixed capital formation (1+3)
Capital formation in stocks	1453					1453	Capital formation in stocks
Exports minus imports	- 481	-3				-484	Exports minus imports (1+2)
Net material product	34741	8298	3194	2787	191	43255	Gross domestic product (1+2+3-4-5)

Table 10.4. Derivation of gross domestic product from the data on global product and material input, Yugoslavia, 1962

(million dinars)

Categories of the MPS		Gross output of the non-material sphere	Intermediate consumption in the non-material sphere	Consumption of non-material services in the material sphere	Consumption of fixed assets in the material sphere	Categories of the SNA	
	1	2	3	4	5	6	
Global product	77331	9668				86999	Gross output (1+2)
Intermediate material consumption including depreciation	42590		3189	968	3003	43744	Intermediate consumption (1+3+4-5)
Net material product	34741	9668	3189	968	3003	43255	Gross domestic product (1+2-3-4+5)

Table 10.5. Condensed input/output table, Yugoslavia, 1970

(million dinars)

	Code	Mining, quarrying and manufacturing	Agriculture	Forestry	Construction	Transport and communications	Trade and catering	Servicing arts and crafts	Other material services	Non-material services	Total intermediate output	Final demand: Personal consumption	Final demand: Other final consumption	Final demand: Gross fixed capital formation	Final demand: Increase in stocks	Final demand: Exports	Final demand: Total	Total output (a+g)
		1	2	3	4	5	6	7	8	9	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
Mining, quarrying and manufacturing	1	69 141	4 046	170	10 599	3 348	3 733	2 171	301	3 766	97 275	43 338	3 170	16 902	10 359	22 053	95 822	193 097
Agriculture	2	14 363	14 609	51	-	2	699	-	-	274	29 938	15 717	230	446	1 483	1 989	19 865	49 803
Forestry	3	2 313	42	120	260	14	22	5	2	36	2 816	692	31	66	334	301	1 424	4 240
Construction	4	546	92	26	7 617	170	245	17	42	1 108	9 863	-	932	31 047	415	385	32 779	42 642
Transport and communications	5	3 825	556	59	1 887	1 298	650	127	21	498	8 921	7 577	420	166	293	4 547	13 003	21 924
Trade and catering	6	4 910	1 599	61	1 943	1 000	842	963	51	469	11 838	23 468	394	1 789	474	3 055	29 180	41 018
Servicing arts and crafts	7	1 403	529	54	534	422	292	58	15	153	3 460	3 508	129	215	31	27	3 910	7 370
Other material production	8	1 332	23	3	121	53	185	26	6	212	1 961	430	179	-	55	49	713	2 674
Non-material services	9	1 320	492	46	303	486	682	40	21	815	4 207	26 554	686	-	-	-	27 240	31 447
Sub - total	A	99 093	21 988	590	23 264	6 795	7 350	3 407	459	7 333	170 279	121 284	6 171	50 631	13 444	32 406	223 936	394 215
Consumption of fixed assets	B	7 356	1 443	334	1 013	2 582	1 308	195	140	1 214	15 585							
Value added, net	C	46 719	23 481	2 985	18 312	8 957	34 848	3 754	1 788	22 900	163 744							
Gross output (A+B+C)	D	153 168	46 912	3 909	42 589	18 334	43 506	7 356	2 387	31 447	349 608							
Decrease in stocks	E	938	19	-	3	-	-	12	13	-	985							
Imports	F	38 990	2 871	331	51	816	287	1	275	-	43 622							
Total (C+E-F)	G	193 096	49 802	4 240	42 643	19 150	43 793	7 369	2 675	31 447	394 215							

Other data: government outlays - depreciation 30, value added-net 8 929, which are not incorporated in this table.

Table 10.6. Derivation of gross domestic product from data on value-added, Yugoslavia, 1970

(million dinars)

	Code	Net material product	Value of non-material services consumed in the material sphere	Value-added in the non-material sphere	Net domestic product (1-2+3)	Consumption of fixed assets	Gross domestic product (4+5)
		1	2	3	4	5	6
Mining, quarrying and manufacturing	1	48 039	1 320	-	46 719	7 355	54 074
Agriculture	2	23 973	492	-	23 481	1 443	24 924
Forestry	3	3 030	46	-	2 984	334	3 318
Construction	4	18 615	303	-	18 312	1 013	19 325
Transport and communication	5	9 445	488	-	8 957	2 582	11 539
Trade and catering	6	35 530	682	-	34 848	1 308	36 156
Servicing arts and crafts	7	3 794	40	-	3 754	195	3 949
Other material production	8	1 809	21	-	1 788	140	1 928
I. MATERIAL SPHERE		144 235	3 392	-	140 843	14 370	155 213
II. NON-MATERIAL SPHERE		-	-	29 829	29 829	1 244	31 073
III. TOTAL (I+II)		144 235	3 392	29 829	170 672	15 614	186 286

Table 10.7. Derivation of gross domestic product from data on final uses, Yugoslavia, 1970

(million dinars)

Categories of the MPS		Final expenditures on non-material services	Consumption of fixed assets	Material inputs in the non-material sphere	Consumption of fixed assets in the non-material sphere	Categories of the SNA	
	1	2	3	4	5	6	
Personal consumption	94 729	26 554				121 283	Final consumption expenditures of residential households (1+2)
Other final consumption	13 247	13 130		12 003	1 244	13 130	Other final consumption (1+2-4-5)
Net fixed capital formation	35 016		15 615			50 631	Gross fixed capital formation (1+3)
Capital formation in stocks	12 459					12 459	Capital formation in stocks
Exports minus imports	-11 217					-11 217	Exports minus imports
Net material product	144 234	39 684	15 615	12 003	1 244	186 286	Gross domestic product (1+2+3-4-5)

Table 10.8. Derivation of gross domestic product from data on global product and material input, Yugoslavia, 1970

(million dinars)

Categories of the MPS		Gross output of the non-material sphere	Intermediate consumption in the non-material sphere	Consumption of non-material services in the material sphere	Consumption of fixed assets in the material sphere	Categories of the SNA	
	1	2	3	4	5	6	
Global product	318 162	44 577				362 739	Gross output (1+2)
Intermediate material consumption including depreciation	173 927		13 504	3 392	14 370	176 453	Intermediate consumption (1+3+4-5)
Net material product	144 235	44577	13504	3 392	14 370	186 286	Gross domestic product (1+2-3-4+5)

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