# Table of Contents

List of Tables ................................................................. 5

Preface ........................................................................ 8

Chapter 1  A Review of the Accounting Structure and the Sources of Data ........................................ 9
  Introduction .................................................................. 9
  Main categories of the system ...................................... 10
  System of accounts ..................................................... 13
  Valuation principles ................................................... 15
  Sources of data .......................................................... 15

Chapter 2  Gross Output ................................................... 18
  Coverage ................................................................... 18
  Valuation .................................................................. 19
  Industry .................................................................... 19
  Agriculture ............................................................... 20
  Forestry .................................................................. 21
  Construction ............................................................. 22
  Transport ................................................................. 23
  Maintenance of roads .................................................. 23
  Communications ....................................................... 24
  Trade, catering, material supply, procurement ............... 24
    Trade ................................................................... 24
    Catering ............................................................... 25
    Material supply ...................................................... 25
    Procurement .......................................................... 25
  Information and computing services ................................ 26
  Other branches of material production ......................... 26
  Housing services ......................................................... 27
  Public utilities and personal services (excluding those allocated to industry) ................................. 28
  Health care, social security, physical culture and sports .... 28
  Education .................................................................. 29
  Culture and art .......................................................... 29
  Science and scientific services ....................................... 30
  Credit ...................................................................... 30
  Insurance ................................................................... 31
  General administration and defence .............................. 31
  Private non-profit institutions serving households ........... 32

Chapter 3  Intermediate Consumption ............................... 33
  Coverage ................................................................... 33
  Valuation .................................................................. 36
  Sources and methods .................................................. 37
  Industry ................................................................. 38
  Agriculture .............................................................. 38
  Construction ............................................................. 38
  Catering ............................................................... 39
  Housing services ......................................................... 39
LIST OF TABLES

Accounts for the total economy

1.1 Goods and services account 1988-1990 ........................................ 79
1.2 Production account 1988-1990 .................................................... 79
1.3 Generation of income account 1988-1990 ..................................... 80
1.4 Distribution of income account 1988-1990 .................................... 81
1.5 Use of income account 1988-1990 .................................................. 82
1.6 Capital account 1988-1990 .......................................................... 82
1.7 External economic relations (rest of the world) account 1988-1990 . 83
    -- Current account ............................................................. 83
    -- Capital account .................................................................. 83
1.8 Actual final consumption 1988-1990 ................................................. 84
1.9 Final consumption expenditure of households 1988-1990 .................. 84
1.10 Gross capital formation 1988-1990 ................................................. 85
1.11 Taxes and subsidies on products 1988-1990 ....................................... 85

Accounts by sectors

2.1 Production account by sectors 1988 ................................................. 86
    -- 1989 .............................................................................. 86
    -- 1990 .............................................................................. 88
2.2 Generation of income account by sectors 1988 .................................. 90
    -- 1989 .............................................................................. 92
    -- 1990 .............................................................................. 94
2.3 Distribution of income account by sectors 1988 ................................ 96
    -- 1989 .............................................................................. 97
    -- 1990 .............................................................................. 98
2.4 Use of disposable income account by sectors 1988 ............................. 99
    -- 1989 .............................................................................. 100
    -- 1990 .............................................................................. 101
2.5 Redistribution of income in kind account by sectors 1988 ................. 102
    -- 1989 .............................................................................. 102
    -- 1990 .............................................................................. 103
2.6 Use of adjusted disposable income account by sectors 1988 ............. 103
    -- 1989 .............................................................................. 104
    -- 1990 .............................................................................. 104
2.7 Capital account by sectors 1988 ...................................................... 105
    -- 1989 .............................................................................. 106
    -- 1990 .............................................................................. 107
Production and generation of income accounts by industries

3.1 Production account by industries 1988 ......................... 109
-- 1989 ........................................................... 110
-- 1990 ........................................................... 111

3.2 Generation of income account by industries 1988 .............. 112
-- 1989 ........................................................... 113
-- 1990 ........................................................... 114

3.3 Production and generation of income account by industries 1988 .... 115
-- 1989 ........................................................... 116
-- 1990 ........................................................... 117

Production and generation of income accounts by sectors and industries

4.1 Gross output by sectors and industries 1988 ...................... 118
-- 1989 ........................................................... 120
-- 1990 ........................................................... 122

4.2 Intermediate consumption by sectors and industries 1988 ........ 124
-- 1989 ........................................................... 126
-- 1990 ........................................................... 128

4.3 Gross domestic product by sectors and industries 1988 ........... 130
-- 1989 ........................................................... 132
-- 1990 ........................................................... 134

4.4 Compensation of employees by sectors and industries 1988 ....... 136
-- 1989 ........................................................... 138
-- 1990 ........................................................... 140

4.5 Taxes on production by sectors and industries 1988 .............. 142
-- 1989 ........................................................... 144
-- 1990 ........................................................... 146

4.6 Consumption of fixed capital by sectors and industries 1988 ..... 148
-- 1989 ........................................................... 150
-- 1990 ........................................................... 152

Investment by sectors and industries

5.1 Gross fixed capital formation by sectors and industries 1988 ...... 154
-- 1989 ........................................................... 156
-- 1990 ........................................................... 158

5.2 Change in stocks by sectors and industries 1988 ................... 160
-- 1989 ........................................................... 162
-- 1990 ........................................................... 164

Production accounts for individual industries for 1989

6.1 Industry .......................................................... 166
6.2 Agriculture ....................................................... 168
6.3 Construction ...................................................... 169
6.4 Transport and communication ..................................... 170
6.5 Trade and catering ................................................ 171
6.6 Material supply ................................................... 173
6.7 Procurement ....................................................... 174
6.8 Information and computing services .............................. 175
6.9 Housing services .................................................. 176
6.10 Public utilities and personal services .......................... 177
6.11 Health care, social security, physical culture and sports .... 178
6.12 Education, culture and art ....................................... 180
6.13 Science and scientific services .................................. 182
6.14 Credit .................................................................. 183
6.15 Insurance ................................................................ 185
6.16 General administration ............................................ 186
6.17 Defence ............................................................... 187

Other worksheets for 1989

7.1 Gross output at producers’ prices and at basic prices 1989 .... 188
7.2 Gross output, intermediate consumption and gross value added of households 1989-1990 ................................. 189
7.3 Final consumption expenditure of general government and private non-profit institutions serving households 1989 .......... 190
7.4 Compensation of employees by sectors and industries 1989 .... 191
7.5 Other taxes on production by sectors and industries 1989 .... 194
7.6 Property income by sector 1989 ................................... 200
7.7 Current transfers by sector 1989 .................................. 201
7.8 Capital transfers by sector 1989 ................................... 202

NOTE: In the Tables presented, figures may not add due to rounding. Small numbers may round to zero in Sections 2 and 3.
PREFACE

This document is the result of collaboration undertaken since 1990 between the former State Committee on Statistics of the USSR, and later by the Statistical Committee of the CIS, and the OECD Centre for Co-operation with the European Economies in Transition through the technical support of the OECD Statistics Directorate. The objective of the collaboration was to develop a methodology whereby estimates of national income according to the international standards of the System of National Accounts (SNA) could be produced, using detailed data available in a planned economy together with supplementary data and estimates where appropriate. After the dissolution of the USSR, it was decided to continue the work in order to provide comprehensive guidance to the staff in the republics of the former Soviet union who are faced with the same task of producing SNA estimates from similar data sources.

While the work was proceeding, the manual describing the SNA was itself under revision. As far as possible, the recommendations of the revised System have been adopted. Inevitably, however, some changes to the SNA were proposed after the earlier stages of this work were completed. Further, the revised System has still to be formally approved by the Statistical Commission of the United Nations. Nevertheless, it is thought that any variations between the methodology suggested here and the recommendations that will be incorporated in the revised SNA will be slight and capable of correction without extensive reworking.

This document describes how production accounts, generation, distribution and use of income accounts and capital accounts were developed for the USSR for the years 1988, 1989 and 1990. This is a major achievement. Nonetheless, more work remains to be done; accounts are needed in constant prices, on a quarterly basis and for financial transactions. It is expected that these will be the subject of continuing collaboration between the two institutions concerned.

Mikhaïl A. Korolev Salvatore Zecchini
Statistical Committee of the Commonwealth of Independent States Centre for Co-operation with the European Economies in Transition

Copyright OECD, Statistical Committee of the CIS, 1992.
CHAPTER 1
A Review of the Accounting Structure and the Sources of Data

Introduction

1.1 The first draft of the System of National Accounts (SNA) of the former Soviet Union was based on the instructions for implementing the SNA in Western market economies given in the European System of Integrated Economic Accounts (ESA), but with the categories and definitions of the ESA adapted to specific forms of organisation of economy in the country. These adaptations mainly concern taxation, subsidisation, the price system, methods of income distribution etc. A number of conceptual, methodological and statistical problems arise which pertain to sectorisation of the economy, introduction of new classifications, computation and allocation of the output of selected activities and the valuation of transactions. The recommendations of the ESA do not always respond to these problems. Thus alternative decisions were taken in relation to the treatment of highly subsidised activities, of financial intermediaries and of welfare services provided by subdivisions of enterprises and institutions to their employees. In a number of cases the solutions adopted are tentative and require further study. It should be emphasized that the instruments and mechanisms in the economy are undergoing rapid changes as a result of reforms, which will also require changes in the methodology to match reality.

1.2 In the course of the elaboration of the original draft some new elements resulting from the revision of the SNA were introduced. They refer, for example, to compilation of the production accounts for all sectors of economy; to the redistribution of income in kind account and the use of the adjusted disposable income account; the introduction of such concepts as mixed income and social transfers in kind; the distinction between final consumption expenditure and actual final consumption; the extension of the concept of fixed capital formation etc. Some deviations from the new SNA still remain. Not all accounts are introduced, for example, the financial account, other changes in volume of assets account and balance sheets; the distribution of income account is not divided into two accounts for distribution of primary income account and secondary distribution of income account. No imputation is made in respect of rent on buildings owned by general government. A special treatment of output of financial institutions is adopted to take care of the peculiarities in the organisation of the economy. Thus, a distinction is made between output of state banks and commercial banks. The output of state banks is estimated at cost and allocated to final consumption expenditure of general government. The output of commercial banks is imputed (taken as the difference between interest received and paid) and allocated to intermediate consumption of a notional unit.

1.3 On the other hand, the SNA estimates for the former Soviet Union have kept certain consistency with the traditional MPS estimates. This has been
achieved, first of all, by grouping of kinds of activities on the basis of the All-Union Classification of Industries of National Economy in use at the period to which the estimates relate. A systematic distinction has been made, where it is relevant, between the flows of material goods and services and the non-material services, as well as between the material and non-material industries. Among other methods of the MPS also kept in this implementation of the SNA is the definition of gross output of agriculture on the gross gross basis. It seems to be reasonable especially in a transition period connected with considerable changes in the organisation of the economy because it ensures figures which are more invariant. This concept is also more suitable for the compilation of input-output tables.

Main categories of the system

1.4 A productive activity is defined as one which gives rise to the production of goods and services. It covers the activities of enterprises in both the material and non-material spheres, the activities of general government and of private non-profit institutions. It also includes productive activities by households. These cover the production of all goods whether they are sold or not, including agricultural products from personal plots, construction at own account and the output of individual labour activity. Services produced by households for their own consumption are excluded except in respect of the imputed rent of owner-occupied dwellings. In principle the definition of productive activity should cover both legal and illegal activities which give rise to goods and services as defined above. However, at the present time illegal activities are not covered because of the lack of reliable data.

1.5 The producers of goods and services are classified by industries distinguished in the All-Union Classification of Industries of National Economy. Industries are defined as groups of establishments engaged in the same kind of productive activities. They are divided between the two spheres: the sphere of material production and the sphere of non-material services. The sphere of material production covers the industries which give rise to the production of goods and material services. They are:

- industry;
- agriculture;
- forestry;
- construction;
- transportation of goods;
- maintenance of roads;
- communication serving the sphere of material production;
- wholesale and retail trade;
- catering;
- material supply;
- procurement;
- information and computing services;
- other branches of material production.
The sphere of non-material services covers the industries which give rise to non-material services:

-- health care;
-- social security;
-- physical culture and sports;
-- education;
-- passenger transportation;
-- communication serving the sphere of non-material production and households;
-- housing services, public utilities and personal services;
-- culture and art;
-- science and scientific services;
-- credit;
-- insurance;
-- general administration and defence;
-- non-profit institutions serving households.

1.6 Institutional units are grouped into the following sectors according to the natures of their economic activity:

-- non-financial enterprises;
-- financial institutions;
-- general government;
-- private non-profit institutions serving households;
-- households.

1.7 Non-financial enterprises include institutional units whose main function is to produce goods and non-financial services for sale at prices which cover production costs. These include self-supporting units, though in some cases part of the cost could be covered by subsidies and grants from the State budget. The resources of these units are mainly derived from receipts from sales of goods and services. By convention, enterprises that are completely financed from the State budget but produce goods and material services (public enterprises in forestry and water systems) are also treated as non-financial enterprises. Private non-profit institutions established by various groups of producers whose expenditures are financed by the fees of members (e.g. business associations, chambers of commerce etc.) are also included in the non-financial enterprises sector.

1.8 Financial institutions consist of institutional units engaged in financial transactions on a commercial basis, such as commercial credit institutions and insurance companies. They are institutions that are primarily engaged in financial intermediation and in auxiliary financial activities. The activity of credit institutions in the country had the specific feature during the period of estimates that their resources were mainly derived from insurance premiums. Since 1988 commercial banks were allowed and their number started to grow rapidly; however, their role was still limited. On the other hand, the State Bank (Gosbank), as well as some other banks, were still an integral part of the state budgetary system: it automatically financed the state budget deficits, provided interest free credit to state agencies and its functions were similar to other government bodies engaged in management and regulation of
economy. Considering this all credit institutions were subdivided into two groups:

a) commercial banks which included newly organised commercial banks and also some state banks operating on a commercial basis, i.e. Sberbank (Saving Bank) and Vnesheconombank (Bank for Foreign Economic Relations); only this group was allocated to the financial institutions sector;

b) state banks which included Gosbank (State Bank), Promstroybank (Bank for Industry and Construction), Agroprombank (Bank for Agriculture and Related Industries), Zhilsotsbank (Bank for Housing and Social Services); this group was allocated to general government.

1.9 General government includes institutional units engaged in rendering non-marketed services for collective consumption and providing services for individual consumption which acts as redistribution of national income and wealth. The institutions included are financed mainly from the state budget, undertake general administration, finance, regulation and planning of the economy, scientific research activity, environmental protection, defence, internal law and order as well as providing services to the population in the fields of education, health, physical culture and sports, culture and art free or at reduced prices.

The subdivisions of enterprises and institutions providing such services to their employees are allocated to the same sector as the enterprises and institutions which own them.

F. Social security and social insurance funds (institutions) are also included. At present this sector also includes public, central, regional and local banks whose main functions are providing financial services to general government agencies, issuing notes, coins and securities, custody of gold and foreign currency. Private non-profit institutions as long as they are financed and controlled by government institutions are also allocated to general government. The resources of these units come mainly from compulsory payments made by units belonging to other sectors or from property income and donations.

1.10 Private non-profit institutions serving households comprise institutional units providing services to particular groups of households. They serve individual households mainly in the field of education, health, culture and art, religion, leisure and social services and households collectively in the case of political parties and trade unions. These institutions are neither controlled nor financed by government institutions. Their resources come mainly from voluntary payments and donations by households and from property income.

1.11 The household sector comprises resident households irrespective of their size and form. All households are consumers and some undertake economic activity. The accounts for this economic activity typically cannot be separated from the households’ own accounts either legally or economically. The productive activities included cover subsidiary agricultural plots of workers and employees, members of co-operatives, individual farms and small production of private craftsmen as well as private enterprises without independent legal status.

1.12 In addition accounts for the rest of the world are compiled which bring together all aspects of transactions by foreign economic units with residents of the country. In effect therefore the rest of the world acts as a (de facto) sector of the economy.
System of accounts

1.13 The original intention was to elaborate seven principal accounts for the country. These are the goods and services account, production account, generation of income account, distribution of income account, use of income account, capital account and financial account. For the rest of the world accounts would be compiled for current transactions, the capital account and the financial account. It was intended to compile all the accounts for the economy as a whole. For each of the domestic sectors, the accounts from production through to financial account would be compiled. For industries it was hoped to compile the production account and the generation of income account. Goods and services accounts were to be compiled by groups of products. The following Table shows the pattern of core accounts that it was hoped ultimately to compile using the SNA. So far, the estimates have been made for all the consolidated accounts excluding the financial account. These are shown in tables in Section 1. Production accounts and generation of income accounts were also compiled by industries and sectors; distribution of income accounts, use of disposable income accounts and capital accounts were compiled by sectors. The redistribution of income in kind accounts and use of adjusted disposable income accounts were constructed using the elements taken from the revised SNA. The tables by sector are shown in Section 2 and by industries in Section 3. For the rest of the world only the current transactions account was compiled.

1.14 In addition to the accounts, the system also includes as an integral element a table (Table 1.1) showing the supply and use of goods and services. It resembles an aggregate input/output table compiled at purchasers' prices. The supply of products (or goods and services) is calculated by adding to output at basic prices imports of goods and services, taxes on products net of subsidies and trade and transport margins. The disposition of goods and services is between industries, exports, final consumption (split between households, general government and non-profit institutions serving households) and gross capital formation (split between gross fixed capital formation and changes in stocks). The system also includes in Sections 4 and 5 a set of tables with a cross classification of the main aggregates by sectors and industries. A number of additional tables with detailed calculations for 1989 are shown in Sections 6 and 7.
| Accounts | ------ | Goods | • | • | Distri- | Use of | Groups • | and • | Genera- | tion • | dispos- • | •Rest of | of • | Serv- | Produc- | tion • | of • | able • | •the | units • | ices • | tion • | income | income | income | Capital | Financial | world |
|----------|--------|-------|---|---|--------|--------|---------|--------|---------|--------|--------|---------|--------|--------|---------|--------|---------|--------|---------|--------|--------|--------|--------|---------|--------|--------|
| Domestic economy | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| total • | X • | X • | X • | X | X | X X | X X | | | | | | | | | | | | | | | | | | | | | | | | |
| Non- financial enterprises | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Financial institutions | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| General government | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Private non-profit institutions serving households | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Households | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rest of the world | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Industries | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Valuation principles

1.15  The main flows in the system are valued at the prices actually used in transactions. Gross output is valued at basic prices. All items of disposition of goods and services including intermediate consumption are valued at purchasers’ prices. This means that net taxes on products are not part of the value added of industries. Taxes on products, net of subsidies on products, have to be added to the sum of value added of all industries to arrive at the GDP at market prices. Non-marketed goods and services are valued by using the market price of similar goods and services that are marketed where these are available and where not they are valued at the sum of costs of production. In particular the services of general government and private non-profit institutions are valued as the sum of costs. Further information on the methods of valuation to be adopted is given in the description of the methodology for the individual items in subsequent chapters. Valuation in constant prices is not considered in this publication.

Sources of data

1.16  One of the important issues associated with the introduction of the System of National Accounts refers to the adaptation of the existing reporting system to the requirements of the SNA as well as to introduction of new sources of data. This problem has a more general connotation because of economic reforms in the country and the necessity to ensure consistency between the system of information and emerging institutions and mechanisms. The statistical reporting system of the country was established as a part of the administrative management of the economy and focused on those aspects of economic analyses which were of the immediate interest for the state planning authorities, i.e. on production and distribution of material resources. Considerably less attention was paid to financial aspects because the role of the financial institutions was a rather limited one in a "command" economy. The existing reporting system provided adequate data for compilation of the MPS balances where the emphasis was on recording flows of material goods and where analysis of financial transactions was not a priority. However some information on these transactions was presented within the framework of such MPS balances as the consolidated financial balance (balance of the production, distribution, redistribution and final use of gross social product and net material product) and the balance of money incomes and expenditures of population as well as in the accounting and finance statistics. All these data were also used for the compilation of the SNA estimates. Most of them were drawn from the reports submitted by enterprises, institutions and agencies to statistical authorities.

1.17  The reporting system consisted of two flows of information from enterprises and institutions: book-keeping and statistical reports. Book-keeping reports were primarily intended to provide for the needs of enterprises and their supervisors for information to analyse the production process and the result of the activities of enterprises. Book-keeping reports were specialised for various industries. The data of these reports were used, as a rule, when no statistical reports on the issue were available. This was the case for example, for agricultural, transportation and communication enterprises, banks and insurance companies. Statistical reports were made by enterprises and institutions on the basis of the book-keeping reports. Their purpose was to collect the necessary information on various branches of
statistics to satisfy the needs of the state planning authorities. For the compilation of the national accounts the following consolidated statistical reports of enterprises and institutions were used:

-- the report on the number of enterprises, employment and output in the industry by branches;
-- the report on the cost of industrial output;
-- the report on capital investments by customers (industries and ministries);
-- the report of contractors on the cost of construction work;
-- the report on the cost of geological and exploration work;
-- the report on the construction of private buildings by households;
-- the annual censuses of livestock;
-- the report on the stock of dwellings;
-- the report on the income and outlays of housing units of local government;
-- the report on the public utilities;
-- the report on the sales of personal services;
-- the report on the sales and prices of kolkhoz market trade in 264 cities;
-- the report on the employment, wages and salaries and other remuneration for labour by industries;
-- the report on the number of cooperatives and the main indicators of their activities.

Among other sources of data used for compilation of national accounts the following should be mentioned:

-- the reports of the Ministry of Finance on revenues and outlays of the State budget; on the expenditure for welfare and general administration purposes; on the taxes on income received from the individual labour activities;
-- the consolidated financial report on the budget of the social insurance funds;
-- accounting statistics;
-- household budget surveys.

The data collected from the above mentioned sources do not in all cases meet the definitions of the SNA and certain adjustments had to be introduced to
ensure their consistency. For example, the classification of the state budget revenues and outlays does not correspond to the categories of the SNA. The classification of the costs of enterprises does not permit certain important components of intermediate consumption, e.g. purchases of services, to be identified.

1.18 At the beginning of the 1990s the reporting system started to undergo visible changes: the volume of information submitted by enterprises to the statistical authorities was considerably reduced. In particular, the enterprises were not obliged to submit their book-keeping data on financial aspects of their activities. The number of new types of enterprises not covered by the regular reporting system continued to grow rapidly at that time. They are commercial banks, "small" private enterprises, cooperatives, joint ventures, commodity exchanges etc. The special system of collecting information from these units is still developing. Further transformation of the economy will require further changes in the corresponding information systems. They will be introduced by the authorities of the individual members of CIS.
CHAPTER 2
Gross Output

Coverage

2.1 The output of goods and services represents the value of goods and services that result from the production activity of resident producer units in the given period. It covers all marketed and non-marketed goods and services. Some special categories of goods and services which are produced but not marketed are also included in the value of output. These include:

-- goods that are produced by an establishment for consumption within the parent enterprise (for continuity with existing national statistical practice this includes such items as seed and plant for use in agriculture, coal used by coal mines in the production of coal briquettes);
-- goods which are to be used for own account capital formation including both structures and other fixed assets (plant and machinery);
-- goods and services which are exchanged in barter terms;
-- goods and services which are used for remuneration of employees in kind;
-- goods which are transferred to the subdivisions of enterprises providing services to the employees (canteens, kindergartens, hospitals etc.);
-- agricultural and food products produced by households for their own consumption (food crops, meat, milk, eggs, the production of wine and cooking oil);
-- other goods produced by households, for example, clothing, footwear, furniture, textiles etc.;
-- imputed rent on owner-occupied dwellings;
-- imputed service charge of financial intermediaries.

Services produced by households for their own consumption such as cooking, cleaning and child-care are not included in output. However, if a household pays someone to perform these services they are included in output. Rent on land was treated as property income and not included in output.

2.2 Gross output was calculated as the sum of output by industries. The estimates of the gross output of industries which belonged to the sphere of material production (see paragraph 1.5) were based on the calculation of the gross social product in the MPS with necessary adjustments. The gross output of industries which belong to the sphere of non-material services (see paragraph 1.5) is not calculated in the MPS; such estimates were made specially for this project.
Valuation

2.3 The valuation of output of goods and services in the reports of producers differed across various industries: some showed output in producers’ prices, others in basic prices. This was a result of the peculiarities in the price system. In the first case the necessary adjustments were made to arrive at basic prices. Incomplete goods were treated as work in progress and were entered into stocks with a value reflecting the cost of production to date. The description of sources of information and methods of estimates of the gross output by industries is given below. Information covering gross output at producers’ and basic prices for 1989 is shown in Table 7.1.

Industry

2.4 Industry includes mining, energy, water supply, fishing, manufacturing, repair of machinery and equipment, laundering, cleaning, film processing. The main source of information about the gross output of industry was the consolidated statistical report covering the number of enterprises, employment and output in industry by branches. It was based on book-keeping reports and covered all public enterprises (including those co-operatives which were their subdivisions), secondary industrial activities of consumer co-operation enterprises, F

F Consumer co-operation enterprises were first organised in the 1920s for purchasing agricultural goods from rural households and providing them with manufactured goods. It covers procurement, trade and food industry enterprises.

The data about output taken from the report were adjusted by:

a) deducting the output of the research subdivisions of the enterprises (allocated to the science and scientific services);

b) adding the work-in-progress in some branches not included in the report;

c) adding the output of private industrial co-operatives (those that were not the subdivisions of public enterprises).

The sources of information for the adjustments mentioned under a) and b) were the reports of enterprises. The source of information about co-operatives was the statistical report which contained the data about their number and main indicators of their activities: sales, employment, compensation of employees and others. The output of private industrial co-operatives was calculated as the difference between the output of all industrial co-operatives taken from the report and the output of co-operatives included in the reports of public industrial enterprises to which they belonged. The resulting figure of gross output was allocated to the sector of non-financial enterprises.

2.5 Total output of industry also covered the following activities of households:

a) cooking oil, wine and construction materials production whether for sale or for own consumption;

b) production of handicraft and art works, dressmaking, shoemaking, repairs and similar services allocated in the USSR classification to industry if for sale only.
The sources of information about these activities of households were as follows:

a) The balance of money incomes and expenditures of population for the sums received by households from sales of handicrafts to the procurement agencies; the original source of these data were the reports of these agencies;

b) the report of the Ministry of Finance about the taxes on income of unincorporated enterprises;

c) the data from the household budget survey about dressmaking, shoemaking and repairs, cooking oil, wine and construction materials production.

Agriculture

2.6 Gross output of agriculture consists of the following elements:

a) The value of finished plant goods.

b) The value of finished animal goods, including fur and fish farming.

c) The value of planting and cultivation of perennial plants (except forests).

d) The change in the value of work-in-progress.

e) The value of output of agricultural services. The output of cropping is determined after deducting harvesting losses.

The output of animal husbandry consists of the value of the animal offspring, the gain in the weight of the animals and the value of goods obtained from live animals (milk, eggs, honey, wool etc.). The output of planting and cultivation of perennial plants represents the expenditure on them till they reach fruitbearing age and are transferred to the category of fixed assets. The output of agricultural services covers such activities as ploughing, fertilizing and other cultivation of soil, the control of pests, the operation of irrigation and reclamation plants and veterinary services. Some of these services are market, others are non-market (mainly the operation of the irrigation and veterinary services). In the MPS these services are not included in the gross output of agriculture; only the value of market services is included in the material input of agriculture.

2.7 Gross output of agriculture includes all agricultural goods wherever they have been produced: in specialised state and collective farms, in subsidiary units of enterprises of non-agricultural industries or by households. On the other hand, gross output of agriculture does not include the output of subsidiary units of agricultural enterprises, such as production of electricity, the industrial processing of agricultural products, construction etc.

2.8 Gross output of agriculture was calculated on the gross gross basis, i.e. including the value of agricultural goods produced by the given unit and
used for its own productive purposes, for instance, cereals and potatoes produced by the farm and used by it for seed or feed.

2.9 The data about the gross output of agriculture (except the output of agricultural services) were based on the following sources of information:

a) the reports of the specialised agricultural enterprises (state and collective farms);

b) the reports of the enterprises belonging to other industries on their subsidiary agricultural activities;

c) the reports of agricultural co-operatives;

d) household budget surveys.

2.10 The value of finished plant and animal goods was calculated in the following way. For the main goods, resource and use tables were developed which showed the volumes of output, and various uses of goods at producers' units (enterprises and households). The value of output was calculated by valuing the various uses separately. The output of goods for sale was valued at the actual prices at which it was sold to the state or co-operative procurement organisations or at the market. The output of goods used by enterprises for intermediate consumption was valued at cost. The output of goods supplied in kind by the farms to their employees was valued at average retail prices. The output of goods used by households for intermediate consumption and stocks was valued at the average prices of sales, and the output of goods used for own consumption at the average retail prices.

2.11 The change in the value of work-in-progress was calculated as the difference between the expenditure during the current year for the crops of the next year and the same expenditure during the last year. It was not calculated for households. The output of planting and cultivation of perennial plants was valued at cost. In principle, allowance should be made for the effects of inflation but so far in practice this has been ignored.

2.12 The data about the output of market agricultural services were taken from the reports of the enterprises rendering such services. The output of non-market agricultural services (the operation of the water systems and veterinary services) was calculated as the sum of compensation of employees, intermediate consumption and consumption of fixed capital of the corresponding organisations. The compensation of employees was taken from the labour statistics report about the employment, wages and salaries and other remuneration for labour. Intermediate consumption and consumption of fixed capital were estimated using the same proportion to the compensation of employees as shown in the reports of enterprises rendering similar market services.

Forestry

2.13 The industry "Forestry" covers the afforestation care of forest plantations, the maintenance of the forests in a proper state and other works contributing to natural afforestation. The gross output of forestry was valued
at cost including the consumption of fixed capital. The sources of information for these estimates were as follows:

a) the reports of the state forestry enterprises;
b) the reports on the forestry of the state and collective agricultural enterprises.

Construction

2.14 Gross output of construction consists of the value of work on the production and reconstruction of fixed assets produced either by contractors or on own account. It covers the following activities:

a) construction, assembly and installation works;
b) geological exploration and drilling works relating to individual investment projects;
c) research and planning works relating to individual investment projects;
d) major repairs of buildings and other structures;
e) current repairs of buildings and other structures carried out by contractors;
f) construction of private houses and buildings for productive purposes carried out by households at their own account;
g) improvement of land, irrigation and reclamation works, planting new forests, orchards and vineyards.

2.15 When calculating the gross output of construction, the industrial method was applied. This means that the value of work carried out by a sub-contractor for the main contractor is not included as a separate item in the gross output of construction, but is a part of total volume of work carried out by the main contractor. The alternative treatment, to regard the sub-contractors independently, would increase gross output and intermediate consumption of construction output by other construction enterprises by the same amount. The value of the equipment installed in structures was not included in the gross output of construction.

2.16 The sources of information for the calculation of the gross output of construction were as follows:

a) the statistical reports of all enterprises and co-operatives about their capital investments (complete and incomplete);
b) the reports of contractors on the cost of the construction work done;
c) the data of accounting statistics about the expenditures on major repairs of buildings and other structures based on the book-keeping
reports of enterprises concerning the stocks of and changes in fixed assets and depreciation;

d) the report on the construction of private buildings by households. The area of newly built houses and other structures was multiplied at the average price per square metre charged by specialised building enterprises for similar building work.

Construction of houses was allocated to the household sector when it was undertaken on own account and to the sector of non-financial enterprises when it was undertaken by contractors. Major repairs of private buildings was defined at the rate of 2 to 3 per cent of the value of their stock at the beginning of the year.

2.17 The gross output of construction carried out by contractors was evaluated at the actual price paid by the customer. The gross output of construction carried out on own account was evaluated at cost.

Transport

2.18 The industry "Transport" includes railway, water, air, motor, pipeline transport, city electric transport (underground, tramways, trolleybuses) and rafting. It covers all activities connected with the transportation of goods and passengers carried out by the state and co-operative transport enterprises, and similar services provided for sale by the subsidiary divisions of enterprises belonging to other industries. Transportation of goods was allocated to the sphere of material production and transportation of passengers to the sphere of non-material services.

2.19 Gross output of transport was estimated as the sum of actual receipts for goods and passengers transportation, transportation of mail, loading and unloading, storage etc.

2.20 The sources of information for the estimation of gross output of transport were as follows:

a) the reports of transport enterprises on their incomes and outlays;

b) the reports of the enterprises belonging to other industries on their subsidiary transportation activities;

c) the reports of transport co-operatives.

In principle the output of transport services provided by households for sale (for example private taxis) should also be included but in practice it was not estimated because of the absence of information. In most cases, the data in the above-mentioned reports allowed the receipts for the transportation of goods or passengers to be allocated directly. Some items were divided arbitrarily by means of coefficients used in the MPS estimates.

Maintenance of roads

2.21 The industry "Maintenance of roads" includes enterprises dealing with the repairs and maintenance of motor ways and associated structures excluding
the city motor ways allocated to the industry "Public utilities and personal services" (see paragraph 2.40). These services are non-market and the gross output of the industry was taken to be equal to the costs including the consumption of fixed capital. The sources of information were as follows:

a) the reports of the specialised enterprises on the costs of the repairs and maintenance of roads;

b) the data of accounting statistics on the depreciation of the fixed assets of these enterprises and of the roads.

Communications

2.22 The industry "Communications" includes post, telegraph, telephone and wireless communications. The gross output of communications was estimated as the sum of the receipts of the state enterprises from delivery of mail, periodicals, parcels, sales of postage stamps, cards etc.; for use of telephone and telegraph channels and for installation of telephones; the receipts of broadcasting and television etc. These data were taken from the report of the Ministry of Communications. The receipts from various communication services by type were divided between the services for the sphere of material production and services for the sphere of non-material services and households. This was made by means of coefficients defined by the Ministry of Communications as a result of a special survey and used in the MPS estimates. If a separation between material and non-material activities is to be maintained, the co-efficients would need revision because the survey was undertaken many years ago (as in many other similar cases).

Trade, catering, material supply, procurement

2.23 Distribution of commodities is undertaken by the following industries: trade, material supply, procurement. Each of them has its specific functions. Trade mostly covers consumer goods; material supply covers providing raw materials (except agricultural goods), fuel, energy, equipment etc. to enterprises; procurement agencies cover the purchase of agricultural goods from producers and their supply to manufacturers. Catering is included in this group because it is often combined with trade.

{Trade}

2.24 The industry "Trade" includes retail and wholesale trade. Retail trade also covers vegetable storage. Wholesale trade covers internal trade, external trade and distribution of films.

2.25 Gross output of trade was estimated as the trade margin, i.e. the difference between the sale price and the purchase price of goods. The sources of information for these estimates were as follows:

a) the reports of the state trade enterprises;

b) the reports of the trade enterprises of consumer co-operation;
c) the reports of vegetable storage enterprises;
d) the reports of the trade subdivisions of units belonging to other industries;
e) the reports of the trade co-operatives.

The reports mentioned under a), b), c) contained the data about trade margin directly. For the trade subdivisions in other industries it was estimated using the same ratio of the trade margin to costs. For co-operatives the trade margin was estimated using data about their turnover and the ratio of trade margin to turnover for the state trade enterprises. In principle the trade activity of households should be included but it was not estimated because of the absence of information.

(Catering)

2.26 The industry "Catering" includes restaurants, cafés, canteens, etc. Gross output of catering is equal to the turnover of these enterprises including the value of both goods used for cooking and those sold without processing. The sources of information about the output of catering were the same as for the output of trade.

(Material supply)

2.27 The gross output of material supply is equal to trade margin of the corresponding enterprises. The sources of information were:
   a) the reports of the state material supply enterprises;
   b) the reports of the material supply subdivisions of enterprises belonging to other industries.

(Procurement)

2.28 The gross output of procurement is equal to the trade margin of enterprises dealing with the purchase of agricultural products. The sources of information were as follows:
   a) the reports of the state procurement enterprises;
   b) the reports of the procurement enterprises of consumer co-operation;
   c) the reports of the co-operatives dealing with trade and procurement activities.

The trade margin of enterprises mentioned under a) and b) was calculated as the sum of the costs other than the purchase of goods for resale and net profit. The report on the activities of co-operatives did not allow their procurement activity to be defined exactly. Co-operatives allocated to the industry "Procurement" undertake not only procurement of agricultural products but also trade and maybe some other activities. The gross output for them was estimated
using the data about their turnover and the percentage of trade margin to turnover for the state procurement enterprises.

Information and computing services

2.29 The industry "Information and computing services" covers the market activities on the processing of information. The gross output of information and computing services is equal to the sales of such services. The sources of information were:

a) the reports of the information and computing centres and other similar enterprises;

b) the reports of the co-operative facilities dealing with processing of information.

Other branches of material production

2.30 The industry "Other branches of material production" includes the activities of publishing agencies, film studios, waste and scrap processing, the procurement of forest goods, fishing, hunting.

2.31 The gross output of publishing agencies is the value of printed matter. It was estimated on the basis of reports of relevant trade associations.

2.32 The gross output of film studios is the value of films sold to the enterprises dealing with their distribution (which are allocated to trade) or to other customers, plus the changes in the value of work-in-progress. The gross output of film studios was taken from the MPS estimates where it was calculated as the sum of the cost of film production including the consumption of fixed capital and net profit from the sale of films. The sources of information were the reports of the film studios.

2.33 The output of waste and scrap processing includes the collection and primary processing of metal and other scrap. The gross output of the metal scrap is the difference between the sale and purchase prices. The gross output of other scrap is equal to the sales. The sources of information were the reports of enterprises of consumer co-operation and other enterprises dealing with waste and scrap processing.

2.34 The procurement of forest goods, fishing and hunting includes the value of firewood, peat, wild plants, mushrooms, berries and fruits, fish and game procured by households for sale and for own consumption. The gross output of procurement of forest goods, fishing and hunting was valued at market prices: sales to procurement enterprises and at the free market were valued at actual average sale prices, goods for own consumption were valued at the prices of procurement enterprises. The sources of information were:

a) the data of household budget surveys;

b) the reports of enterprises of consumer co-operation dealing with these activities.
Housing services

2.35 The industry "Housing services" covers the services on rented dwellings, including hostels, and services provided for their own use by households owning their dwellings. The approach to the valuation of the gross output of the housing services has some peculiarities due to the fact that they are highly subsidised and that there are a variety of owners of housing units: local government, dwelling co-operatives, enterprises, government agencies and households. The differences in ownership and mode of financing of costs influenced the allocation of the housing units to institutional sectors and the application of the various methods of valuation of output.

2.36 The housing units owned by local government cover their costs partly from the rent (about 30 per cent) and partly from the state subsidies. They were allocated to non-financial enterprises (as quasi-corporations) on the ground that the government never intended to provide housing services free of charge but was willing to subsidise producers in order to achieve certain social objectives. The gross output of such units was valued at basic prices (i.e. including subsidies), but consumption of housing services was taken to be equal to actual rent (i.e. at purchasers' prices excluding subsidies).

2.37 The housing units owned by enterprises and government agencies (some of them provide housing free or at reduced prices) were considered as their establishments and were not treated as separate institutional units. Their output was valued at cost including the consumption of fixed capital. The part of output of the housing units owned by enterprises which was not covered by rent was allocated to final consumption expenditure of private non-profit institutions serving households financed by imputed transfers from the enterprises and to actual final consumption of households. The part of output of the housing units owned by budgetary government agencies which was not covered by rent was allocated to final consumption expenditure of the general government and also to actual final consumption of households.

2.38 The dwellings occupied by their owners or rented by them were considered as unincorporated enterprises of households. The output of the former was imputed on the basis of costs because it was difficult to find an appropriate market rent. The output of the latter was estimated on the basis of the data about the taxes on income of unincorporated enterprises dealing with renting the dwellings.

2.39 The main sources of information for estimation of the gross output of housing services were as follows:

a) the report on the incomes and outlays of housing units of local government;

b) the report on housing services of self-financing enterprises;

c) the report on the housing services of collective farms;

d) the report on the stock of dwellings;

e) balance of money incomes and expenditures of households (the data about taxes on dwellings);
f) the report of the Ministry of Finance on the taxes on income of unincorporated enterprises;
g) household budget surveys (the data about purchases of goods for intermediate consumption of owners of dwellings).

Public utilities and personal services (excluding those allocated to industry)

2.40 The industry "Public utilities and personal services" covers the services of enterprises dealing with gas and water supply, sewerage, city improvement and planting, maintenance of city roads, the services of the special motor transport used by these enterprises, hotels, photo studios, hairdressers, public baths, hire of consumer goods, funeral and other services.

2.41 The gross output of these services was taken to be equal to their sales from the following sources:

a) the consolidated report on the public utilities (data on gas supply, city improvement and planting, the maintenance of roads, special transport);
b) the report on the housing services and public utilities rendered by enterprises and organisations belonging to other industries;
c) the report on the sales of personal services (the data on the photo studios, hairdressers, hire of consumer goods, public baths);
d) the reports on the sales of the services of hotels, water supply and sewerage, funeral services.

Health care, social security, physical culture and sports

2.42 The industry "Health care, social security, physical culture and sports" covers the activities of hospitals, clinics, sanatoria, holiday centres, tourist camps, stadia, sport clubs, social security agencies. The industry is characterised by the great diversity of modes of financing. Most of the health services are rendered by institutions entirely financed from the state budget. Most of the services related to recreation and sports are market ones but some of them are highly subsidised from the social insurance funds. At the same time a significant part of both groups are provided by subdivisions of enterprises belonging to other industries. The market activities in these spheres are carried out by both the public and co-operative institutions; the services of officially registered private doctors and dentists are also included. The non-market services are provided by social security agencies.

2.43 The gross output of market services was estimated at basic prices. The value of these services rendered by the public institutions were taken from the report on the value of market services rendered to households less the value of services of pioneer camps which were mostly non-market. The value of services rendered by co-operatives was taken from the report on their number and main indicators of their activities. The value of services of private doctors and dentists was calculated on the basis of the Ministry of Finance report about the taxes on the income of such unincorporated enterprises.
2.44 The services rendered by subdivisions of enterprises to their employees free of charge or at low prices were valued at cost including the consumption of fixed capital. The gross output of these services was estimated using the data of accounting statistics about the payments and privileges received by households from the social funds of enterprises. These data are based on the reports of enterprises on their use of the social funds.

2.45 The gross output of non-market services was estimated at cost. The main source of information was the report of the Ministry of Finance on the expenditures from the state budget for welfare purposes. The classification of expenditures allowed current and capital expenditures to be divided as well as the identification of current transfers (pensions, scholarships etc.) Gross output was derived from the sum of the current expenditures by adding:

a) current expenditures on the maintenance of the social insurance agencies, of the pioneer camps, on the health services at the expense of the social insurance funds (taken from the consolidated financial report on the budget of the state social insurance funds);

b) the consumption of fixed capital.

Education

2.46 The industry "Education" covers the activities of kindergartens, various schools (primary, secondary, vocational, musical, art etc.), institutes, universities and institutions dealing with the professional training of adults. There are also various modes of financing of these activities but the financing from the state budget predominates.

2.47 The gross output of non-market services was estimated at cost on the basis of the report of the Ministry of Finance on the expenditure from the state budget for welfare purposes. The sum of current expenditures taken from the report was augmented by the following items:

a) the current expenditures on the extra-mural educational services for children (taken from the consolidated financial report on the budget of the state social insurance funds);

b) the consumption of fixed capital.

2.48 The gross output of educational services provided by subdivisions of enterprises to their employees was estimated in the same way as their health services (see paragraph 2.44). The source of information used only gave the gross output of educational and cultural services together. They were separated arbitrarily.

2.49 The gross output of the market educational services was taken to be equal to the corresponding payments of households.

Culture and art

2.50 The industry "Culture and art" covers the activities of cinemas, theatres, clubs, libraries, museums, art galleries, radio and television. The
sources and methods used for the estimation of the gross output of this industry were the same as for education.

Science and scientific services

2.51 The industry "Science and scientific services" covers the activities of research institutions, research subdivisions of industrial enterprises, and also the activities of contracting engineers, geological and exploration organisations not related to individual investment projects. Activities of the public institutions in this sphere are entirely financed from the state budget; activities by other institutions are formally self-financing but may be subsidised. Some of them cannot really be considered as self-financing because they are in effect subdivisions of some budgetary organisations and get their funds from them. The information available did not allow public research institutions to be properly allocated between non-financial enterprises and general government. The separation was made on the basis of data about sources of financing of the research work.

2.52 The gross output of market services was calculated as the difference between the total market value of these services and the value of services financed from the state budget. The result was increased by the market value of scientific services provided by co-operatives. The sources of information were as follows:

   a) the consolidated report on the principal activity of research organisations which was developed from accounting statistics on the basis of reports of these organisations;

   b) the report on the number of co-operatives and main indicators of their activities.

2.53 The gross output of non-market services was calculated as the sum of the current expenditures on research, geological and exploration works financed from the state budget and the consumption of fixed capital. The sources of information were as follows:

   a) the report of the Ministry of Finance on the revenues and outlays of the state budget;

   b) the report on the cost of geological and exploration works provided by enterprises carrying out such works at the expense of the state budget.

Credit

2.54 The industry "Credit" covers the activities of financial intermediaries which were represented at the time the estimates were made by state and commercial banks (see paragraph 1.8). The gross output of the financial intermediaries included the following components:

   a) the non-market output of state banks;
b) the market output of commercial banks associated with financial intermediation;

c) the market output of state and commercial financial auxiliaries.

The non-market output was valued at cost including the consumption of fixed capital. The market output of commercial banks associated with financial intermediation was imputed, i.e. taken to be equal to the excess of property income received over the interest paid out. In practice it was not feasible to separate interest received on own funds to remove this from property income received. The output of financial auxiliary services was taken to be equal to actual payments for services. The source of information for the estimates was the consolidated report of the State Bank which contained also the reports of other state banks and, since 1990, newly organised commercial banks.

Insurance

2.55 The industry "Insurance" covers the services of life and non-life insurance. At the time of estimates they were provided only by the State Insurance Agency (Gosstrah). The gross output of the services produced by it were measured in the following way:

a) the gross premiums earned (excluding the premiums related to the insurance of extra pensions);

b) less the claims due (excluding the claims related to the insurance of extra pensions);

c) less the increase of the reserves for life insurance;

d) plus the interest accrued on insurance reserves.

The source of information was the report on the principal activity of the State Insurance Agency.

General administration and defence

2.56 The industry "General administration and defence" covers the services of the state power and legal authorities, of the commercial legal institutions, the lottery services and the activities related to the maintenance of the army, the navy and the air force.

2.57 The gross output of non-market services of the state power and legal authorities was valued at cost. The data on current expenditures were taken from the report of the Ministry of Finance on the expenditures from the state budget on the maintenance of these authorities.

2.58 The gross output of the market legal services was calculated as the sum of the following items:

a) actual payments of households for the services of the legal advice bureaux;
b) the purchases of services of the legal co-operatives (estimated using the data of the report on their activities as an arbitrarily defined part of the output of cooperatives not allocated to any kind of activities).

2.59 The output of lottery services was calculated as the difference between the sales of lottery tickets and the sum of the winnings paid out. These data were taken from the reports of the organisations which distributed the tickets and paid out the winnings (saving banks, non-profit organisations etc.).

2.60 The gross output of defence was valued at cost. The current expenditures were taken to be equal to the published sum of defence expenditures (excluding the expenses on construction and research and development).

Private non-profit institutions serving households

2.61 The gross output of private non-profit institutions serving households was taken to be equal to their costs including the consumption of fixed capital. These are described in the sections below.
CHAPTER 3
Intermediate Consumption

Coverage

3.1 Intermediate consumption is regarded as being made up of the following major components:

a) material input (goods and material services);
b) purchases of non-material services;
c) business travelling expenses;
d) any expenditures of institutional units on providing normal conditions of labour not covered in a) or b).

3.2 Material input includes the following items:

-- raw materials and goods embodied in the final product;

• materials used in the production process under normal technology, for example, material used in carrying out tests, undertaking control, maintenance and repair, materials necessary for the use of equipment, buildings and other fixed assets, spare parts for the repair of equipment, instruments, measuring devices, implements, laboratory equipment not included in fixed assets, working clothes and footwear, special meals required by employees and other goods of small value;

-- semi-manufactured goods and components that are assembled in the enterprise;

-- fuel of all kinds, inputs into the production of all kinds of energy, heating and transport carried out by the enterprise itself;

-- energy of all kinds purchased for the technological and other productive and economic needs of the enterprise; expenditure incurred in the production of electricity and other energy by the given enterprise and for the transformation and transportation of purchased energy to the place of consumption;

-- output carried out by other enterprises or sub-divisions of the given enterprise not connected with the main activity such as individual operations in respect of the production of goods, processing of raw materials, repair and maintenance;

-- expenditure connected with the delivery of goods undertaken by the enterprise itself as well as transportation services carried out by other enterprises; transportation of goods within the enterprise;
-- payments for the services of communication and computing centres;
-- the net cost of packing materials (i.e. the cost of acquisition of packing materials less the receipts from the disposal of used packing materials);
-- any adjustments necessary for losses either on output or intermediate inputs;
-- reimbursement of expenditure by employees on necessary tools, working clothes;
-- consumption of goods and services of own production including consumption in agriculture of fodder and seeds from own production (this practice deviates from the recommendations in the revised SNA);
-- purchases of food, drink and tobacco by hotels, restaurants and cafes;
-- purchase of food and medicines by hospitals and other medical institutions for their patients and by other educational establishments for their students;
-- purchases by households of tools, working clothes, construction material, seeds and fodder etc. for their own productive activities;
-- expenditure by owner occupiers of dwellings for current repairs including the purchase of materials to effect these repairs;
-- expenditure by the defence forces on offensive weapons and their means of delivery (e.g. missile silos, warships and fighter aircraft); other equipment acquired by defence forces is also included for practical reasons though this practice deviates from the recommendations in the revised SNA;
-- food and military clothing for the armed forces.

Material input also includes part of the following expenses:
-- expenses related to guaranteed repairs and maintenance;
-- expenses connected with the process of selling the goods;
-- expenditure on maintenance of scientific research laboratories and bureaux;
-- expenditure on receptions and entertainment of guests;
-- the cost of transporting employees to and from work when this is organised by the producer;
-- expenses associated with recruitment of employees.
3.3 Purchases of non-material services includes:
-- payments for quality control tests;
-- payments for scientific and experimental research works;
-- explicit payments for financial services;
-- the imputed service charge for financial intermediation;
-- the imputed value of insurance services in respect of property including those for owner occupied dwellings;
-- payments to educational institutions connected with professional training of employees;
-- payments for health care services such as medical examinations, vaccinations etc.;
-- rental payments on buildings, construction, machines and equipment;
-- payments for municipal services, such as cleaning and waste disposal;
-- payments for legal services;
-- payments for advertising and other business services such as copying facilities, reservation fees, payments to professional associations etc.;
-- fees and licenses for certificates for goods;
-- payments for fire and security services.

3.4 Business travelling expenses include the reimbursement of expenditures by employees on fares, hotels, food and personal services while travelling on business.

3.5 Expenditures on providing normal conditions of labour cover expenditure on such facilities as medical rooms, bathrooms, rest rooms, sports halls, libraries.

3.6 Expenditures on professional training of employees includes:
-- expenditure on professional training at the enterprises (purchases of special equipment not included in fixed assets, maintenance of classes etc.);
-- payments to educational institutions.

3.7 Intermediate consumption excludes:
-- major expenditure on construction or capital repairs to buildings and structures and improvement and repairs of machines and equipment that are made in order to increase the life length of the assets and to
enhance their productive capacity (such expenditures are treated as gross fixed capital formation);

-- minor expenses on repairs to dwellings such as those typically undertaken by tenants, for example purchase of paint, wallpaper and other similar material (these are treated as final consumption expenditure of households);

-- goods and services provided by an enterprise to its employees free or at a reduced price as compensation of labour in kind;

-- the cost to the employee of travelling between home and work (these costs are treated as final consumption expenditure of households);

-- social benefits in kind provided to households by government and private non-profit institutions under social security or social assistance programmes (these are treated as final consumption expenditure of general government and NPIs serving households);

-- expenditure associated with the transfer of ownership of land, fixed assets and intangible assets (which are treated as gross capital formation);

-- rent on land (which is treated as property income);

-- costs associated with geological exploration, drilling and other expenses, prospecting for oil and natural gas (these are all treated as gross fixed capital formation);

-- major land improvements including land clearance and land reclamation and the preparatory work for establishing forests and orchards etc. (these are treated as gross fixed capital formation);

-- the value of welfare services provided to employees and their families by enterprises such as hospitals, stadiums, clubs etc. (these are treated as imputed purchases of services from enterprises by NPIs and enter the final consumption expenditure of NPIs serving households; they are then transferred in kind to households and finally enter the actual final consumption of households);

-- allowances for the consumption of fixed capital;

-- acquisition of goods by general government which go into stocks.

Valuation

3.8 Intermediate consumption should be valued at the price that would have to be paid by the producer to acquire these products at the time the goods and services are consumed. In practice the prices actually paid were used. The price includes any trade and transport margins paid by the producer but typically excludes retail margins paid by final consumers. Goods and services which are produced for own consumption are valued identically whether regarded as output or intermediate consumption.
Sources and methods

3.9 The estimates of intermediate consumption of non-financial enterprises were based on the following sources of information. The value of material input was taken from the sources which were normally used for the compilation of material input in the MPS estimates. These were the reports on the costs of enterprises which provided data on direct material input to production and also contained data on other costs from which material costs were separated by means of coefficients specified for each industry. There was no statistical information available about the purchases of non-material services. They were estimated arbitrarily after consulting with experts in industrial statistics and accountants. The information on business travelling expenses was based on the data on the cash turnover of the State Bank. The total sum was allocated to all industries in proportion to the wages and salaries taken from the report on the employment, wages and salaries and other remuneration for labour. The expenditures on providing the normal conditions of labour financed from profit were estimated on the basis of the report of accounting statistics on the use of funds of enterprises for welfare purposes and housing construction. About one third of the total sum of expenditures of enterprises on health, cultural and sports services in each industry was by convention allocated to the expenditures on providing the normal conditions of labour. The expenditures on the professional training of employees financed from profit were estimated on the basis of the report of the accounting statistics on the use of the funds of enterprises on the professional training. The total sum of expenses for these purposes was reduced by the payments for the days off for passing exams, scholarships and travelling expenses of students.

3.10 The value of intermediate consumption of financial institutions (both state and commercial) was calculated on the basis of their reports on incomes and outlays. The grouping of outlays allowed such items as business travelling expenses, purchases of inventories, stationery, computing and communication services and rent to be allocated directly to intermediate consumption. Other items were divided arbitrarily between intermediate consumption and compensation of employees. These were the expenditures on production, purchase and delivery of forms, tapes, paper, the cost of printing banknotes, the maintenance and current repairs of buildings and equipment, secure delivery, safety and other expenditures n.e.c. The allowances to the economic stimulation funds (the special funds of enterprises designed for investment and development, providing facilities for labour process, welfare services, bonuses and benefits to employees) and expenditures on professional training of employees were also partly allocated to intermediate consumption by convention.

3.11 The value of intermediate consumption of most general government institutions (belonging to health care, social security, physical culture and sports, education, culture and art, general administration) was calculated on the basis of the report of the Ministry of Finance on welfare and general administration costs. The following items of expenditure were allocated to intermediate consumption:

a) purchases of stationery, foodstuff, medicines, bandages, bed linen and working clothes;

b) business travelling expenses;
c) the part of the expenditures on professional training of students, research work, purchases of books and other expenditures n.e.c. pertaining to the purchases of goods and services for intermediate consumption.

3.12 Intermediate input of household production allocated to industry, health care, education and art was taken as 45 per cent of their output by convention. The specific features of sources and methods used for various industries are described below.

Industry

3.13 The material input excluded such payments to the state budget as the allowances for geological exploration, payments for water and stumpage which were treated as other taxes on production.

Agriculture

3.14 Intermediate consumption includes the consumption of fodder and seeds from own production. The material input was increased by the value of losses of finished agricultural products stored by producers.

Because market agricultural services are consumed by the industry itself, intermediate consumption of agriculture includes both these services and their own intermediate consumption.

3.15 The intermediate consumption of households included the following elements:

a) material input (excluding the consumption of fixed capital);

b) the value of losses of finished agricultural products stored by households;

c) the purchases of biotechnical and veterinary services;

d) the purchases of non-material services.

The estimates of the elements mentioned under a) and b) were based on data from the resource and use tables for the main agricultural products and from household budget surveys. The value of purchases of biotechnical and veterinary services by households was estimated by dividing the gross output of these market services between households and agricultural enterprises in proportion to the gross output of animal husbandry.

The purchases of non-material services were estimated arbitrarily.

Construction

3.16 The reports on the costs of construction works include construction both for sale and on own account but they do not cover all builders. The ratios of material inputs to the value of the output by types of construction work
available from the reports were applied to gross output to get the value of total intermediate consumption.

3.17 Intermediate consumption of construction works carried out by households on own account was by convention taken as 75 per cent of the gross output.

Catering

3.18 Material input was increased by the purchases of foodstuff for cooking and sale without processing.

Housing services

3.19 Information about the outlays by type was available only for dwellings in local government ownership. Thus the ratio of intermediate consumption to the corresponding output was first estimated in respect of this part of housing services and then applied to the rest of the gross output.

3.20 The intermediate consumption of households owning their dwellings was calculated as the value of purchases of construction materials for current repairs and other goods for maintenance of dwellings. The value of purchases of goods was estimated on the basis of the data on the trade turnover by kinds of goods and of household budget surveys.

Public utilities and personal services

3.21 The reports on the costs of hotels, public baths and sewerage referred only to enterprises in the charge of the Ministry of Housing Services and Public Utilities. They did not cover enterprises which were the subdivisions of units belonging to other industries. These reports were used to estimate the ratio of intermediate consumption to the value of the output of these enterprises. The ratio was later applied to the output of all the other enterprises to get the value of total intermediate consumption.

Health care, social security, physical culture and sports

3.22 Intermediate consumption of institutions rendering market health services was calculated using its ratio to output estimated on the basis of the report on the costs of holiday centres and sanatoria. For clinics and sports institutions rendering market services as well as for health and sports subdivisions of enterprises belonging to other industries the ratio of the intermediate consumption to the gross output of the corresponding budgetary organisations was used. The ratio used for market services was slightly reduced to allow for the existence of profit and the higher rate of the compensation of employees.

Education, culture and art

3.23 Intermediate consumption of institutions providing market services was
estimated using its ratio to the gross output of the corresponding institutions rendering non-market services with the adjustments mentioned in paragraph 3.22.

Science and scientific services

3.24 The intermediate consumption of research institutions includes the purchases of research services provided by other research institutions.

3.25 Although gross output on research services was available from the consolidated report on the principal activity of research organisations, the total value of intermediate consumption of market research services had to be estimated from total costs using the ratio of output on market research services to total output. A further report on the costs of research organisations was used to establish the structure of costs split between separate items, of which purchases of materials, fuel, energy and services and a part of the overhead expenses and other expenses n.e.c., estimated arbitrarily, were allocated to intermediate consumption.

3.26 The data of the report of Ministry of Finance on the expenditures from the State budget were available only in highly aggregated form which did not allow the items of intermediate consumption to be separated properly. Thus for the non-market research activities the ratio of intermediate consumption to the gross output of the market research activities was used with some adjustments.

3.27 The intermediate consumption of geological and exploration organisations was calculated on the basis of the report of their costs.

Credit

3.28 The items included in intermediate consumption in 1989 are shown in Table 6.14. The reports of the banks for 1990 were not available in the same detail as for previous years. The total current expenditures were divided into separate items using their structure in 1989.

Defence

3.29 The data available on the structure of the defence expenses did not allow allocation the corresponding items directly to intermediate consumption. Thus it was calculated as the difference between the gross output and the sum of the compensation of employees and the consumption of fixed capital.

Private non-profit institutions serving households

3.30 No information was available about their intermediate consumption. Estimates were made by multiplying the compensation of employees by an arbitrarily defined coefficient.
CHAPTER 4
Compensation of Employees

Coverage

4.1 Compensation of employees includes all payments in cash and in kind to the employees of an enterprise as remuneration for their work during the period in question. It covers the compensation of all employees of resident enterprises whether the employees themselves are residents or non-residents. Compensation of employees is made up of three components:

a) gross wages and salaries;
b) actual social contributions;
c) imputed social contributions.

4.2 Gross wages and salaries is shown before deduction of any social contributions and income taxes. It includes the following elements:

-- wages and salaries earned for work completed or for time worked according to agreed rates of pay, tariff scales, months of salary or average earnings;

-- additions to tariff scales and salaries: these may be payments for work in particular conditions, allowances for travelling or payments for working overtime at night, at weekends or during holidays for example;

-- allowances linked to changes in retail prices;

-- bonuses and remuneration for productivity performance or for long service etc.;

-- pay for annual or other holidays;

-- wages and salaries paid to employees while they are undergoing professional training;

-- payments in kind including the value of housing services and public utilities, food and clothes. If these items are supplied free the whole value of the items is included. If they are provided at reduced prices only the difference between the reduced price and the full price is included;

-- compensation for lost earnings and other payments in the case of injury or other disability of the employees

F; In the new SNA, this item and the next should be treated as social benefits. However, these items could not be identified separately from wages and salaries in the data source.

-- severance payments when a contract of labour is broken;
-- payments for the time spent by employees on medical examinations and for donating blood;
-- commissions and tips;
-- wages of domestic servants.

Wages and salaries do not include:

a) Expenditure by enterprises on goods and services which primarily benefit them rather than the employees who use them. Some examples include:
   • -- reimbursement of business travelling expenses of employees and removal costs;
   • -- costs of special protective clothing and footwear, special meals for employees;
   • -- purchase of tools needed by employees in the course of their work;
   • -- expenditure on education and training of employees but excluding wages and salaries paid to the employees during training and for the days not worked when the employees are taking exams etc.

   These items are treated as intermediate expenditure whether initially incurred by the enterprise or initially paid by the employee and reimbursed by the enterprise.

b) Payments to employees which are considered social benefits rather than compensation for labour:
   • -- sickness benefits including maternity benefits;
   • -- pensions paid to individuals of pensionable age who continue to work;
   • -- voucher payments for medical cure and rest;
   • -- other payments that are related to particular individuals (for example, widows and orphans of employees and those made redundant).

c) Payments to employees which are considered miscellaneous transfers rather than compensation for labour:
   • -- occasional grants;
   • -- scholarships, travelling expenses for students, payments for the days off when passing exams provided by enterprises to employees.

d) Welfare services provided by enterprises to employees and their families (these are treated as social transfers in kind; see paragraphs 3.7 and 9.11).
e) Payments to self-employed professionals for their services (these costs represent intermediate consumption by the enterprises; from the point of view of the professionals, the income element is included under gross mixed income).

4.3 Actual social contributions consist of the payments made by enterprises to the state insurance schemes on behalf of their employees and payments into the centralised Union funds for social insurance and social security of collective farmers. These payments are the main source of the funds for pensions, other social benefits and for providing recreational services for the households. Although these allowances are actually made directly by the enterprises through the social insurance institutions they are treated in the SNA as part of the compensation of employees (wages and salaries). These receipts by the employees are then matched by payments to social insurance institutions.

4.4 Imputed social contributions represent the social benefits paid directly by enterprises and institutions to their employees or former employees and other eligible persons. They include for example additional pensions, payments to persons or to their families in the case of industrial injury, occupational disease or death. They also include the pensions of servicemen for whom no actual social contributions are made. Three imputed flows are recorded in the accounts; firstly a value equal to the social benefits paid is treated as an imputed social contribution paid by the enterprise to the employees as part of compensation of employees. Secondly the employees are deemed to make a payment of equal size to a notional fund held by the employer. Thirdly the employer is treated as making a payment out of this notional fund to cover social benefits actually paid. These are shown in the accounts as current transfers.

Sources and methods

4.5 Given the information available, compensation of employees was estimated from the following items:

a) Compensation of employees of public enterprises and organisations of which:
   • i) payments from wages and salaries fund and from the material stimulation fund of employees;
   • ii) bonuses and other remuneration for labour not included in a)i);
   • iii) other wage-type income.

b) Compensation of employees in co-operatives.

c) Compensation of labour in collective farms.

Minus: d) Compensation of temporarily hired staff in collective farms [which is included in both item a) and item c)].
e) Total wages and salaries [the sum of items a), b) and c) less item d)].

f) Social contributions paid by public enterprises and institutions on behalf of their employees.

g) Social contributions paid by co-operatives.

h) Contributions into the Centralised Union Fund for social insurance and social security of the collective farmers.

i) Total actual social contributions of enterprises and institutions [the sum of items from f), g) and h)].

j) Imputed social contributions.

k) Total social contributions [items i) plus j)]

l) Total compensation of employees [items e) plus k)].

4.6 In accordance with the sources of information available the estimates of the compensation of employees were carried out for three groups of enterprises and organisations:

a) public enterprises and organisations including dwelling and consumer co-operation, non-profit institutions (named below "public enterprises");

b) co-operatives;

c) collective farms.

Consumer co-operation enterprises are not usually allocated to public enterprises as formally they are in collective and not in state ownership (as well as dwelling co-operatives and NPIs). However they are grouped here with public enterprises because the data on their compensation of labour are in the same report.

4.7 The compensation of employees of public enterprises was calculated on the basis of the report on the employment, the wages and salaries and other remuneration for labour. This report provided data on accrued sums from the wage and salary and the material stimulation funds (the wage and salary fund was the main source of remuneration for labour, the material stimulation fund was the special fund for bonuses), on the bonuses and other remuneration for labour not included in these funds by industries. The total of the wages and salaries of the employees not included in the regular staff was allocated to industries using the structure of 1985 (the last year when these data were available by industries in the report). The wages and salaries in the defence and party organisations not included in the report were defined and allocated to industries by means of special estimates. Gross wages and salaries should also include other wage-type incomes. They were estimated as a residual by
excluding from the income received by employees at the enterprises and institutions the following items other than wages and salaries:

a) business travelling expenses, reimbursement of the employees’ outlays on purchase of tools, special clothing and footwear (these were treated as intermediate consumption);

b) payments to the owners of rented dwellings (these were treated as gross output of households owning the dwellings and intermediate consumption of enterprises);

c) occasional cash grants from the material stimulation fund (these were treated as current transfers);

d) reimbursement to the owners for pulling down buildings and structures (these were treated as capital transfers).

Income received by employees in enterprises and institutions other than wages and salaries was estimated using the State Bank data on cash turnover. The value of the items excluded was defined arbitrarily. Wage-type incomes were allocated to industries proportionally to the wages and salaries.

4.8 The division of the wages and salaries in the transport and communication enterprises between the sphere of material production and the sphere of non-material services was made by means of the ratios used in the MPS estimates. The division of the wages and salaries of the trade enterprises between wholesale and retail trade was proportional to gross output. The compensation of employees of the general government institutions providing non-market services in the fields of health care, social security, sports, education, culture and art, and general administration were taken from the report of the Ministry of Finance on welfare and general administration costs. The report contained the total sum of the compensation of employees including social insurance contributions equal to 7 per cent of wages and salaries as laid down by the legislation for such institutions. The compensation of employees of the public institutions providing market services in the same areas as those mentioned above was calculated as the difference between the sum of compensation of employees for total public enterprises and that for general government institutions of the corresponding industry. The compensation of employees for the market research, geological and exploration organisations was calculated in the same way as the intermediate consumption (see paragraphs 3.25 and 3.27). For the non-market research services it was calculated as the difference between the total sum of compensation of employees in science and scientific services and the compensation of employees related to the market research services and geological and exploration works.

4.9 The gross wages and salaries at co-operatives were estimated on the basis of the report on the number of co-operatives and main indicators of their activities. This report contained data on wages and salaries by types of co-operatives which allowed direct allocation to industries with the following exceptions:

a) the total wages and salaries for the co-operatives dealing with dressmaking, shoemaking, repairs and personal services were allocated to various industries proportionally to their sales taken from the special report for such co-operatives by types;
b) the wages and salaries in other co-operatives n.e.c. were allocated to various industries arbitrarily. The ratio of this group of co-operatives to the total wages and salaries decreased from one third in 1988 to 14 per cent in 1989 and 11 per cent in 1990 as a result of more detailed allocation.

4.10 The gross wages in collective farms were estimated on the basis of the reports on labour of collective farms as the sum of the accrued wages and bonuses less the wages and bonuses of temporarily hired staff included in the wages and salaries of employees of public enterprises which sent them to agricultural works.

4.11 The total sum of the social contributions of the public enterprises and co-operatives was taken from the consolidated financial report on the budget of social insurance funds. No information was available about their allocation to industries. They were estimated using the rates of wages and salaries fixed by legislation which varied from 4 to 14 per cent or were taken from the MPS estimates as weighted average for complex industries. The total sum of collective farms' contributions to the Centralised Union funds for social insurance and the social security of the collective farms was taken from their reports and allocated to various industries in proportion to wages.

4.12 The imputed social contributions were taken to be equal to the actual payments of pensions to servicemen and pensions and allowances in the cases of sickness and pregnancy paid out by the collective farms. The information about the pensions to servicemen was taken from published data on defence expenses. The data on the pensions and allowances of the collective farms were taken from the accounting statistics estimates of the payments and privileges received by the population from the social funds. These estimates were made on the basis of the reports of collective farms and the surveys of the use of their economic stimulation funds carried out in 1987 and 1989.
CHAPTER 5
Taxes and Subsidies on Production

Coverage

5.1 Taxes on production include all taxes and duties which are applied to productive activity. They are divided into two groups:

a) taxes on products;
b) other taxes on production.

5.2 Taxes on products are usually levied in proportion to the quantity or the value of the goods and services produced or sold by resident producer units. They include turnover tax and similar taxes, e.g. payments to the state budget of allowances connected with temporary prices on new goods of better quality; incomes from the sales of goods at the contract retail or commercial prices; additions to the sale prices on radio and TV sets; differences between the sale and purchase prices on sugar, fish products etc.; contributions from the insurance premiums.

5.3 Other taxes on production include the payments made by the enterprises and institutions into the state budget for the use of resources as well as fees and duties, necessitated by the activity of the resident producer unit. The following payments were treated as such:

-- taxes on the use of fixed assets and stocks;
-- taxes on the use of labour force;
-- tax on increases in wages and salaries;
-- allowances for reimbursement of exploration costs;
-- stumpage;
-- payments for water;
-- tax on buildings and land;
-- tax on vehicles;
-- fees charged by car inspection

To be in strict accordance with the new SNA, this item should be treated as intermediate consumption in the case of enterprises and as final consumption in the case of households.

-- city improvement tax (paid by health and recreational institutions at the resort places to the local government);
-- stamp duties;
-- customs duties;
-- payments for permission for individual labour activities;
-- farm tax;
-- fees at the market places.

5.4 Subsidies on production are also divided into two groups:
   a) subsidies on products;
   b) other subsidies on production.

Subsidies on products are subsidies granted in proportion to the quantity or value of the goods and services produced, sold on the domestic market or exported by a resident producer unit. They include the reimbursement from the state budget of the balance between the purchase and sale prices on agricultural and other goods (on agricultural raw materials for industry, on livestock, meat, milk and dairy goods, on potatoes, grapes and other fruits and vegetables, on sugar, on raw cotton, on mineral fertilizers, agricultural machinery, fuel etc.). There is another group of subsidies allocated to subsidies on products though they are not directly linked to the quantity or value of the goods and services produced or sold. These are subsidies destined to cover the current losses of enterprises or for improvement of their position by enlarging their funds for purchasing the necessary inventories and other current needs. Other subsidies on production are considered to be those connected with executing certain economic or social policy. No such subsidies were found.

Sources and methods

5.5 The main source of data on taxes and subsidies on production was the report of the Ministry of Finance on the revenues and outlays of the state budget. Other sources of information were also used in some cases; they are described below. The data on city improvement tax were taken from the report of the Central Council of Trade Unions on the costs of the holiday centres and sanatoria. The data on subsidies paid from the state budget to ensure the free use of the metro for the veterans of the Second World War were taken from the annual book-keeping report of the Ministry of Railways.

5.6 Because of the lack of information some subsidies were estimated. The subsidies to self-financing enterprises providing services on land improvement, fertilizing and agrochemical services to agriculture, housing services, services of city electric transport and public baths were calculated on the basis of the book-keeping reports of corresponding enterprises as the difference between the current costs including the consumption of fixed capital and output at market prices. The subsidies to enterprises providing market health and sports services were estimated on the basis of the consolidated financial report on the budget of the social insurance funds. They were calculated as the sum of the expenditures from these funds on health services, tourism, mountain climbing, dietetic food and on the maintenance of the
sanatoria less payments of households for vouchers. In addition, the compensation of labour of doctors in hospitals, clinics and sanatoria belonging to enterprises of various industries was added because it was financed from the state budget.

5.7 The report on the revenues and outlays of the state budget contained only the total sums of taxes and subsidies. It did not always allow the industry or sector paying taxes or receiving subsidies to be identified. In some cases it was necessary to make estimates. Some subsidies on products were also allocated to industries in connection with the valuation of the gross output of industries in basic prices. Thus, subsidies destined to increase funds of enterprises were allocated to industries in proportion to the value of stocks at the end of the year. Subsidies destined to cover losses of the non-profitable enterprises and subsidies for extra-bonuses were allocated to industries proportionally to their gross output at producers’ prices (excluding agriculture because there were direct data available about such subsidies to agricultural enterprises).

5.8 Allocation of the other taxes on production to industries and sectors were made in the following way. Stumpage, payments for water and customs duties were entirely allocated to industry (sector of non-financial enterprises). Farm tax and fees at the market places were allocated to agriculture (households sector). Tax on city improvement was allocated to health services (sector of non-financial enterprises). Payments for fixed assets and stocks were allocated to industries in the sphere of material production (excluding trade, procurement and material supply because these industries did not pay this tax) proportionally to the total value of stock of the fixed assets and inventories. These data came from the book-keeping reports of enterprises. Payments for labour force and tax on increases in the wages and salaries were allocated to the industries in the sector of non-financial enterprises (excluding health care, social security, physical culture and sports, education, culture and art) proportionally to the average number of employees taken from the labour statistics. Allowances for reimbursement of exploration costs were allocated to industry, agriculture and construction in accordance with the data of the report on the revenues and outlays of the state budget. The total sum of stamp duties, taxes on vehicles, buildings and land, fees charged by car inspection were divided into two parts: payments by households and payments by enterprises and institutions. The data on these taxes paid by households were based on the reports of the local financial authorities and (in the case of fees charged for car inspection) on the information of the local departments of the Ministry of Internal Affairs. Payments by households were allocated to current transfers. The other part of these taxes, paid by enterprises and institutions, was treated as other taxes on production and was allocated to industries in proportion to their gross output at producers’ prices. Tax on vehicles paid by enterprises was allocated to their industries in the sector of non-financial enterprises, fees charged by car inspection were allocated to transport enterprises. Stamp duties and tax on buildings and land were allocated to the units belonging to all sectors and industries. Payments for permission to undertake individual labour activities were allocated to the household sector, to industry, and an insignificant part (defined arbitrarily) to health services.

5.9 Table 1.11 shows taxes and subsidies on products for 1988-90. Table 7.5 shows other taxes on production for 1989. Table 4.5 shows taxes on production by industries and sectors for 1988-90.
6.1 According to the SNA, consumption of fixed capital should be calculated for all items of fixed capital formation taking account of actual service lives and be valued at current replacement cost. So far, this concept has been approximated by the MPS measure of depreciation. Consumption of fixed capital was thus calculated as the sum of the following elements:

   a) annual depreciation allowances;
   b) residual value of assets taken out of service;
   c) losses caused by the death of breeding and dairy livestock.

Depreciation allowances were made on the basis of the historical value of fixed assets and the rates of depreciation fixed by government regulation. The annual total of depreciation allowances included allowances for the replacement and major repairs of fixed assets. In those enterprises and institutions where no depreciation allowances were provided in the current accountancy, and for households, the depreciation was estimated on the basis of the rates of depreciation of similar fixed assets. The residual value of assets taken out of service was estimated as the difference between the written down cost of fixed assets which were eliminated, i.e. consumed or fallen into decay, and any value of the scrap. As a rule the difference was positive and was added to the annual sum of depreciation. No depreciation allowances were made for breeding and dairy livestock, so they were taken to be equal to the losses caused by death and included in the consumption of fixed capital.

6.2 The data on depreciation were taken from the balance of fixed assets by industries. They were based on the reports of enterprises on the stocks and changes in the value of fixed assets. The insufficiency of depreciation allowances was estimated using the data of accounting statistics on the change to the capital of enterprises at the start of the period based on their book-keeping reports. The data on the losses caused by the death of breeding and dairy livestock were based on the data of the book-keeping reports of agricultural enterprises and the annual census of livestock. The number of livestock lost was evaluated at its historical cost to the agricultural enterprises. The peculiarities of estimating consumption of fixed capital in some industries are described below.

6.3 The division of the consumption of fixed capital of transport and communication enterprises between the sphere of material production and the sphere of non-material services was taken from the MPS estimates where it was estimated using special coefficients. The division of the consumption of fixed
capital of trade enterprises between wholesale trade and retail trade and catering was made in proportion to their gross output. The division of the consumption of fixed capital of research institutions between those providing market and non-market services was made in proportion to their intermediate consumption. The depreciation of insurance institutions was estimated as the difference between the total for credit and insurance institutions in the balance of fixed assets and the depreciation of fixed assets of banks taken from their reports.

6.4 Consumption of fixed capital by sectors and industries for 1988-90 is shown in Table 4.6.
CHAPTER 7

Property Income

7.1 Property income covered the following items for which some information was available:
   a) interest on bank loans and deposits;
   b) withdrawals from profit to the state budget;
   c) interest on consumer trade credit;
   d) receipts from the state bonds;
   e) dividends.

7.2 The data about the interest paid out and received by banks were taken from the consolidated report of the State Bank which contained the reports of all state banks and for 1990 the reports of commercial banks also. These data were divided into two groups: a) those related to commercial banks; b) those related to state banks. The tables were then compiled for each group where interest was allocated to the sectors which paid or received it. When direct data about such allocations were not available imputations were made.

7.3 Interest on short-term and long-term loans received by state banks (in 1990 also by commercial banks excluding the Saving Bank and the Bank for Foreign Economic Relations) was divided between the non-financial enterprises (which belonged to the sphere of material production and the sphere of non-material services) and households as payers in proportion to their debts (short-term and long-term separately) at the end of the year taken from the report of the State Bank. Interest on loans received by the Saving Bank was allocated to households and interest received by the Bank for Foreign Economic Relations was allocated to the sphere of material production in the sector of non-financial enterprises as payers. The interest on transactions with general government was not shown in this item (see below). Interest received by banks for transactions with the Ministry of Finance and paid out from the state budget for use of credit resources were allocated to the general government as payer. Interest received by the Bank for Foreign Economic Relations was allocated to the rest of the world as payer.

7.4 Interest paid by banks on deposits of enterprises was allocated to the non-financial enterprises in the sphere of material production; on deposits of the State Insurance Agency to the sector of financial institutions; on deposits of the population to the household sector as receivers. Interest paid out by the Bank for Foreign Economic Relations on deposits of foreign customers was treated as being received by the rest of the world. Interest paid out for use of the credit resources of other banks was allocated to corresponding groups of
banks by means of comparison of the interest received from other banks and paid out to them.

7.5 The total sum of withdrawals from profit to the state budget was taken from the report of the Ministry of Finance on the revenues and outlays of the state budget. They were allocated to the sectors and industries as payers proportionally to the data recorded as profit in the book-keeping system.

7.6 Interest on consumer trade credit was taken from the balance of money incomes and expenditures of population where it was estimated on the basis of the data of trade statistics as 4 per cent of the average annual sum of this credit. Interest on consumer trade credit was shown as paid by households to the non-financial enterprises in the sphere of material production.

7.7 The receipts from state bonds were taken from the report of the Savings Banks and shown as paid by general government to households.

7.8 Dividends were taken from the report of enterprises on the use of profit and shown as paid by the non-financial enterprises in the sphere of material production to households because they referred only to employees of the given enterprises.

7.9 Property income received and paid out by the rest of the world was taken from the rest of the world current transactions account. The source of these data were the estimates of the balance of payments given in "A Study of the Soviet Economy" by the IMF, World Bank, OECD and EBRD. The difference between the interest received by the Bank for Foreign Economic Relations from the foreign customers and the interest received from the rest of the world in the current transactions account was allocated to the sector of non-financial enterprises. The difference between the interest paid out to the rest of the world in the current transactions account and the interest paid out by the Bank for Foreign Economic Relations on deposits of foreign customers was allocated to the general government.

7.10 No information was available on the property income of private non-profit institutions serving households.

7.11 The difference between property income received and interest paid out by banks allocated to the financial institutions is equal to the imputed service charge of financial intermediaries.

7.12 Table 7.6 shows the matrix of property income with property income received by sectors in the rows and the property income paid out by sectors in the columns. The total balance of property income received including the property income received by the rest of the world is equal to the total property income paid, including that paid by the rest of the world.
8.1 Current transfers include the following items:
   a) non-life insurance premiums and claims;
   b) taxes on income and property;
   c) social contributions;
   d) social benefits;
   e) compulsory payments and dues by households to general government;
   f) fines and penalties;
   g) voluntary contributions;
   h) a contribution from enterprises to NPIs serving households representing the value of welfare services;
   i) miscellaneous current transfers n.e.c.

Insurance premiums and claims

8.2 Insurance premiums and claims related to non-life insurance were estimated on the basis of the annual book-keeping report of the State Insurance Agency. From the total insurance payments (premiums and claims) the payments referring to life and additional pensions insurance were excluded. The other sums were considered as related to non-life insurance and allocated to sectors as payers and receivers in the following way.

8.3 The payments on compulsory and voluntary insurance of property of agricultural enterprises, public enterprises of other industries and half of the payments on insurance of property of co-operative and private non-profit institutions were allocated to the non-financial enterprises in the sphere of material production. The other half of the payments on insurance of property of co-operative and private non-profit institutions and also the payments on insurance of property of public enterprises rented to religious organisations were allocated to private non-profit institutions. The payments on personal non-life insurance, compulsory and voluntary insurance of households’ property were allocated to the household sector.

8.4 The insurance premiums were first estimated on a gross basis but only the net insurance premiums were included in current transfers. They were
calculated in the following way: the total sum was taken to be equal to the
total sum of insurance claims and was allocated to sectors in proportion to
their gross insurance premiums. The balance between the gross and net
insurance premiums was treated as output of insurance services and a payment
for a service provided by the insurance enterprise to the policy holder. This
service charge is part of intermediate consumption if the policy holder is an
enterprise and part of household final consumption if the policy holder is an
individual (see paragraph 2.55). Strictly unincorporated enterprises in the
household sector may have intermediate consumption of insurance services but
for practical reasons all payments were treated as final consumption.

8.5 In the consolidated table of current transfers (see Table 7.7 for 1989)
the insurance payments were shown as the current transfers from the
non-financial enterprises in the sphere of material production, financial
institutions, private non-profit institutions serving households and households
to the financial institutions. The insurance claims were shown as transfers
from the financial institutions to the non-financial enterprises in the sphere
of material production, to the financial institutions, private non-profit
institutions serving households and to households.

Taxes on income and property

8.6 Taxes on income and property include the following taxes:

-- allowances from profit of public enterprises (since 1990 tax on
  profits);
-- fixed (rental) payments;
-- taxes on income of collective farms, consumer co-operation
  enterprises, co-operatives and enterprises belonging to NPIs;
-- tax on personal income of wage and salary earners;
-- tax on income of single persons, families without children or with
  few children;
-- tax on vehicles belonging to households.

The main source of data on the taxes on income and property was the report on
the revenues and outlays of the state budget. It did not always allow
allocation of these data to the paying sectors. In these cases imputations
were made. The data on the taxes on income and property paid out by households
were taken mainly from the balance of money incomes and expenditures of
population. The sources of information about them were the reports of regional
financial authorities.

8.7 The main problem was the allocation to the paying sectors of the
allowances from profits of public enterprises which were replaced in 1990 by
the tax on profits. For the estimates the data recorded as profits by
industries in the book-keeping system were used excluding the profits of
collective farms, consumer co-operation enterprises and enterprises belonging
to the private non-profit institutions. The profits of public enterprises were
divided between non-financial enterprises (which belonged to the sphere of
material production and the sphere of non-material services) and financial institutions. Profits of transport and communication enterprises were divided between the sphere of material production and the sphere of non-material services using the proportions taken from the MPS estimates. Taxes were allocated to corresponding paying sectors proportionally to the profits. Payments to the state budget from extra profits earned by enterprises using temporary and contract prices or breaking the standards were allocated to the non-financial enterprises in the sphere of material production. Payments of the profits of tourist agencies were allocated to the non-financial enterprises in the sphere of non-material services.

8.8 Fixed (rental) payments were usually paid by mining enterprises operating in more favourable areas. They were entirely allocated to the non-financial enterprises in the sphere of material production.

8.9 Taxes on income of collective farms, consumer co-operation enterprises and enterprises belonging to private non-profit institutions were allocated to the non-financial enterprises in the sphere of material production. Tax on income of co-operatives was divided between the sphere of material production and the sphere of non-material services in proportion to the data recorded as profits in the report on the financial results of co-operatives by industries. The profits of co-operatives providing personal services was divided between the sphere of material production and the sphere of non-material services proportionally to their sales. The profits of co-operatives providing transport services were allocated entirely to the sphere of non-material services.

8.10 Tax on personal income of wage and salary earners was taken from the balance of money incomes and expenditures of population less the payments for permission to undertake individual labour activity (which are treated as a tax on production). Tax on income of single persons, families without children or with few children and tax on vehicles belonging to households were also taken from the above mentioned balance. These taxes were allocated to households.

8.11 Taxes on income and property were shown in the consolidated table of current transfers as transfers to general government. (See Table 7.7 for 1989).

Social insurance contributions

8.12 The sources of information and methods of estimating social insurance contributions are described at Chapter 4 "The compensation of employees" (see paragraphs 4.11, 4.12). It should be noted that these contributions were increased by the value of insurance of additional pensions when they were included in the current transfers. These sums are paid out from the gross wages and salaries and they were not included in the social contributions when compensation of employees was calculated to avoid double counting. The social contributions were shown in the consolidated table of current transfers as the transfers from households to the non-financial enterprises in the sphere of material production (imputed social contributions related to collective farmers), to general government (actual social contributions and imputed social contributions related to servicemen) and to financial institutions. (See Table 7.7).
Social benefits

8.13 Social benefits include:

a) all types of pensions and allowances paid out from the state budget or budget of state social insurance, Centralized Fund of social insurance of collective farmers, funds of enterprises and trade unions including:

- retirement pensions;
- pensions and allowances to servicemen and their families, military survivors pensions;
- pensions and allowances to persons injured in the war and to their families; pensions to families of servicemen killed in the Second World War;
- disability pensions;
- allowances in the cases of temporary sickness; allowances to persons suffering from industrial injury or occupational disease; fare allowances to sanatoria;
- maternity allowances, allowances for caring and feeding infants etc.;
- allowances to families with low income and many children; allowances for care for children and people suffering mental infirmity;
- survivors pensions, funeral allowances;

b) voucher payments by enterprises for medical cure and rest;

c) other payments related to particular individuals (for example, widows and orphans of employees and those made redundant).

Social benefits do not include:

- outlays of the enterprises which are reimbursements for labour input (allocated to compensation of employees);
- payments to households for purposes other than social insurance, e.g. scholarships, reimbursement of travelling expenses of students, payments for the days off when passing exams (allocated to miscellaneous current transfers)

According to the new SNA, payments in respect of education allowances should be included in social benefits.

F.

The data on social benefits were taken from the estimates of the balance of the money incomes and expenditures of the population. This allowed allocation of the benefits to the paying sectors. The main sources of information about the social benefits were as follows:

- the report of the Ministry of Finance on the revenues and outlays of the state budget;
• -- the consolidated financial report on the budget of the social insurance fund;
• -- the report on the budget of the Central Council of Trade Unions;
• -- the annual report of the Ministry of Social Security;
• -- the report on the outlays of the Centralized Fund of social security of collective farmers;
• -- the consolidated book-keeping report of collective farms.

The social benefits were shown in the consolidated table of current transfers as transfers from the non-financial enterprises in the sphere of material production, financial institutions, general government and private non-profit institutions to households.

Compulsory payments and dues

8.14 Compulsory payments and dues include the following payments by households:

This grouping is not in strict accordance with the new SNA. Stamp duties, fishing and hunting licences should be classified as taxes, the other items as fees for services.

F:

-- fees paid for car inspection;
-- passport fees;
-- stamp duties;
-- local fees (e.g. at fishing and hunting places, health resorts etc.).

Compulsory payments and dues were taken from the balance of money incomes and expenditures of the population. The initial sources of information were as follows:

-- for stamp duties and local fees, the reports of regional financial authorities;
-- for fees paid to car inspection and passport fees, the data of regional departments of internal affairs.

Compulsory payments and dues were shown in the consolidated table of current transfers as transfers from households to general government.

Fines and penalties

8.15 The sources of information about fines and penalties were the report on the revenues and outlays of the state budget and the data of accounting statistics on the structure of the profits and losses of enterprises. From the total sum of the fines and penalties paid out to the state budget the sums paid by households were separated. They were taken from the balance of money incomes and expenditures of the population (the initial sources of information were the data of the regional departments of internal affairs). The rest was allocated to the non-financial enterprises in the sphere of material
production. The fines and penalties paid out by enterprises to each other were taken from the data of accounting statistics on the structure of the profits and losses of enterprises. The fines and penalties were shown in the consolidated table of current transfers as transfers from non-financial enterprises and households to non-financial enterprises and general government.

**Voluntary contributions**

8.16 Voluntary contributions include the contributions of households to consumer co-operation enterprises, to private non-profit institutions and to various charity funds. The data were taken from the balance of money incomes and expenditures of population. The initial sources of information were reports of the receiving units. No information on the voluntary contributions of enterprises and institutions was available. The voluntary contributions were shown in the consolidated table of current transfers as transfers from the households to the non-financial enterprises in the sphere of material production (consumer co-operation) and to private non-profit institutions.

8.17 Contributions in respect of welfare services from enterprises to NPIs serving households is a separate category of current transfers introduced to cover the value of social and cultural services provided by enterprises to their employees and their families free of charge or at a reduced price. Under this heading services are included which are provided by appropriate subdivisions of enterprises if they can be isolated as separate establishments (e.g. hospitals, stadia, holiday centres, clubs). This transaction is a counterpart of the imputed purchase of these services by NPIs serving households which enter into their final consumption expenditure and then via social transfers in kind into actual final consumption of households. The source of data for the estimates of the imputed transfers of welfare services was the consolidated report of the accounting statistics on the formation and use of the economic stimulation funds which was based on the book-keeping reports of enterprises. It contained the data on the expenditures for health, cultural and sports purposes. Part of these expenditures relating to the maintenance of subdivisions providing welfare services to employees was estimated arbitrarily because of the lack of information. The imputed transfers of welfare services were shown in the consolidated table of current transfers as the transfers from the non-financial enterprises in the sphere of material production to the NPIs serving households.

**Miscellaneous current transfers**

8.18 Miscellaneous current transfers n.e.c. included:

-- the various payments from the funds of enterprises to employees: scholarships and travelling expenses for students, payments for the days off for passing exams, occasional payments from the material stimulation funds not related to compensation of labour and other payments;

-- the funds received by enterprises in the sphere of material production from the voluntary unpaid works and transferred to the state budget;
8.19 The value of scholarships was taken from the balance of money incomes and expenditures of the population (the initial sources of information were the data on the cash turnover of the State Bank). They were allocated to the paying sectors (general government, non-financial enterprises, private non-profit institutions) using the data of the accounting statistics on the payments and privileges received by households from the social funds. These data also contained information on the compensation for travelling expenses of students and payments for the days off for passing exams from the funds of enterprises. These payments were shown in the consolidated table of current transfers as transfers from the corresponding sectors to households.

8.20 Occasional payments from the material stimulation funds and other payments from enterprises to employees were estimated arbitrarily on the basis of the data of the balance of money incomes and expenditures of population (see paragraph 4.7). They were allocated to the paying sectors proportionally to the compensation of employees. These payments were shown in the consolidated table of current transfers as transfers from all sectors (except the rest of the world) to households.

8.21 The funds received by enterprises from voluntary unpaid works and transferred to the state budget were taken from the report on the revenues and expenditures of the state budget. In the consolidated table of current transfers they were shown as transfers from non-financial enterprises in the sphere of material production to general government.

8.22 Very little information is available on net current transfers from the rest of the world. An overall estimate was taken from the estimates of the balance of payments given in "A Study of the Soviet Economy" by the IMF, World Bank, OECD and EBRD.
Final consumption expenditure of households

9.1 Final consumption expenditure of households covers the following items:
   a) consumption of goods and material services which includes:
      • -- purchases of consumer goods and material services from retail state and co-operative trade, at the city markets and from individuals;
      • -- receipts of goods in kind as compensation for labour;
      • -- goods produced by households for own consumption;
      • -- purchases of electricity, water and gas for domestic purposes;
      • -- purchases of laundry and film processing services which are treated as material services;
   b) purchases of market consumer non-material services (except lottery and insurance services);
   c) purchases of lottery services;
   d) purchases of insurance services;
   e) imputed rent of owner-occupied dwellings.

Final consumption expenditure of households does not include:
   a) food and military clothing provided to servicemen;
   b) purchases of materials for minor repairs by the owners of dwellings;
   c) purchases of goods and services from the business travelling expenses;
   d) purchases of agricultural and transport services representing intermediate consumption of small-scale agricultural production of households, payments for construction works and major repairs which are treated as gross fixed capital formation;
e) the value of welfare services rendered by enterprises and institutions to their employees and members of their families free of charge or at reduced prices (see paragraphs 8.17 and 9.11);

f) reimbursement of expenditures of disabled persons on purchases of cars and petrol (see paragraph 9.11).

The latter items under a), b) and c) were treated as intermediate consumption; item d) partly as intermediate consumption and partly as gross fixed capital formation; items e) and f) as social transfers in kind and then as actual final consumption of households.

{Sources and methods}

9.2 The value of purchases of consumer goods in retail trade and at the city markets was determined by deducting from the total purchases of goods the value of goods used by households as means of production. These data were taken from the balance of money incomes and expenditures of the population. They were based on information about the cash turnover of the State Bank and trade enterprises. Purchases of consumer goods from the individuals were estimated using the data of household budget surveys.

9.3 The receipts of agricultural goods in kind as compensation for labour were estimated using data from the resource and use balances of main agricultural products and households budget surveys. Receipts of other goods in kind were included in the purchases of consumer goods (paragraph 9.1a).

9.4 The value of goods produced by households for own consumption covers agricultural goods, cooking oil, wine. The value of agricultural goods was estimated on the basis of the same sources of information as the receipts of agricultural goods in kind (see paragraph 9.3). The value of cooking oil and wine produced for own consumption was estimated on the basis of data from household budget surveys.

9.5 The purchases of electricity, water and gas for domestic purposes, of laundry and film processing services and purchases of market consumer non-material services from state and co-operative organisations were taken from the balance of money incomes and expenditures of the population. The source of information about them were the reports of enterprises providing such services.

9.6 The purchases of goods and non-material services were decreased by the value of purchases from business travelling expenses (see paragraph 3.9).

9.7 Purchases of lottery services provided by general government and private non-profit institutions serving households were taken to be equal to their output. It was calculated as the difference between the sales of lottery tickets and the sum of the winnings paid out. The sources of information are described in paragraph 2.59.

9.8 Purchases of insurance services were taken to be equal to the part of their gross output related to households which consisted of the following elements:
a) that part of the difference between the gross premiums and claims due related to non-life insurance of households;
b) plus the difference between the premiums and claims due on life insurance;
c) less the increase in the reserves for life insurance;
d) plus the interest accrued on life insurance reserves.

9.9 The imputed rent of owner-occupied dwellings was taken to be equal to the gross output of these services (see paragraph 2.38).

9.10 No data were available on final consumption expenditure by non-resident households on the economic territory of the country or by resident households in the rest of the world.

Final consumption expenditure of general government and private non-profit institutions serving households

9.11 Final consumption expenditure of general government and private non-profit institutions serving households includes the value of services rendered free of charge by these institutions to individuals in the field of health care, social security, physical culture and sports, education, culture and art and to the society as a whole in the field of science, general administration, defence; the value of agricultural services rendered by budgetary institutions; the services of state banks and maintenance of roads. It covers in addition goods and services that are purchased by government and non-profit institutions and supplied without transformation, to households.

9.12 Final consumption expenditure of general government and private non-profit institutions serving households was taken to be equal to their gross output:

a) plus purchases of goods and services for further transfer to households;
b) less "incidental sales" of goods and market services (these were included in the intermediate consumption of other sectors or in the final consumption expenditure of households);
c) less output of geological and exploration works not related to individual construction projects and carried out by budgetary institutions (allocated to gross fixed capital formation).

9.13 Purchases of goods and services for further transfer to households included:

a) reimbursement of expenditures by disabled persons on purchases of cars and petrol (these data were taken from the report on the revenues and outlays of the state budget); in principle this item should also include distribution of food and clothes by social
welfare institutions, provision of medicines free of charge etc. but no information about these was available;

b) the imputed purchase of welfare services rendered by enterprises and organisations to their employees and members of their families free of charge or at reduced prices (about the sources of information see paragraph 8.17).

9.14 The "incidental sales" of market services included the following items:

a) partial payments of households for the vouchers for health and holiday institutions financed from social insurance funds;

b) payments of households for the services of public kindergartens, schools etc.;

c) payments for lottery services;

d) payments of enterprises and organisations to the state budget for checking of scales and measuring instruments, for stamping goods made of precious metals;

e) rental income of the state budget and reimbursement of the expenditure on the maintenance and improvement of city plots;

f) payments to the state budget for construction and other works;

g) payments for services of the state banks;

h) payments for veterinary services to households and others.

The sources of information about the payments for vouchers were the consolidated financial report on the budget of the social insurance funds and the report of the Centralized Union fund of social insurance for collective farmers. The payments for kindergartens, schools etc. were taken from the report on the sales of personal services and from the report on the revenues and outlays of the state budget. Payments for lottery services were estimated as described in paragraph 9.7. Receipts of the state budget mentioned under d), e) and f) were taken from the report on the revenues and outlays of the state budget. For the year 1990 they were estimated arbitrarily because of the absence of information. Market services of the state banks were taken from their reports except the data for the year 1990 for which they were estimated arbitrarily. Market veterinary services to households were taken from the estimates of intermediate consumption of households.

Actual final consumption

9.15 Actual final consumption of households covers goods and services which are available for individual consumption by households irrespective of who ultimately bears the expense.
9.16 Actual final consumption of households was calculated as the sum of the following items:
   a) final consumption expenditure of households;
   b) final consumption expenditure of general government institutions providing services for individual consumption;
   c) final consumption expenditure of NPIs serving households (by convention this is taken to be entirely individual consumption).

9.17 Actual final consumption of general government was taken to be equal to final consumption expenditure of general government institutions providing services for collective consumption.

9.18 There is no actual final consumption of non-profit institutions serving households.

9.19 Table 1.8 shows actual final consumption for the whole economy for 1988-90. Final consumption expenditure of households for the same period is shown in Table 1.9. A detailed worksheet for 1989 showing final consumption expenditure of the general government and non-profit institutions serving households appears as Table 7.3.
10.1 Gross fixed capital formation includes the following items:

a) capital investment included in investment statistics which cover:
   
   • the value of new durable goods or objects bought by economic units or produced at own account (buildings, structures, machinery and equipment, vehicles, tools etc.);
   
   • purchases of existing durable goods or objects;
   
   • geological and drilling works related to individual investment projects;
   
   • capital investments in improvement of land and planting of orchards and vineyards before they reach fruit-bearing age;
   
   • unfinished construction works and major repairs paid for by the customer;
   
   b) change in the value of breeding and dairy livestock;
   
   c) expenditure on major repairs;
   
   d) purchases of equipment and inventories, including books for libraries by general government institutions;
   
   e) outlays on purchases and development of software;
   
   f) expenditure on geological and exploration works not related to individual investment projects;
   
   g) expenditure on the planting of forests.

The following items are not included in the gross fixed capital formation:

a) minor tools, work overalls, spare parts, equipment of little value, even if their wear and tear period extends beyond one year (treated as intermediate consumption);

b) consumer durable goods purchased by households (treated as final consumption expenditure of households);

c) acquisition of military equipment (treated as intermediate consumption of general government, see also paragraph 3.2);
d) expenditure of economic units on research and development, advertising etc. (treated as intermediate consumption);

e) land, mineral deposits, forest plots, etc. and intangible non-financial assets (transactions with these assets are shown under the item "net purchases of land and intangible non-financial assets").

The elements of gross fixed capital formation are valued at purchasers’ prices, if they are bought, or at basic prices, if they are produced for own use.

10.2 The sources of information about the capital investments were based on:

a) the reports of enterprises on their investments;

b) the report on the construction of private buildings by households.

The investments of enterprises excluded:

a) outlays not increasing the value of fixed assets but included in investments in the book-keeping system (for pulling down buildings at construction sites, for professional training);

b) purchases of inventories not allocated to fixed assets.

10.3 The resulting value was allocated to industries in proportion to the distribution of the reported data. Division of the capital investments of the transport and communication enterprises between the sphere of material production and the sphere of non-material services, and of the research institutions between those providing market and non-market services, was made in proportion to their gross output. The total sum of capital investments relating to credit, insurance and private non-profit institutions serving households was also divided between them in proportion to their gross output. The capital investments of enterprises providing agricultural non-market services were taken to be equal to the capital transfers received by them. The capital investments of enterprises providing agricultural goods and market services were calculated as the difference between the total capital investments in agriculture (excluding the households) and the capital investments of the enterprises providing agricultural non-market services. The capital investments of the institutions providing non-market services in the fields of health care, social security, physical culture and sports, education, culture, art and general administration were taken from the report of the Ministry of Finance on the expenditures from the state budget for welfare and general administration purposes. For 1990 the capital investments were estimated using their ratio to the total expenditures of these institutions in 1989 because the data on the structure of expenditures were not available. The capital investments of the institutions providing market services in the same fields were estimated as the difference between the total capital investments of all institutions in these fields and those providing non-market services. Capital investment by defence in construction was taken from the published data on the defence expenses. The capital investments of households included the capital investments in dwellings and in structures for agricultural purposes. They were taken from the balance of fixed assets; the original source of information was the report on construction of private buildings by households.
10.4 The change in the value of breeding and dairy livestock was taken from the balance of fixed assets. It was estimated as the difference between the value of livestock at the end and at the beginning of the year. The number of livestock by kind was taken from the data of annual censuses of livestock. It was valued at the historical cost to agricultural enterprises.

10.5 Expenditure on major repairs was calculated as the sum of the following elements:

a) expenditure on completed major repairs (including the repairs of railways and motor-ways increasing their historical cost);

b) expenditure on major repairs still in progress.

The expenditure on completed major repairs was taken from the balance of fixed assets by industries. The sources of information were the reports of enterprises on the change in the depreciation fund. The expenditure of households on finished major repairs was estimated using an arbitrarily established ratio based on the historical cost of their fixed assets. The expenditure on the unfinished major repairs was estimated as the difference between the value at the end and the beginning of the year. The source of information was the data of accounting statistics based on the balance sheets of enterprises. The division of the expenditure on major repairs between the transport and communication enterprises allocated to the sphere of material production and the sphere of non-material services; between the institutions providing market and non-market services in the field of health care, social security, physical culture and sports, education, culture and art, science and general administration; and between the banks (state and commercial) and insurance enterprises was made in the same way as described in paragraph 10.3.

10.6 Purchases of equipment and inventories by general government were taken from the report on the revenues and outlays of the state budget. The data allowed allocation of most of the purchases to the producers of non-material services. For 1990 the same ratio as in 1989 was used. Purchases of books for libraries were taken to be equal to 20-25 per cent of the item "Expenditure on the education, professional training of students, research works and purchases of books for libraries" of the report of Ministry of Finance on the expenditures from the state budget of the general government institutions providing educational, cultural and art services.

10.7 Outlays on purchases and development of software for 1988 were taken from the report of the Main Computing Centre of the former state Committee on Statistics of the USSR which covered all computing centres of the country (which were independent subdivisions of enterprises and institutions). For 1989 and 1990 the outlays were estimated using their ratio to gross output of information and computing services in 1988 because the above mentioned report was not available for these years.

10.8 Expenditures on geological and exploration works not related to individual construction projects were taken from the reports of the enterprises carrying out such works. They were allocated to science and scientific services.
10.9  The expenditures on the planting of forests were taken to be equal to the gross output of forestry.

10.10 No information was available on the outlays connected with the transfers of property rights on fixed assets, land and non-tangible non-financial assets.

10.11 Table 5.1 shows gross fixed capital formation by sectors and industries for 1988-90.
CHAPTER 11
Changes in Stocks

11.1 Changes in stocks covers the change in value of stocks:

a) of goods destined for intermediate consumption;

b) of work-in-progress;

c) of finished goods held by producers or for resale by enterprises in the industries of trade, procurement and material supply;

d) of strategic reserves held by government.

Work in progress in construction that has been paid for is included in gross fixed capital formation. Only work in progress not yet paid for is included in changes in stocks.

11.2 The sources of information for estimates of the changes in stocks were as follows:

a) the data of accounting statistics on the stocks by kind and by industries (based on the balance sheets of enterprises);

b) the data of the reports of agricultural enterprises on the stocks of agricultural goods, young and fattened livestock, work-in-progress;

c) the resource and use tables for main agricultural goods;

d) the data of household budget surveys for stocks of agricultural products from small-scale production;

e) the data on the financing of the Department of the State Material Reserves from the state budget.

The stocks of agricultural goods held by agricultural enterprises were valued at cost, those held by households as producers at average market prices. Adjustment for eliminating the price influence was not made because of the lack of necessary information.

11.3 Table 5.2 shows changes in stocks cross-classified by sectors and industries for 1988-90.
12.1 Capital transfers include the following groups:

a) financed from the state budget:
   • i) capital investments;
   • ii) expenditure on the formation of the herd of breeding and dairy livestock and reimbursement of the bank loans taken for these purposes;
   • iii) major repairs;
   • iv) purchases of equipment, tools and books included in fixed assets;
   • v) writing off the debts of collective farms on bank loans;
   • vi) compensation for political repressions paid to households;

b) financed by enterprises and institutions:
   • i) grants to the employees for dwelling construction;
   • ii) reimbursements for pulling down the buildings and orchards owned by households.

12.2 The main sources of information about the capital transfers financed from the state budget [items a)i), ii), iii), iv)] were as follows:

   a) the report on the revenues and outlays of the state budget;
   b) the report on the expenditure from the state budget on welfare and general administration purposes.

The data concerning writing off the debts of collective farms were taken from the report of the State Bank. Compensation for political repressions was taken from the balance of money incomes and expenditures of the population; the original source of information was the data of the State Bank on cash turnover.

12.3 The source of data for the estimates of grants to the employees for dwelling construction was the consolidated report of the accounting statistics on the formation and use of economic stimulation funds which was based on the book-keeping reports of enterprises. These grants were estimated as 1 per cent of the expenditures for health care, cultural and sports purposes. The
reimbursements for pulling down the buildings and orchards owned by households were taken from the estimates of the compensation of employees (see paragraph 4.7).

12.4 Capital transfers by sector for 1989 appear in Table 7.8.
CHAPTER 13

Export and Import of Goods and Services and
Other Indicators of External Economic Relations

13.1 Exports and imports of goods and services includes:
-- exports and imports of "visible" goods;
-- exports and imports of material and non-material services.

13.2 Goods considered as "visible" are goods which are realised as a result of business deals, deliveries according to agreements, barter exchanges and other kinds of deliveries. In addition exports (imports) of "visible" goods cover:

-- non-monetary gold, silver and other precious metals which are not used as a means of payment;
-- goods delivered as a contribution to the UN fund of technical assistance as donation, gratuitous aid etc.;
-- electric power, water, goods transported by pipeline (oil, gas);
-- bunker fuel, provisions and materials sold to foreign ships, aeroplanes and lorries;
-- catches of fish and other sea goods sold in neutral or foreign waters (on a concession basis);
-- cinema and television films including payments of licences for them;
-- securities, bank notes and coins which are not in circulation.

Exports (imports) of "visible" goods do not include:

-- re-exports (goods entered into the country and then exported without any processing, as well as the goods purchased by the country's external trade institutions abroad and sent to the third countries);
-- temporary export (export of goods which after utilisation for a short time abroad should be returned to the country e.g. exhibition equipment, containers, animals for racing);
-- goods sent to the territorial enclaves located abroad (e.g. embassies);
-- goods purchased by non-resident households on the economic territory of the country;
-- gold and other precious metals as means of payment; personal belongings of tourists.

13.3 In principle, imports and exports should be recorded when they change ownership. In practice, the time of recording of exports of "visible" goods carried by rail, road, air and water is taken as the date of permission to cross the frontier marked on the commodity customs declaration by the border customs. For the goods delivered by pipe-line and for electric power this is the date of the delivery-receipt statement filled out at the frontier or other points of control and distribution of the pipe-line or electric line. The time of recording of imports of "visible" goods carried by rail, road, air and water is taken as the date of permission on the commodity customs declaration to deliver goods for domestic consumption; for the goods delivered by pipe-line and for electric power this is the date of the delivery-receipt statement filled out at the frontier or other points of control and distribution of the pipe-line or electric line. For the goods purchased abroad and delivered to own institutions for local consumption this is the time of transfer of ownership recorded by the delivery-receipt statement. The recording of the exports of goods is made at f.o.b. prices, of imported goods at c.i.f. prices.

13.4 Exports (imports) of material services include: transportation, storage and communication services; repairs and technical services for vehicles; computing services; printing works; assemblage and repair of furniture, machines and equipment. Exports (imports) of non-material services include: commercial services, educational services; services in the field of health care and social security; services in waste removal and sanitary treatment; services related to leisure, cultural and sporting activities.

13.5 The sources of information on exports and imports of "visible" goods were the statistical reports provided by all external economic associations and the commodities customs declarations which covered the external economic activity of co-operatives, joint ventures and other units. The exports and imports of "visible" goods were estimated by means of the following adjustments to the data of the above mentioned reports:

a) subtracting re-exports;

b) subtracting exports and imports of material services;

c) adding goods transferred free of charge.

13.6 The main sources of information on material services (except transport and communication services) were the statistical reports of external economic associations. The value of material services included in the total value of the equipment which was destined for construction on the economic territory of the country and in the rest of the world was also added. It was estimated arbitrarily. The data on transport, communication and tourist services were based on the book-keeping reports of the foreign economic associations. No information was available on non-material services other than tourism.

13.7 Taxes on imports are the payments into the state budget of the net income which arises as a result of the differences between foreign trade prices
(converted into roubles according to the state Bank exchange rates) and domestic prices on some goods imported in the country. Taxes on imports also include compulsory duties levied by government on imported goods. Net taxes on imports equals taxes on imports less subsidies on imports. Net taxes on imports were calculated as the excess of exports in foreign trade roubles over the exports in domestic prices plus excess of imports in domestic prices over the imports in foreign trade roubles plus custom import duties minus external trade margins of foreign trade enterprises.

13.8 The data on property income and current transfers received from the rest of the world and paid out to it were based on the balance of payments estimates referred to in paragraph 7.9.

13.9 No information was available on the final consumption of resident households in the rest of the world and of non-resident households on the economic territory of the country; on the compensation of employees; on taxes and subsidies on production; on capital transfers received from the rest of the world and paid out to it and on the net purchases of intangible non-financial assets.

13.10 The consolidated accounts for 1988-90 for the external sector are shown in Table 1.7.
CHAPTER 14
The Sequence of Compilation of the Accounts

Production

14.1 The first stage in compiling the detailed accounts was to compile production accounts for individual industries. The results are Tables 6.1 to 6.17. The definition and sources and methods for deriving these are given in Chapter 2 for gross output and Chapter 3 for intermediate consumption.

14.2 These calculations lead to estimates of gross output that are valued in producers’ prices. Table 1.11 shows the data on taxes and subsidies on products that allows the conversion to basic prices. A summary of production accounts in basic prices, as Table 3.1, can then be prepared.

14.3 The information on production by industry can also be allocated on a sector basis. This leads to Tables 4.1, 4.2 and 4.3 which show the cross-classification by industry and sector and thus to Table 2.1 which is a summary at the sectoral level only.

Income

14.4 The generation of income accounts were compiled in a parallel way. The derivation of figures on compensation of employees, taxes and subsidies on production and consumption of fixed capital are described in Chapters 4, 5 and 6 respectively. This information is used to compile Table 3.2 showing generation of income account by industries. Table 3.3, showing a consolidation of production and generation of income accounts can also be compiled at this stage.

14.5 The allocation of compensation of employees by sector and industry is shown in Table 7.4 and allocation of other taxes on production by type of tax in Table 7.5. Tables 4.4, 4.5 and 4.6 show compensation of employees, taxes on production and consumption of fixed capital cross-classified by sector and industry and Table 2.2 represents a consolidation showing the sectoral allocation only.

14.6 The distribution of income account is presented in sector terms only and is shown as Table 2.3. It is derived from the generation of income account by sector by using information on property income and current transfers. These are described in Chapters 7 and 8 and their flows are summarised in Tables 7.6 and 7.7.

14.7 The use of income accounts consist of the use of disposable income account, redistribution of income in kind account and use of adjusted
Disposable income account (Tables 2.4, 2.5 and 2.6). They are derived from the
distribution of income account using information on final consumption
expenditure of households (Table 1.9) and final consumption expenditure of
general government (Table 7.3). The derivation of these figures is given in
Chapter 9. Table 1.8 showing actual final consumption can also be compiled at
this point.

Capital accumulation

14.8 Chapters 10 and 11 describe the sources of information for gross fixed
capital formation and changes in stocks. The corresponding data values by type
of asset are shown in Table 1.10. The allocation by sectors and industries is
shown in Tables 5.1 and 5.2.

14.9 The capital account by sectors, Table 2.7, shows how the expenditure on
gross capital formation is financed. It uses information from the use of
income accounts and also on capital transfer. These are described in
Chapter 12 and shown in Table 7.8.

External Account

14.10 The relations with the rest of the world are shown in Table 1.7 and the
underlying sources are described in Chapter 13.

Consolidated Accounts

14.11 Tables 1.2 to 1.6 are a consolidation of Tables 2.1 to 2.7 where
sectoral information is eliminated and only the total flows for the economy as
a whole are shown. Table 1.1 is a goods and services account showing how the
output of production is allocated among different uses, thus reconciling the
output and expenditure estimates of Gross Domestic Product.