# European system of accounts

# ESA 1995





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### **FOREWORD**

To achieve the objectives set by the Treaty on European Union, and more specifically Economic and Monetary Union, we need high-quality statistical instruments which provide the Community institutions, governments and economic and social operators with a set of harmonised and reliable statistics on which to base their decisions.

The new European System of National and Regional Accounts (ESA 95) is a major improvement on the previous version, which dates from 1979. Progress has been achieved in the harmonisation of methodology and in the precision and accuracy of the concepts, definitions, classifications and accounting rules which have to be applied in order to arrive at a consistent, reliable and comparable quantitative description of the economies of the Member States.

The new system will provide its users with a more comprehensive and more detailed knowledge of the economic and financial structures of the Member States and their regions.

ESA 95 is the fruit of several years' work. It draws on the experience acquired by the European statistical system during its work on harmonising gross national product (GNP). The European Commission is deeply grateful to the specialists from the National Statistical Institutes for the perseverance and the expertise with which they helped Eurostat to accomplish this task.

The 1995 ESA is broadly consistent with the System of National Accounts of the United Nations (1993 SNA) as regards the definitions, accounting rules and classifications. It nevertheless incorporates certain differences, particularly in its presentation, which is more in line with its use within the European Union. This specific use in fact requires greater accuracy in the definitions and the accounting rules.

To ensure that the methodological provisions set out in this volume are strictly applied, the Council of the European Union has decided, following a proposal from the Commission, to give it a solid legal basis. ESA 95 was thus adopted in the form of a Council Regulation dated 25 June 1996.

The results of this joint effort by the European statistical system will be an essential tool for formulating and implementing the entire range of European Community policies, whether economic, agricultural, regional, social, commercial or environmental.

ESA 95 will also be a crucial aid to the training of those concerned with running, understanding and analysing the European economy.

Similar efforts will be made to ensure that the data compiled at European Union level are disseminated in the form and with the frequency required by their users.

In this way the Commission hopes to give all those engaged in building Europe - institutions, businesses and members of the public alike - the means to base their decisions on a genuine understanding of the issues involved.

**JUNE 1996** 

Yves Franchet Director-General

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### LIST OF ABBREVIATIONS AND ACRONYMS

BA bankers' acceptances

BPM Balance of Payments Manual

c.i.f. cost, insurance, freight

COFOG Classification of the Functions of Government

COICOP Classification of Individual Consumption by Purpose for Households

CPA Classification of Products by Activity

EAGGF European Agricultural Guidance and Guarantee Fund

EC European Communities

ECSC European Coal and Steel Community

ECU European currency unit

EEC European Economic Community

EIB European Investment Bank

EKS Elteto-Köves-Szulc

EMI European Monetary Institute
EMS European Monetary System
ESA European System of Accounts

EU European Union

FISIM financial intermediation services indirectly measured

f.o.b. free on board

FRA forward rate agreement

FRN floating rate note
G nominal holding gain
GDP gross domestic product

GDPR gross domestic product per region
GFS Government Finance Statistics

GNI gross national income GNP gross national product

ILO International Labour Organisation

IMF International Monetary Fund

INTERACTAT

INTRASTAT intra-community trade statistics

ISCED International Standard Classification of Education

ISIC Rev. 3 International Standard Industrial Classification of all Economic Activities (Revision 3)

KAU kind-of-activity unit

NACE Rev. 1 General Industrial Classification of Economic Activities within the European Communities

(Revision 1)

NDP net domestic productn.e.c. not elsewhere classified



NG neutral holding gain

NIF note issuance facility

NIFO next-in-first-out

NNI net national income NPI non-profit institution

NPISH non-profit institutions serving households

NUTS Nomenclature of Territorial Units for Statistics

OECD Organisation for Economic Cooperation and Development

OTC over-the-counter

PIM perpetual inventory method PPP purchasing power parity R and D research and development

RG real holding gain ROW rest of the world

SAM social accounting matrix SDR special drawing right

SNA System of National Accounts

TARIC Integrated Tariff of the European Union

UCITS Undertakings for Collective Investment in Transferable Securities

UN United Nations
VAT value added tax

### CHAPTER 1 GENERAL FEATURES

1.01. The European System of National and Regional Accounts (1995 ESA, or simply: ESA) is an internationally compatible accounting framework for a systematic and detailed description of a total economy (that is a region, country or group of countries), its components and its relations with other total economies.

The 1995 ESA replaces the European System of Integrated Economic Accounts published in 1970 (1970 ESA; a second, slightly modified, edition appeared in 1978).

The 1995 ESA is fully consistent with the revised world-wide guidelines on national accounting, the System of National Accounts (1993 SNA, or simply: SNA; these guidelines have been produced under the joint responsibility of the United Nations, the IMF, the Commission of the European Communities, the OECD and the World Bank). However, the ESA is focused more on the circumstances and data needs in the European Union. Like the SNA, the ESA is harmonised with the concepts and classifications used in many other, social and economic statistics. Cases in point are statistics on employment, statistics on manufacturing and statistics on external trade. The ESA can therefore serve as the central framework of reference for the social and economic statistics of the European Union and its Member States.

- 1.02. The ESA framework consists of two main sets of tables:
  - a) the sector accounts<sup>1</sup>,
  - b) the input-output framework<sup>2</sup> and the accounts by industry<sup>3</sup>.

The sector accounts provide, by institutional sector, a systematic description of the different stages of the economic process: production, generation of income, distribution of income, redistribution of income, use of income and financial and non-financial accumulation. The sector accounts also include balance sheets to describe the stocks of assets, liabilities and net worth at the beginning and the end of the accounting period.

The input-output framework and the accounts by industry describe in more detail the production process (cost structure, income generated and employment) and the flows of goods and services (output, imports, exports, final consumption, intermediate consumption and capital formation by product group).

The ESA encompasses concepts of population and employment<sup>4</sup>. These concepts are relevant for both the sector accounts and the input-output framework.

The ESA is not restricted to annual national accounting, but applies also to quarterly accounts<sup>5</sup> and regional accounts<sup>6</sup>.

### THE USES OF THE ESA

### Framework for analysis and policy

- 1.03. The ESA framework can be used to analyse and evaluate:
  - a) the structure of a total economy. Cases in point are:
    - value added and employment by industry;
    - (2) value added and employment by region;
    - (3) income distributed by sector;
    - (4) imports and exports by product group;
    - (5) final consumption expenditure by product group;
    - (6) fixed capital formation and fixed capital stock by industry;
    - (7) the composition of the stocks and flows of financial assets by type of asset and by sector.
  - b) specific parts or aspects of a total economy.Cases in point are:

<sup>1</sup> See chapter 8., 'Sequence of accounts and balancing items'.

<sup>2</sup> See chapter 9., 'The input-output framework'.

<sup>3</sup> See chapter 8., 'Sequence of accounts and balancing items'.

<sup>4</sup> See chapter 11., 'Population and labour inputs'.

<sup>5</sup> See chapter 12., 'Quarterly economic accounts'.

<sup>6</sup> See chapter 13., 'Regional accounts'.



- banking and finance in the national economy;
- (2) the role of government;
- (3) the economy of a specific region (in comparison to that of the nation as a whole).
- c) the development of a total economy over time. Cases in point are:
  - (1) the analysis of GDP growth rates;
  - (2) he analysis of inflation;
  - the analysis of seasonal patterns in household expenditure on the basis of quarterly accounts;
  - (4) the analysis of the changing importance of particular types of financial instruments over time, e.g. the increased importance of options;
  - (5) the comparison of the industrial structures of the national economy over the long term, e.g. over a period of thirty years.
- d) a total economy in relation to other total economies. Cases in point are:
  - the comparison of the roles of government in the Member States of the European Union;
  - (2) the analysis of the interdependencies between the economies of the European Union;
  - (3) the analysis of the composition and destination of the exports of the European Union;
  - (4) the comparison of GDP growth rates or disposable income per capita in the European Union and in the United States and Japan.
- 1.04. For the EU and its Member States, the figures from this framework play a major role in formulating and monitoring their social and economic policy.

Furthermore, there are some very important specific uses:

- a) for monitoring and guiding European monetary policy: the criteria of convergence for the European Monetary Union have been defined in terms of national accounts figures (government deficit, government debt and GDP);
- b) for granting monetary support to regions in the EU: the expenditure for the Structural Funds of the EU is partly based on regionalised national accounts figures;

- c) for determining the own resources of the EU. The latter depend on national accounts figures in three ways:
  - the total resources for the EU are determined as a percentage of the Member States' gross national products (GNP);
  - (2) the third own resource of the EU is the VAT own resource. The contributions by the Member States for this resource are largely affected by national accounts figures, because they are used to calculate the average VAT rate;
  - (3) the relative sizes of the contributions by the Member States for the fourth own resource of the EU are based on their gross national products.

### Eight characteristics of ESA concepts

- 1.05. In order to establish a good balance between data needs and data possibilities, the concepts in the ESA have eight important characteristics. They are:
  - a) internationally compatible;
  - b) harmonised with those in other social and economic statistics;
  - c) consistent;
  - d) operational;
  - e) different from most administrative concepts;
  - f) well-established and fixed for a long period;
  - g) focused on describing the economic process in monetary and readily observable terms;
  - h) flexible and multi-purpose.
- 1.06. The concepts are internationally compatible because:
  - a) for EU Member States, the ESA is the standard for submitting national accounts data to all international organisations. Only in the national publications is strict adherence to the ESA not obligatory;
  - b) the concepts in the ESA are in all respects consistent with those in the world-wide guidelines on national accounting, i.e. the SNA.

International compatibility of concepts is crucial when comparing statistics for different countries.

1.07. The concepts are harmonised with those in other social and economic statistics because:



- a) the ESA employs many concepts and classifications (e.g. NACE rev. 1) that are also used for the other social and economic statistics of EU Member States, e.g. in statistics on manufacturing, statistics on external trade and statistics on employment; conceptual differences have been kept to a minimum. Furthermore, these EU concepts and classifications are also harmonised with those of the United Nations;
- b) like the SNA, the concepts in the ESA are also harmonised with those in the major international guidelines on some other economic statistics, in particular the IMF Balance of Payments Manual (BPM), the IMF Government Finance Statistics (GFS), the OECD Revenue Statistics and the ILO resolutions on the concepts of employment, hours worked and labour costs.

This harmonisation with other, social and economic statistics greatly aids the linkage to and comparison with these figures. As a consequence, better national accounts figures can be compiled. Furthermore, the information contained in these specific statistics can now be better related to the general statistics on the national economy, i.e. the national accounts figures like GNP or value added per industry and sector.

- 1.08. The identities in the accounting framework enforce the consistency of the concepts used to describe the different parts of the economic process (production, income distribution, use of income, accumulation). As a result of this internal consistency, statistics from different parts of the accounting framework can be usefully related to each other. So, for example, the following ratios can be calculated:
  - a) productivity figures, such as value added per hour worked (this figure requires consistency between the concepts of value added and hours worked);
  - National disposable income per capita (this ratio requires consistency between the concepts national disposable income and population);
  - c) fixed capital formation as a percentage of fixed capital stock (this ratio requires consistency between the definitions of these flows and stocks);
  - d) government deficit and debt as percentages of gross domestic product (these figures require consistency between the concepts

of government deficit, government debt and gross domestic product).

This internal consistency of concepts also allows some estimates to be derived by residual, e.g. saving can be estimated as the difference between disposable income and final consumption expenditure<sup>7</sup>.

- 1.09. The concepts in the ESA are operational concepts since they are designed with their measurement in mind. The operational character of the concepts is revealed in several ways:
  - a) some activities or items have only to be described when significant in size. This pertains, for example, to own-account production of goods by households: weaving cloth and the production of pottery are not to be recorded as production, because these types of production are deemed to be insignificant for EU countries. Another case in point is that small inexpensive tools and appliances are only recorded as fixed capital formation when the purchaser's expenditure on such durables exceeds ECU 500 (at 1995 prices) per item (or, when bought in quantities, for the total amount bought); when this expenditure does not exceed this threshold, these items are recorded as intermediate consumption;
  - b) some concepts are accompanied by clear indications of how to estimate them. For example, in defining capital consumption reference is made to linear depreciation and for estimating fixed capital stock the Perpetual Inventory Method is recommended. Another case in point is the valuation of own-account production: in principle, it should be at basic prices, but if necessary the basic prices may be approximated by adding up the various costs involved;
  - c) some simplifying conventions have been adopted. For example, by convention, the collective services provided by government are all final consumption expenditure;
  - d) the concepts are harmonised with those in social and economic statistics used as inputs for compiling the national accounts.
- 1.10. However, at the same time, the concepts are not always easy to put into operation as they usually diverge in some respects from those employed in administrative data sources. Cases in point are business accounts, data on various types of taxes (VAT, personal income tax, import levies, etc.), social security data and

<sup>7</sup> See chapter 8., 'Sequence of accounts and balancing items'.



data from supervisory boards on banking and insurance. These administrative data often serve as inputs for compiling the national accounts. In general, they will therefore have to be transformed in order to comply with the ESA.

The concepts in the ESA usually differ in some respects from their administrative counterparts because:

- a) administrative concepts differ between countries. As a consequence, international compatibility cannot be attained through administrative concepts;
- administrative concepts change over time.
   As a consequence, comparability in time cannot be attained through administrative concepts;
- c) the concepts underlying administrative data sources are usually not consistent with each other. However, linking and comparing data, which is crucial for compiling national accounts figures, is only possible with a consistent set of concepts;
- d) the administrative concepts are generally not optimal for economic analysis and the evaluation of economic policy.

Nevertheless, sometimes, administrative data sources meet the data needs of national accounts and other statistics very well, because:

- a) concepts and classifications originally devised for statistical purposes may also be adopted for administrative purposes, e.g. the classification of government expenditure by type;
- administrative data sources may explicitly take account of the (separate) data needs of statistics; this applies, for example, to the INTRASTAT system for providing information about deliveries of goods between EU-Member States.
- 1.11. The main concepts in the ESA are well-established and fixed for a long period, because:
  - a) they have been approved as the international standard for the next decades;
  - in the successive international guidelines on national accounting most of the basic concepts have hardly been changed.

This conceptual continuity reduces the need to recalculate time series and to learn new concepts. Furthermore, it limits the vulnerability of the concepts to national and international political pressure. For these reasons, the national accounts figures have been able to serve as an

- objective data base for economic policy and analysis for decades.
- 1.12. The ESA concepts are focused on describing the economic process in monetary and readily observable terms. For the most part, stocks and flows that are not readily observable in monetary terms, or that do not have a clear monetary counterpart are not taken into account.

This principle has not been applied strictly, because account should also be taken of the requirement of consistency and the various data needs. For example, consistency requires that the value of collective services produced by government is recorded as output, because the payment of compensation of employees and the purchase of all kinds of goods and services by government are readily observable in monetary terms. Furthermore, for the purposes of economic analysis and policy, describing the collective services of government in relation to the rest of the national economy increases also the usefulness of the national accounts as a whole.

1.13. The scope of the concepts in the ESA can be illustrated by considering some important borderline issues.

The following fall within the production boundary of the ESA (see paragraphs 3.07. – 3.09.):

- a) production of individual and collective services by government;
- b) the own-account production of housing services by owner-occupiers;
- c) production of goods for own final consumption, e.g. of agricultural products;
- d) own-account construction, including that by households;
- e) the production of services by paid domestic staff;
- f) breeding of fish in fish farms;
- g) production forbidden by law, e.g. prostitution and production of drugs;
- h) production from which the revenues are not declared in full to the fiscal authorities, e.g. clandestine production of textiles.

The following fall outside the production boundary:

 a) domestic and personal services produced and consumed within the same household, e.g. cleaning, the preparation of meals or the care of sick or elderly people;



- volunteer services that do not lead to the production of goods, e.g. caretaking and cleaning without payment;
- c) natural breeding of fish in open seas.

In general, the ESA records all outputs that result from production within the production boundary. However, there are some specific exceptions to this rule:

- a) the outputs of ancillary activities are not to be recorded; all inputs consumed by an ancillary activity – materials, labour, consumption of fixed capital, etc. – are treated as inputs into the principal or secondary activity which it supports;
- b) outputs produced for intermediate consumption in the same local kind-of-activity unit (KAU, see paragraph 1.29.) are not to be recorded; however, all outputs produced for other local KAUs belonging to the same institutional unit are to be recorded as output.

The accounting logic of the ESA implies that if activities are regarded as production and their output is to be recorded, then the concomitant income, employment, final consumption, etc. are also to be recorded. For example, as the own-account production of housing services by owner-occupiers is recorded as production, so is the income and final consumption expenditure it generates for these owner-occupiers. The reverse holds when activities are not recorded as production: domestic services produced and consumed within the same household do not generate income and final consumption expenditure and according to the ESA concepts, no employment is involved.

The ESA also contains many specific conventions, e.g.:

- a) the valuation of government output;
- b) the valuation of the output of insurance services and financial intermediation services indirectly measured;
- recording all the collective services provided by government as final consumption expenditure and none as intermediate consumption;
- d) recording the use of financial intermediation services indirectly measured as the intermediate consumption of a nominal sector or a nominal industry.
- 1.14. The concepts in the ESA are multi-purpose: for a great range of uses the ESA concepts will be acceptable, though they may need to be supplemented for some uses (see paragraph 1.18.).

- 1.15. The detail in the conceptual framework of the ESA offers the opportunity for flexible use: some concepts are not explicitly present in the ESA but can nevertheless easily be derived from it. For example, value added at factor cost can be derived by subtracting net other taxes on production from value added at basic prices. Another case in point is the creation of new sectors by rearranging the sub-sectors defined in the ESA.
- 1.16. Flexible use is also possible by introducing additional criteria which do not conflict with the logic of the system. For example, these criteria might be the scale of employment for producer units or the size of income for households. For employment, subclassification by level of education, age and sex can be introduced.
- This flexible use may be incorporated in a 1.17. Social Accounting Matrix (SAM). The SAM is a matrix presentation which elaborates the linkages between supply and use tables and the sector accounts (see paragraphs 8.133. – 8.155.). A SAM commonly provides additional information on the level and composition of (un)employment, via a subdivision of compensation of employees by type of person employed. This subdivision applies to both the use of labour by industry, as shown in the use tables, and the supply of labour by socio-economic subgroup, as shown in the allocation of primary income account for sub-sectors of the sector households. In this way, the supply and use of various categories of labour is shown systematically.
- 1.18. For some specific data needs the best solution is to draw up separate satellite accounts. Cases in point are the data needs for e.g.:
  - a) the analysis of the role of tourism in the national economy;
  - b) the analysis of the costs and financing of health care;
  - c) the analysis of the importance of research & development and human capital for the national economy;
  - d) the analysis of the income and expenditure of households on the basis of microoriented concepts of income and expenditure;
  - e) the analysis of the interaction between the environment and the economy;
  - f) the analysis of production within households;
  - g) the analysis of changes in welfare;



- h) the analysis of the differences between national accounts and business accounts figures and their influence on stock and exchange markets;
- i) the estimation of tax revenues.
- 1.19. Satellite accounts can serve such data needs by:
  - a) showing more detail where necessary and leaving out superfluous detail;
  - enlarging the scope of the accounting framework by adding non-monetary information, e.g. on pollution and environmental assets:
  - c) changing some basic concepts, e.g. by enlarging the concept of capital formation by amount of the expenditure on research & development or the expenditure on education.
- 1.20. An important feature of the satellite accounts is that in principle all basic concepts and classifications of the standard framework are retained. Only when the specific purpose of the satellite account definitely requires a modification, are changes in the basic concepts introduced. In such instances, the satellite account should also contain a table showing the link between the major aggregates in the satellite account and those in the standard framework. In this way, the standard framework retains its role as a framework of reference and at the same time justice is done to more specific needs.
- 1.21. The standard framework does not pay much attention to stocks and flows which are not readily observable in monetary terms (or without a clear monetary counterpart). By their nature, the analysis of such stocks and flows is usually also well served by compiling statistics in non-monetary terms, e.g.:
  - a) production within households can most easily be described in terms of hours allocated to the alternative uses;
  - b) education can be described in terms of type of education, the number of pupils, the average number of years of education before obtaining a diploma, etc.;
  - c) the effects of pollution are best described in terms of changes in the number of living species, the health of the trees in the forest, the volume of refuse, the amounts of carbon-monoxide and radiation, etc.

The satellite accounts offer a possibility to link such statistics in non-monetary units to the standard national accounts framework. The linkage is possible by using for these non-monetary statistics, as far as possible, the classifications employed in the standard framework, e.g. the classification by type of household or the classification by industry. In this way, a consistent extended framework is drawn up. This framework can then serve as a data base for the analysis and evaluation of all kinds of interactions between the variables in the standard framework and those in the extended part.

- 1.22. The standard framework and its major aggregates do not describe changes in welfare. Extended accounts can be drawn up which include also the imputed monetary values of, e.g.:
  - a) domestic and personal services produced and consumed within the same household;
  - b) changes in leisure time;
  - c) amenities and disadvantages of urban life;
  - d) inequalities in the distribution of income over persons.

They can also reclassify the final expenditure on regrettable necessities (e.g. defence) as intermediate consumption, i.e. as not contributing to welfare. Similarly, the damage due to floods and other natural disasters could be classified as intermediate consumption, i.e. as a reduction in (absolute) welfare.

In this way, one could try to construct a very rough and very imperfect indicator of changes in welfare. However, welfare has many dimensions, most of which are best not expressed in monetary terms. A better solution for measuring welfare is therefore to use, for each dimension, separate indicators and units of measurement. The indicators could be, for example, infant mortality, life expectancy, adult literacy and national income per capita. These indicators could be incorporated in a satellite account

1.23. In order to attain a consistent, internationally compatible framework, administrative concepts are not employed in the ESA. However, for all kinds of national purposes, obtaining figures based on administrative concepts can be very useful. For example, for estimating tax revenues statistics of taxable income are required. These statistics can be provided by making some modifications to the national accounts statistics.

A similar approach could be taken for some concepts used in national economic policy, e.g. for:

 a) the concept of inflation used for increasing pensions, unemployment benefits or compensation of employees for civil servants;



- the concepts of taxes, social contributions, government and the collective sector used in discussing the optimal size of the collective sector;
- the concept of 'strategic' sectors/industries used in national economic policy or the economic policy of the EU;
- d) the concept of 'business investments' used in national economic policy.

Satellite accounts or simple supplementary tables could meet such, usually specifically national, data needs.

#### The 1995 ESA and the 1993 SNA

- 1.24. The ESA (the 1995 ESA) is fully consistent with the revised System of National Accounts (the 1993 SNA), which provides guidelines on national accounting for all countries throughout the world. Nevertheless, there are several differences between the 1995 ESA and the 1993 SNA:
  - a) differences in presentation, e.g.:
    - in the ESA there are separate chapters on transactions in products, distributive transactions and financial transactions. In contrast, in the SNA these transactions are explained in seven chapters arranged by account, e.g. chapters on the production account, the primary distribution of income account, the capital account and the Rest of the World account;
    - (2) the ESA describes a concept by providing a definition and a listing of what is included and what is excluded. The SNA describes concepts usually in more general terms and endeavours also to explain the rationale behind the conventions adopted;
    - (3) the ESA also contains chapters on regional accounts and quarterly accounts;
    - (4) the SNA also contains a chapter on satellite accounts.
  - b) the ESA concepts are in several instances more specific and precise than those of the SNA, e.g.:
    - (1) the SNA does not contain very precise definitions on the distinction between market, for own final use and other non-market for institutional units, local KAUs and their outputs. This implies that in this respect the valuation of output and the classification by sectors are not defined sufficiently precisely. The ESA has therefore introduced several

- extra clarifications and also added in some specific instances the criterion that the sales of a market producer should cover at least 50% of the production costs (see Table 3.1);
- the ESA specifies concrete recording thresholds, e.g. for recording small tools and appliances devices as intermediate consumption;
- (3) the ESA assumes that several types of household production of goods, such as the weaving of cloth and the making of furniture, are not significant in EU Member States and therefore need not be recorded;
- (4) the ESA makes explicit reference to specific institutional arrangements in the EU, such as the INTRASTAT system for recording intra-EU flows of goods and the contributions by the Member States to the EU;
- (5) the ESA contains EU-specific classifications, e.g.: CPA for products and NACE rev. 1 for industries (specific but harmonised with the corresponding UN classifications);
- (6) the ESA contains an additional classification for all external transactions: they should be divided into those between residents of the EU and those with residents from outside the EU.

The ESA can be more specific than the SNA, because the ESA primarily applies to the EU Member States. For the data needs of the EU, the ESA should also be more specific.

#### The 1995 ESA and the 1970 ESA

- 1.25. The 1995 ESA differs in scope as well as in concepts from the 1970 ESA. Most of these differences correspond to differences between the 1968 SNA and 1993 SNA. Some of these major differences in scope are:
  - a) the inclusion of balance sheets;
  - b) the inclusion of other changes in assets accounts, i.e. the introduction of the concepts other changes in volume, nominal holding gains and real holding gains;
  - the introduction of a subsectoring of households;
  - d) the introduction of a new concept of final consumption: Actual Final Consumption;
  - e) the introduction of a new price-adjusted income concept: real national disposable income;



f) the inclusion of the concept of purchasing power parities.

Some of the major differences in concepts are:

- a) literary-artistic work (writing books, composing music) is now regarded as production; payments for literary-artistic work are therefore payments for services and not property income;
- b) the valuation of the output of insurance services has changed in some respects, e.g. the revenues from the investment of technical reserves are now also taken into account in valuing the output of non-life insurance;
- more detailed treatment of trade and transport margins;
- d) the introduction of chain linking for calculating constant prices;
- e) the concept of financial leasing has been introduced (the 1968 SNA and 1970 ESA contained only the concept of operational leasing);
- f) expenditure on mineral exploration and on computer software is now recorded as capital formation (instead of as intermediate consumption);
- g) capital consumption should also be recorded for infrastructurel works of government (roads, dikes, etc.);
- identification of new financial instruments, such as repurchase agreements, and derivative financial instruments such as options.

There are also differences that do not result from changes in the SNA, e.g.:

- a) the introduction of supply and use tables (this was already included in the 1968 SNA);
- b) the introduction of some registration thresholds and the reference to specific institutional arrangements in the EU (see paragraph 1.24.);
- a clear choice in favour of valuing output at basic prices (the 1970 ESA, the 1968 SNA and the 1993 SNA also accept valuation at producer's prices);
- d) the introduction of the concepts of economically active population and unemployment (these concepts are absent in the 1968 and 1993 SNA).

#### THE ESA AS A SYSTEM

- 1.26. The main features of the system are:
  - a) statistical units and their groupings;
  - b) flows and stocks;
  - c) the system of accounts and the aggregates;
  - d) the input-output framework.

### Statistical units and their groupings8

1.27. A characteristic feature of the system is the use of two types of unit and two ways of subdividing the economy which are quite different and serve separate analytical purposes.

In order to describe income, expenditure and financial flows, and balance sheets, the system groups institutional units into sectors on the basis of their principal functions, behaviour and objectives.

In order to describe processes of production and for input-output analysis, the system groups local kind-of-activity units (local KAUs) into industries on the basis of their type of activity. An activity is characterised by an input of products, a production process and an output of products.

### Institutional units and sectors

- 1.28. Institutional units are economic entities that are capable of owning goods and assets, of incurring liabilities and of engaging in economic activities and transactions with other units in their own right. For the purposes of the system, the institutional units are grouped together into five mutually exclusive institutional sectors composed of the following types of units:
  - a) non-financial corporations;
  - b) financial corporations;
  - c) general government;
  - d) households;
  - e) non-profit institutions serving households.

The five sectors together make up the total economy. Each sector is also divided into subsectors. The system makes provision for a complete set of flow accounts and balance sheets to be compiled for each sector, and sub-sector if desired, as well as for the total economy.

<sup>8</sup> See chapter 2., 'Units and groupings of units'.



#### Local kind-of-activity units and industries

1.29. Most institutional units in their capacity as producers carry out more than one activity; to emphasise relationships of a technico-economic kind, they have to be partitioned with regard to the type of activity.

Local kind-of-activity units are intended to meet this requirement as an operational approach. A local KAU groups all the parts of an institutional unit in its capacity as producer which are located in a single or closely located sites, and which contribute to the performance of an activity at the class level (4 digits) of the NACE rev. 1.

In principle, as many local kind-of-activity units must be registered as there are secondary activities; however, if the accounting documents that would be necessary to describe such activities are not available, a local kind-of-activity unit may include one or several secondary activities.

The group of all local KAUs engaged on the same, or similar, kind-of-activity constitutes an industry.

There is a hierarchical relationship between institutional units and local KAUs. An institutional unit contains one or more entire local KAUs; a local KAU belongs to one and only one institutional unit.

For more refined analysis of the production process, use is made of an analytical unit of production. This unit, which is not observable (except in the case of a local KAU only producing one type of product), is the unit of homogeneous production, defined as covering no secondary activities. Groupings of these units constitute homogeneous branches.

# Resident and non-resident units; total economy and rest of the world

1.30. The total economy is defined in terms of resident units. A unit is said to be a resident unit of a country when it has a centre of economic interest on the economic territory of that country – that is, when it engages for an extended period (one year or more) in economic activities on this territory. The institutional sectors referred to above are groups of resident institutional units.

Resident units engage in transactions with non-resident units (that is, units which are residents in other economies). These transactions are the external transactions of the economy and are grouped in the rest of the world account. So, in the system's accounting structure, the rest of the world plays a role similar to that of an institutional sector, although non-resident units

are included only in so far as they are engaged in transactions with resident institutional units. Consequently, as far as coding of classifications is concerned, a specific item for the rest of the world is included at the end of the classification of sectors.

Notional resident units, treated in the system as institutional units, are defined as:

- a) those parts of non-resident units which have a centre of economic interest (that is in most cases which engage in economic transactions for a year or more or which carry out a construction activity for a period of less than a year if the output constitutes gross fixed capital formation) on the economic territory of the country;
- b) non-resident units in their capacity as owners of land or buildings on the economic territory of the country, but only in respect of transactions affecting such land or buildings.

#### Flows and stocks

1.31. The system records two basic kinds of information: flows and stocks. Flows refer to actions and effects of events that take place within a given period of time, while stocks refer to positions at a point of time.

#### Flows

1.32. Flows reflect the creation, transformation, exchange, transfer or extinction of economic value. They involve changes in the value of an institutional unit's assets or liabilities. Economic flows are of two kinds: transactions, and other changes in assets. Transactions appear in all accounts and tables where flows appear, except the other changes in volume of assets account and the revaluation account. Other changes in the assets appear only in these two accounts.

Elementary transactions and other flows are innumerable. The system groups them into a relatively small number of types according to their nature.

#### **Transactions**

- 1.33. A transaction is an economic flow that is an interaction between institutional units by mutual agreement or an action within an institutional unit that it is useful to treat as a transaction, often because the unit is operating in two different capacities. It is convenient to divide transactions into four main groups:
  - a) transactions in products:



which describe the origin (domestic output or imports) and use (intermediate consumption, final consumption, capital formation or exports) of products<sup>9</sup>;

b) distributive transactions:

which describe how value added generated by production is distributed to labour, capital and government, and the redistribution of income and wealth (taxes on income and wealth and other transfers)<sup>10</sup>;

c) financial transactions:

which describe the net acquisition of financial assets or the net incurrence of liabilities for each type of financial instrument. Such transactions often occur as counterparts of non-financial transactions, but they may also occur as transactions involving only financial instruments<sup>11</sup>;

d) transactions not included in the three groups above:

consumption of fixed capital and acquisitions less disposals of non-produced non financial assets<sup>12</sup>.

#### Properties of transactions

Interactions versus intra-unit transactions

1.34. Most transactions are interactions between two or more institutional units. However, the system records some actions within institutional units as transactions. The purpose of recording these intra-unit transactions is to give a more analytically useful picture of output, final uses and costs.

Consumption of fixed capital, which is recorded as a cost by the system, is an important intra-unit transaction. Most of the other intra-unit transactions are transactions in products, typically recorded when institutional units operating as both producers and final consumers choose to consume some of the output they have produced themselves. This is often the case for households and general government.

1.35. All own-produced output used for final uses within the same institutional unit is recorded. Own-produced output used for intermediate consumption within the same institutional unit is recorded only when production and intermediate consumption take place in different local kind-of-activity units within the same in-

stitutional unit. Output produced and used as intermediate consumption within the same local kind-of-activity unit is not recorded.

Monetary versus non-monetary transactions

1.36. Most transactions recorded by the system are monetary transactions, where the units involved make or receive payments, or incur liabilities or receive assets denominated in units of currency.

Transactions that do not involve the exchange of cash, or assets or liabilities denominated in units of currency, are non-monetary transactions. Intra-unit transactions are normally non-monetary transactions. Non-monetary transactions involving more than one institutional unit occur among transactions in products (barter of products), distributive transactions (remuneration in kind, transfers in kind, etc.) and other transactions (barter of non-produced non-financial assets).

The system records all transactions in monetary terms. The values to be recorded for non-monetary transactions must therefore be measured indirectly or otherwise estimated.

Transactions with and without counterparts

1.37. Transactions involving more than one unit are either 'something for something' or 'something for nothing' transactions. The former are exchanges between institutional units, i.e. provision of goods, services or assets in return for a counterpart, e.g. money. The latter typically are payments in cash or in kind from one institutional unit to another without counterpart. 'Something for something' transactions occur in all four transaction groups, while 'something for nothing' transactions occur mainly among distributive transactions, in the form of, for example, taxes, social assistance benefits or gifts.

#### Rearranged transactions

1.38. The system's treatment of most transactions is straightforward; that is, the transactions are recorded in the same way as they appear to the institutional units involved. However, some transactions are rearranged in order to bring out the underlying economic relationships more clearly. Transactions can be rearranged in three ways: rerouting, partitioning and recognising the principal party to a transaction.

<sup>9</sup> See chapter 3., 'Transactions in products'.

<sup>10</sup> See chapter 4., 'Distributive transactions'.

<sup>11</sup> See chapter 5., 'Financial transactions',

<sup>12</sup> See chapter 6., 'Other flows'.



#### Rerouting

1.39. A transaction that appears to the units involved as taking place directly between units A and C may be recorded as taking place indirectly through a third unit B. Thus, the single transaction between A and C is recorded as two transactions: one between A and B, and one between B and C. In this case the transaction is rerouted.

A well-known example of a rerouting is employers' social contributions paid directly by employers to social insurance funds. The system records these payments as two transactions: employers pay employer's social contributions to their employees, and employees pay the same contributions to social insurance funds. As with all reroutings, the purpose of rerouting employers' social contributions is to bring out the economic substance behind the transaction. In this case this means to show employer's social contributions as contributions paid for the benefit of employees.

Another type of rerouting is that of transactions recorded as taking place between two or more institutional units, although according to the parties involved no transaction takes place at all. An example is the treatment of property income earned on certain insurance funds, which is retained by insurance enterprises. The system records this property income as being paid by insurance enterprises to policy holders, who then pay the same amount back to the insurance enterprises as premium supplements.

#### Partitioning

1.40. When a transaction appearing to the parties involved as a single transaction is recorded as two or more differently classified transactions, the transaction is partitioned. Partitioning does usually not imply involving additional units in the transactions.

The payment of non-life insurance premiums is a typical partitioned transaction. Although policy holders and insurers regard these payments as one transaction, the system divides them into two quite different transactions: payments in return for non-life insurance services provided, and net non-life insurance premiums. The recording of trade margins is another important case of partitioning.

#### Recognising the principal party to a transaction

1.41. When a unit carries out a transaction on behalf of another unit, the transaction is recorded

exclusively in the accounts of the principal. As a rule, one should not go beyond this principle and try, for instance, to allocate taxes or subsidies to ultimate payers or ultimate beneficiaries under the adoption of assumptions.

#### Borderline cases

1.42. The definition of a transaction stipulates that an interaction between institutional units be by mutual agreement. When a transaction is undertaken by mutual agreement, the prior knowledge and consent of the institutional units is implied. However, this does not mean that all units necessarily enter a transaction voluntarily, because some transactions are imposed by law. This applies mainly to certain distributive transactions, such as payments of taxes, fines and penalties. However, uncompensated seizure of assets is not regarded as a transaction, even when imposed by law.

Illegal economic actions are transactions only when all units involved enter the actions voluntarily. Thus, purchases, sales or barters of illegal drugs or stolen property are transactions, while theft is not.

#### Other changes in assets

- 1.43. Other changes in assets record changes that are not the result of transactions 13. They are either:
  - a) other changes in the volume of assets and liabilities, or
  - b) holding gains and losses.

Other changes in the volume of assets and liabilities

- 1.44. These changes can be roughly divided into three main categories:
  - a) normal appearance and disappearance of assets other than by transactions;
  - b) changes in assets and liabilities due to exceptional, unanticipated events;
  - c) changes in classification and structure.
- 1.45. Examples of changes within category a) are discovery or depletion of subsoil assets, and natural growth of non-cultivated biological resources. Category b) comprises changes (normally losses) in assets due to natural disasters, war or severe acts of crime<sup>14</sup>. Unilateral cancellation of debt and uncompensated seizure of assets also belong to category b). Category c) consists of changes as a consequence of reclassification and restructuring of institutional units or of assets and liabilities.

<sup>13</sup> See chapter 6., 'Other flows'.

<sup>14</sup> The consequences of minor crimes, such as shoplifting, may be recorded as part of change in inventories and thus as a transaction.



#### Holding gains and losses

1.46. Holding gains and losses result from changes in the prices of assets. They occur on all kinds of financial and non-financial assets, and on liabilities. Holding gains and losses accrue to the owners of assets and liabilities purely as a result of holding the assets or liabilities over time, without transforming them in any way.

Holding gains and losses measured on the basis of current market prices are called nominal holding gains and losses. These may be decomposed into neutral holding gains and losses, reflecting changes in the general price level, and real holding gains and losses, reflecting changes in the relative prices of assets.

#### Stocks

1.47. Stocks are holdings of assets and liabilities at a point in time. Stocks are recorded at the beginning and end of each accounting period. The accounts that show stocks are called balance sheets<sup>15</sup>.

> Stocks are also recorded for population and employment. However, these stocks are recorded as mean values over the accounting period.

> Stocks are recorded for all assets within the system's boundaries; that is, for financial assets and liabilities and for non-financial assets, both produced and non-produced. However, the coverage is limited to those assets that are used in economic activity and that are subject to ownership rights. Thus, stocks are not recorded for assets such as human capital and natural resources that are not owned.

Within its boundaries, the system is exhaustive in respect of both flows and stocks. This implies that all changes in stocks can be fully explained by recorded flows.

#### The system of accounts and the aggregates<sup>16</sup>

#### Rules of accounting

1.48. An account is a means of recording, for a given aspect of economic life, the uses and resources or the changes in assets and the changes in liabilities during the accounting period, or the stock of assets and liabilities existing at the beginning or at the end of this period.

#### Terminology for the two sides of the accounts

1.49. The system employs the term 'resources' for the right side of the current accounts where transactions appear which add to the amount of economic value of a unit or a sector. The left side of the accounts, which relates to transactions that reduce the amount of economic value of a unit or sector, is termed 'uses'.

The right side of the accumulation accounts is called 'changes in liabilities and net worth' and their left side is called 'changes in assets'.

Balance sheets are presented with 'liabilities and net worth' (the difference between assets and liabilities) on the right side and 'assets' on the left. Comparison of two successive balance sheets shows changes in liabilities and net worth and changes in assets.

#### Double entry/quadruple entry

1.50. For a unit or sector, national accounting is based on the principle of double entry. Each transaction must be recorded twice, once as a resource (or a change in liabilities) and once as a use (or a change in assets). The total of transactions recorded as resources or changes in liabilities and the total of transactions recorded as uses or changes in assets must be equal, thus permitting a check on the consistency of the accounts.

In practice though, national accounts – with all units and all sectors – are based on a principle of quadruple entry, since most transactions involve two institutional units. Each transaction of this type must be recorded twice by the two transactors involved. For example, a social benefit in cash paid by a government unit to a household is recorded in the accounts of government as a use under transfers and a negative acquisition of assets under currency and deposits; in the accounts of the household sector it is recorded as a resource under transfers and an acquisition of assets under currency and deposits.

On the other hand, transactions within a single unit (such as the consumption of output by the same unit that produced it) require only two entries, whose values have to be estimated.

#### Valuation

1.51. With the exception of some variables concerning population and labour, the system shows all flows and stocks in monetary terms. The system does not attempt to determine the utility of flows and stocks. Instead, flows and

<sup>15</sup> See chapter 7., 'Balance sheets'.

<sup>16</sup> See chapter 7., 'Balance sheets', and chapter 8., 'Sequence of accounts and balancing items'.



stocks are measured according to their exchange value, i.e. the value at which flows and stocks are in fact, or could be, exchanged for cash. Market prices are thus ESA's basic reference for valuation.

- In the case of monetary transactions and cash holdings and liabilities, the values required are directly available. In most other cases, the preferred method of valuation is by reference to market prices for analogous goods, services or assets. This method is used for e.g. barter and the services of owner-occupied dwellings. When no market prices for analogous products are available, for instance in the case of nonmarket services produced by government, valuation should be made according to production costs. If neither of these two methods are feasible, flows and stocks may be valued at the discounted present value of expected future returns. However, due to the great uncertainty involved, this last method is only recommended as a last resort.
- 1.53. Stocks should be valued at current prices at the time to which the balance sheet relates, not at the time of production or acquisition of the goods or assets that form the stocks. It is sometimes necessary to value stocks at their estimated written-down current acquisition values or production costs.

Special valuations concerning products<sup>17</sup>

- 1.54. Because of transport costs, trade margins and taxes less subsidies on products, the producer and the user of a given product usually perceive its value differently. In order to keep as close as possible to the views of the transactors, the system records all uses at purchaser's prices, which include transport costs, trade margins and taxes less subsidies on products, while output is recorded at basic prices, which exclude these elements.
- at border values. Total imports and exports are valued at the exporter's customs frontier, or free on board (f.o.b.). Foreign transport and insurance services between the importer's and the exporter's frontiers are not included in the value of goods but are recorded under services. As it may not be possible to obtain f.o.b. values for detailed product breakdowns, the tables containing details on foreign trade show imports valued at the importer's customs frontier (c.i.f. value). All transport and insurance services to the importer's frontier are included in the value of imported goods. As far as these services concern domestic services a global

f.o.b./c.i.f. adjustment is made in this presentation.

Valuation at constant prices<sup>18</sup>

1.56. Valuation at constant prices means valuing the flows and stocks in an accounting period at the prices of a previous period. The purpose of valuation at constant prices is to decompose changes over time in the values of flows and stocks into changes in price and changes in volume. Flows and stocks at constant prices are said to be in volume terms.

Many flows and stocks, e.g. income, do not have price and quantity dimensions of their own. However, the purchasing power of these variables can be obtained by deflating the current values with a suitable price index, e.g. the price index for final national uses, excluding changes in inventories. Deflated flows and stocks are said to be in real terms. An example is real disposable income.

#### Time of recording

1.57. The system records flows on an accrual basis; that is, when economic value is created, transformed or extinguished, or when claims and obligations arise, are transformed or are cancelled.

Thus, output is recorded when produced, not when paid for by a purchaser, and the sale of an asset is recorded when the asset changes hands, not when the corresponding payment is made. Interest is recorded in the accounting period when it accrues, regardless of whether or not it is actually paid in that period. Recording on an accrual basis applies to all flows, monetary as well as non-monetary and intraunit as well as between units.

However, in some cases it is necessary to show flexibility as regards time of recording. This applies in particular to taxes and other flows concerning general government, which are often recorded on a cash basis in government accounts. It is sometimes difficult to carry out an exact transformation of these flows from cash basis to accrual basis. In these cases it might therefore be necessary to use approximations.

Any flow should be recorded at the same point of time for all institutional units involved and in all accounts in question. This principle may seem simple, but its implementation is not. Institutional units do not always apply the same accounting rules. Even when they do, differences in actual recording may occur for

<sup>17</sup> See chapter 3., 'Transactions in products'.

<sup>18</sup> See chapter 10., 'Price and volume measures'.



practical reasons such as delays in communication. Consequently, transactions may be recorded at different times by the transactors involved. These discrepancies must be eliminated by adjustments.

#### Consolidation and netting

#### Consolidation

1.58. Consolidation refers to the elimination, from both uses and resources, of transactions which occur between units when the latter are grouped, and to the elimination of reciprocal financial assets and liabilities.

For sub-sectors or sectors, flows and stocks between constituent units are not consolidated between constituent units as a matter of principle.

However, consolidated accounts may be built up for complementary presentations and analyses. For certain kinds of analysis, information on the transactions of these (sub) sectors with other sectors and the corresponding 'external' financial position is more significant than overall gross figures.

Moreover, the accounts and tables showing the creditor/debtor relationship provide a detailed picture of financing of the economy and are considered very useful for understanding the channels through which the financing surpluses move from final lenders to final borrowers.

#### Netting

1.59. Individual units or sectors may have the same kind of transaction both as a use and as a resource (e.g. they both pay and receive interest) and the same kind of financial instrument both as an asset and as a liability.

The system recommends gross recording, apart from the degree of netting which is inherent in the classifications themselves.

In fact, netting is implicit in various transaction categories, the most outstanding example being 'changes in inventories', which underlines the analytically significant aspect of overall capital formation rather than tracking daily additions and withdrawals.

Similarly, with few exceptions, the financial account and other changes in assets accounts record increases in assets and in liabilities on a net basis, bringing out the final consequences of these types of flows at the end of the accounting period.

#### Accounts, balancing items and aggregates

1.60. For units (institutional units; local kind-of-activity units) or groups of units (institutional

sectors and, by extension, the rest of the world; industries), different sub-accounts record the transactions or other flows which are connected to some specific aspect of economic life (for instance, production). Such a set of transactions usually does not balance; the total amounts recorded as receivable and payable usually differ. Therefore, a balancing item must be introduced. Usually, a balancing item must also be introduced between the total of assets and the total of liabilities of an institutional unit or sector. Balancing items are meaningful measures of economic performance in themselves. When summed for the whole economy, they constitute significant aggregates.

#### The sequence of accounts

 The system is built around a sequence of interconnected accounts.

The full sequence of accounts for the institutional units and sectors is composed of current accounts, accumulation accounts and balance sheets.

Current accounts deal with the production, generation, distribution and redistribution of income and the use of this income in the form of final consumption. Accumulation accounts cover changes in assets and liabilities and changes in net worth (the difference for any institutional unit or group of units between its assets and liabilities). Balance sheets present stocks of assets and liabilities and net worth.

1.62. It is not possible to envisage a complete set of accounts, including balance sheets, being compiled for a local KAU, because generally such an entity is not capable of owning goods or assets in its own right or capable of receiving or disbursing income. The sequence of accounts for local kind-of-activity units and industries is shortened to the first current accounts: production account and generation of income account, the balancing item of which is the operating surplus.

#### The goods and services account

1.63. The goods and services account shows, for the economy as a whole or for groups of products, the total resources (output and imports) and uses of goods and services (intermediate consumption, final consumption, changes in inventories, gross fixed capital formation, acquisitions less disposals of valuables, and exports).

#### The rest of the world account

1.64. The rest of the world account covers transactions between resident and non-resident in-



stitutional units and the related stocks of assets and liabilities when relevant.

As the rest of the world plays a role in the accounting structure similar to that of an institutional sector, the rest of the world account is established from the point of view of the rest of the world. A resource for the rest of the world is a use for the total economy and *vice versa*. If a balancing item is positive, it means a surplus of the rest of the world and a deficit of the total economy, and *vice versa* if the balancing item is negative.

#### **Balancing items**

1.65. A balancing item is an accounting construct obtained by subtracting the total value of the entries on one side of an account from the total value on the other side. It cannot be measured independently of the other entries; as a derived entry, it reflects the application of the general accounting rules to the specific entries on the two sides of the account.

Balancing items are not only devices introduced to ensure that accounts balance. They encapsulate a great deal of information and include some of the most important entries in the accounts, as can be seen from the following examples of balancing items: value added, operating surplus, disposable income, saving, net lending/net borrowing, net worth.

#### Aggregates

1.66. The aggregates are composite values which measure the result of the activity of the total economy considered from a particular point of view; for example, output, value added, disposable income, final consumption, saving, capital formation, etc. Although the calculation of the aggregates is neither its sole nor its main purpose, the system does recognise their importance as summary indicators and key magnitudes for purposes of macro-economic analysis and comparisons over time and space.

Two types of aggregates can be distinguished:

 a) aggregates which refer directly to transactions in the system, such as the output of goods and services, actual final consump-

- tion, gross fixed capital formation, compensation of employees, etc.;
- b) aggregates which represent balancing items in the accounts, such as gross domestic product at market prices (GDP), operating surplus of the total economy, national income, national disposable income, saving, current external balance, net worth of the total economy (national wealth).
- 1.67. A dimension is added to the usefulness of a number of national accounts figures by calculating these figures per head. For broad aggregates such as GDP or national income or household final consumption, the denominator commonly used is the total (resident) population. When sub-sectoring the accounts or part of the accounts of the household sector, data on the number of households and the number of persons belonging to each sub-sector are also necessary<sup>19</sup>.

#### The input-output framework<sup>20</sup>

- 1.68. The input-output framework consists of supply and use tables by industry, tables linking the supply and use tables to the sector accounts and symmetric input-output tables by homogeneous branch (product).
- 1.69. Supply and use tables are matrices (rows of products, columns of industries) showing how the output of industries is broken down by type of products and how the domestic and imported supply of goods and services is allocated between various intermediate or final uses, including exports. The use table also shows by industry the structure of production costs and the income generated.

The supply and use tables are the coordinating framework for all tables by industry and (or) by product, which include data on labour inputs, gross fixed capital formation, stocks of fixed assets, detailed price indices and thus describe in detail cost structure, income generated, employment, labour productivity, capital intensity.

1.70. It is possible to link the supply and use tables to the sector accounts by cross-classifying output, intermediate consumption and the components of value added by sector and by industry.

<sup>19</sup> See chapter 11., 'Population and labour inputs'.

<sup>20</sup> See chapter 9., 'The input-output framework'

#### **CHAPTER 2**

#### UNITS AND GROUPINGS OF UNITS

- 2.01. The economy of a country is the outcome of the activity of a very large number of units which carry out numerous transactions of various kinds for purposes of production, finance, insurance, redistribution and consumption.
- 2.02. The units and groupings of units used in national accounts must be defined with reference to the kind of economic analysis for which they are intended, and not in terms of the types of unit usually employed in statistical inquiries. These latter units (enterprises, holding companies, kind-of-activity units, local units, government departments, non-profit institutions, households, etc.) may not always be satisfactory for the purposes of national accounts, since they are generally based on traditional criteria of a legal, administrative or accounting nature.

Statisticians should take into account the definitions of units of analysis used in the ESA, in order to ensure that in the surveys in which actual data are collected all the elements of information needed to compile data based on the units of analysis used in the ESA are gradually introduced.

2.03. A feature of the system is the use of three types of unit corresponding to two very different ways of subdividing the economy. To analyse the process of production, it is essential to select units which bring out relationships of a technico-economic nature; to analyse flows affecting income, capital and financial transactions and balance sheets, it is essential to select units which make it possible to study behavioural relationships among economic agents.

Given these two objectives, institutional units appropriate for the analysis of economic behaviour, local kind-of-activity units and units of homogeneous production appropriate for the analysis of technico-economic relationships are defined later in this chapter. In practice, these three types of unit are formed by combining or subdividing the basic units of statistical inquiries or sometimes received directly from statistical inquiries. Before giving precise definitions of these three types of unit used in

the ESA, it is necessary to define the limits of the national economy.

# THE LIMITS OF THE NATIONAL ECONOMY

- The units, whether institutional, local kind-ofactivity or of homogeneous production, which constitute the economy of a country and whose transactions are recorded in the ESA, are those which have a centre of economic interest on the economic territory of that country. These units, known as resident units, may or may not have the nationality of that country, may or may not be legal entities, and may or may not be present on the economic territory of the country at the time they carry out a transaction. Having thus defined the limits of the national economy in terms of resident units, it is necessary to define the meaning of the terms economic territory and centre of economic interest.
- 2.05. The term economic territory means:
  - a) the geographic territory administered by a government within which persons, goods, services and capital move freely;
  - any free zones, including bonded warehouses and factories under customs control;
  - the national air-space, territorial waters and the continental shelf lying in international waters, over which the country enjoys exclusive rights<sup>1</sup>;
  - d) territorial enclaves {i.e. geographic territories situated in the rest of the world and used, under international treaties or agreements between States, by general government agencies of the country (embassies, consulates, military bases, scientific bases, etc.)};
  - e) deposits of oil, natural gas, etc. in international waters outside the continental shelf of the country, worked by units resident in

Fishing boats, other ships, floating platforms and aircraft are treated in the ESA just like any other mobile equipment, whether owned and/or operated by units resident in the country, or owned by non-residents and operated by resident units. Transactions involving the ownership (gross fixed capital formation) and use (renting, insurance, etc.) of this type of equipment are attributed to the economy of the country of which the owner and/or operator respectively are resident. In cases of financial leasing a change of ownership is assumed.



- the territory as defined in the preceding sub-paragraphs.
- 2.06. The economic territory does not include extraterritorial enclaves (i.e. the parts of the country's own geographic territory used by general government agencies of other countries, by the Institutions of the European Union or by international organisations under international treaties or agreements between States<sup>2</sup>).
- The term centre of economic interest indicates 2.07. the fact there exists some location within the economic territory on, or from, which a unit engages, and intends to continue to engage, in economic activities and transactions on a significant scale, either indefinitely or over a finite but long period of time (a year or more). It follows that a unit which carries out such transactions on the economic territory of several countries is deemed to have a centre of economic interest in each of them. The ownership of land and buildings within the economic territory is deemed to be sufficient in itself for the owner to have a centre of economic interest there.
- 2.08. On the basis of these definitions, units deemed to be residents of a country can be sub-divided into:
  - a) units which are principally engaged in production, finance, insurance or redistribution, in respect of all their transactions except those relating to ownership of land and buildings;
  - b) units which are principally engaged in consumption<sup>3</sup>, in respect of all their transactions except those relating to ownership of land and buildings;
  - all units in their capacity as owners of land and buildings with the exception of owners of extraterritorial enclaves which are part of the economic territory of other countries or are States sui generis (see paragraph 2.06.).
- 2.09. In the case of units which are principally engaged in production, finance, insurance or redistribution, in respect of all their transactions except those relating to ownership of land and buildings, the following two cases may be distinguished:

- a) activity conducted exclusively on the economic territory of the country: units which carry out such activity are resident units of the country;
- activity conducted for a year or more on the economic territories of several countries: only that part of the unit which has a centre of economic interest on the economic territory of the country is deemed to be a resident unit. It may be:
  - either an institutional resident unit (see paragraph 2.12.), whose activities conducted for a year or more in the rest of the world are excluded and treated separately<sup>4</sup> or
  - (2) a notional resident unit (see paragraph 2.15.), in respect of the activity conducted in the country for a year or more by a unit which is resident in another country<sup>4</sup>.
- 2.10. In the case of units which are principally engaged in consumption, except in their capacity as owners of land and buildings, households which have a centre of economic interest in the country are deemed to be resident units, even if they go abroad for short periods (less than a year). They include, in particular, the following:
  - a) border workers, i.e. people who cross the frontier daily to work in a neighbouring country;
  - b) seasonal workers, i.e. people who leave the country for several months, but less than a year, to work in another country in sectors in which additional manpower is needed periodically;
  - c) tourists, patients, students<sup>5</sup>, visiting officials, businessmen, salesmen, artists and crew members who travel abroad;
  - d) locally recruited staff working in the extraterritorial enclaves of foreign governments;
  - e) the staff of the Institutions of the European Union and of civilian or military international organisations which have their headquarters in extra-territorial enclaves;

The territories used by the Institutions of the European Union and international organisations thus constitute the territories of States sui generis. The feature of such States is that the only residents are the institutions themselves (see paragraph 2.10. e).

<sup>3</sup> Consumption is not the only possible activity of households. Households may as entrepreneurs engage in any kind of economic activity.

It is only where such activity is carried on for less than a year that it should not be separated from the activities of the producer institutional unit. This may also be done where the activity, though conducted for a year or more, is insignificant, and in all circumstances for the installation of equipment abroad. But a unit which is resident in another country and which is carrying out a construction activity in the country for a duration of less than a year is deemed to have a centre of economic interest on the economic territory of the country if the output of the construction activity constitutes gross fixed capital formation. Such a unit should therefore be treated as a notional resident unit.

<sup>5</sup> Students are always treated as residents, however long they study abroad.



- f) the official, civilian or military representatives of the government of the country (including their households) established in territorial enclaves.
- 2.11. All units in their capacity as owners of land and/or buildings which form part of the economic territory are deemed to be resident units or notional resident units (see paragraph 2.15.) of the country in which the land or buildings in question are located.

#### THE INSTITUTIONAL UNITS

#### 2.12. Definition:

The institutional unit is an elementary economic decision-making centre characterised by uniformity of behaviour and decision-making autonomy in the exercise of its principal function. A resident unit is regarded as constituting an institutional unit if it has decision-making autonomy in respect of its principal function and either keeps a complete set of accounts or it would be possible and meaningful, from both an economic and legal viewpoint, to compile a complete set of accounts if they were required.

In order to be said to have autonomy of decision in respect of its principal function, a unit must:

- a) be entitled to own goods or assets in its own right; it will therefore be able to exchange the ownership of goods or assets in transactions with other institutional units;
- b) be able to take economic decisions and engage in economic activities for which it is itself held to be directly responsible and accountable at law;
- be able to incur liabilities on its own behalf, to take on other obligations or further commitments and to enter into contracts.

In order to be said to keep a complete set of accounts, a unit must keep accounting records covering all its economic and financial transactions carried out during the accounting period, as well as a balance sheet of assets and liabilities.

- 2.13. The following principles apply whenever entities do not clearly possess both the characteristics of an institutional unit:
  - a) households always enjoy autonomy of decision in respect of their principal function and must therefore be institutional units, even though they do not keep a complete set of accounts;

- entities which do not keep a complete set of accounts, and for which it would not be possible or meaningful to compile a complete set of accounts if required, are combined with the institutional units into whose accounts their partial accounts are integrated;
- entities which, while keeping a complete set of accounts, have no autonomy of decision in the exercise of their principal function are combined with the units which control them;
- d) entities which satisfy the definition of an institutional unit are treated as such even if they do not publish their accounts;
- e) entities forming part of a group of units engaged in production and keeping a complete set of accounts are deemed to be institutional units even if they have partially surrendered their autonomy of decision to the central body (the holding corporation) responsible for the general direction of the group; the holding corporation itself is deemed to be an institutional unit distinct from the units which it controls, unless b) is applicable;
- f) quasi-corporations keep a complete set of accounts and have no independent legal status. However, they have an economic and financial behaviour that is different from that of their owners and similar to that of corporations. Therefore they are deemed to have autonomy of decision and are considered as distinct institutional units.
- 2.14. Holding corporations are institutional units whose main function is to control and direct a group of subsidiaries.

#### 2.15. Notional resident units are defined as:

- a) those parts of non-resident units which have a centre of economic interest (that is in most cases which engage in economic transactions for a year or more or which carry out a construction activity for a period of less than a year if the output constitutes gross fixed capital formation) on the economic territory of the country;
- b) non-resident units in their capacity as owners of land or buildings on the economic territory of the country, but only in respect of transactions affecting such land or buildings.

Notional resident units, even if they keep only partial accounts and may not always enjoy autonomy of decision, are treated as institutional units.



- 2.16. In conclusion, the following are deemed to be institutional units:
  - a) units which have a complete set of accounts and autonomy of decision:
    - (1) private and public corporations;
    - (2) co-operatives or partnerships recognised as independent legal entities;
    - (3) public producers which by virtue of special legislation are recognised as independent legal entities;
    - (4) non-profit institutions recognised as independent legal entities;
    - (5) agencies of general government.
  - b) units which have a complete set of accounts and which are deemed to have autonomy of decision:
    - quasi-corporations (see paragraph 2.13. f);.
  - units which do not necessarily keep a complete set of accounts, but which by convention are deemed to have autonomy of decision:
    - (1) households;

(2) notional resident units (see paragraph 2.15.).

#### THE INSTITUTIONAL SECTORS

- 2.17. The need for aggregation means that it is impossible to consider individual institutional units separately; they must be combined into groups called institutional sectors or simply sectors, some of which are divided into subsectors.
- 2.18. Each of the sectors and sub-sectors groups together the institutional units which have a similar type of economic behaviour.

The institutional units are grouped into sectors on the basis of the type of producer they are and depending on of their principal activity and function, which are considered to be indicative of their economic behaviour. A sector is divided into sub-sectors according to the criteria relevant to that sector; this permits a more precise description of the economic behaviour of the units.

Table 2.1 Sectors and sub-sectors

Sectors and sub-sectors		Public	National Private	Foreign Controlled
Non-financial corporations	S.11	5.11001	S.11002	S.11003
Financial corporations	S.12			
Central Bank	S.121			
Other monetary financial institutions	S.122	S.12201	S12202	S.12203
Other financial intermediaries, except	S.123	S.12301	S.12302	5.12303
insurance corporations and pension funds				
Financial auxiliaries	S.124	S.12401	S.12402	S.12403
Insurance corporations and pension funds	S.125	S.12501	S.12502	5,12503
General government	S.13			
Central government	S.1311			
State government	S.1312			
Local government	S.1313			
Social security funds	5.1314			
Households	S.14			
Employers (including own account workers)	S.141 + S.142			
Employees	S.143			
Recipients of property incomes	S.1441			
Recipients of pensions	S.1442			
Recipients of other transfer incomes	S.1443			
Others	S.145			
Non-profit institutions serving households	S.15			
Rest of the world	S.2			
The European Union	S.21			
The member countries of the EU	5.211			
The institutions of the EU	5.212			
Third countries and international organisations	5 5.22			



The accounts for sectors and sub-sectors record all the activities, whether principal or secondary, of the institutional units covered.

Each institutional unit belongs to only one sector or sub-sector.

2.19. When the principal function of the institutional unit is to produce goods and services, it is necessary in deciding the sector to which it should be allocated – to distinguish first of all the type of producer it is belonging to.

Three types of producers are distinguished in the ESA:

- a) private and public market producers (see paragraph 3.24. and Table 3.1 of chapter 3.);
- b) private producers for own final use (see paragraph 3.25. and Table 3.1 of chapter 3.);
- c) private and public other non-market producers (see paragraph 3.26. and Table 3.1 of chapter 3.).

Institutional units which are market producers are classified in the sectors Non-financial corporations (S.11), Financial corporations (S.12) or Households (S.14).

Institutional units which are private producers for own final use are classified in the House-

holds sector (S.14) together with the unincorporated enterprises owned by households (see paragraph 3.30.).

Institutional units which are other non-market producers are classified in the sector General Government (S.13) or Non-profit institutions serving households (S.15).

2.20. Table 2.2 shows the type of producer, the principal activities and functions which are characteristic of each sector.

The rest of the world (S.2) is a grouping of institutional units (see paragraph 2.89.) which is not characterised by similar objectives and types of behaviour; it groups together non-resident institutional units insofar as they carry out transactions with resident institutional units.

#### Non-financial corporations (S.11)

#### 2.21. Definition:

The sector non-financial corporations (S.11) consists of institutional units whose distributive and financial transactions are distinct from those of their owners and which are market producers (see paragraphs 3.31., 3.32. and 3.37.), whose principal activity is the production of goods and non-financial services<sup>6</sup>.

2.22. The sector non-financial corporations also includes non-financial quasi-corporations.

Table 2.2 The type of producer, the principal activities and functions classified by sector

Sector	Type of producer	Principal activity and function
Non-financial corporations (S.11) (see paragraph 2.21.)	Market producer	Production of market goods and non- financial services
Financial corporations (S.12) (see paragraph 2.32.)	Market producer	Financial intermediation inclu-ding insurance Auxiliary financial activities
General government (S.13) (see paragraph 2.68.)	Public other non- market producer	Production and supply of other non- market output for collective and individual consumption and carrying out transactions inten-ded to redistribute national inco-me and wealth
Households (S.14)  – as consumers  – as entrepreneurs  (see paragraph 2.75.)	Market producer or private producer for own final use	Consumption Production of market output and output for own final use
Non-profit institutions serving households (S.15) (see paragraph 2.87.)	Private other non-market producer	Production and supply of other non- market output for individual consumption

<sup>6</sup> By convention, market regulatory agencies whose sole or principal activity is to buy, hold and sell agricultural and other food products are classified under S.11 {see paragraph 2.69. a note (11)}.



2.23. The term 'non-financial corporations' denotes all bodies recognised as independent legal entities which are market producers and whose principal activity is the production of goods and non-financial services.

The institutional units covered are the following:

- a) private and public corporations which are market producers principally engaged in the production of goods and non-financial services;
- b) co-operatives and partnerships recognised as independent legal entities which are market producers principally engaged in the production of goods and non-financial services;
- c) public producers which by virtue of special legislation are recognised as independent legal entities and which are market producers principally engaged in the production of goods and non-financial services;
- d) non-profit institutions or associations serving non-financial corporations, which are recognised as independent legal entities and which are market producers principally engaged in the production of goods and non-financial services<sup>7</sup>;
- e) holding corporations controlling (see paragraph 2.26.) a group of corporations which are market producers, if the preponderant type of activity of the group of corporations as a whole measured on the basis of value added is the production of goods and non-financial services;
- f) private and public quasi-corporations which are market producers principally engaged in the production of goods and nonfinancial services.
- 2.24. The term 'non-financial quasi-corporations' denotes all bodies without independent legal status which are market producers principally engaged in the production of goods and non-financial services and meet the conditions qualifying them as quasi-corporations (see paragraph 2.13. f).

Quasi-corporations must keep a complete set of accounts and are operated as if they were corporations. The de facto relationship to their owner is that of a corporation to their shareholders.

Thus non-financial quasi-corporations owned by households, government units or non-profit institutions are grouped with non-financial corporations in the non-financial corporations sector.

The existence of a complete set of accounts, including balance sheets, is not a sufficient condition for market producers to be treated as quasi-corporations. Therefore, partnerships and public producers, other than those included under 2.23. a, b, c and f and sole proprietorships – even if they keep a complete set of accounts – are in general not distinct institutional units because they do not enjoy autonomy of decision, their management being under the control of the households, non-profit institutions or governments which own them.

- 2.25. The sector non-financial corporations also includes all notional resident units (see paragraph 2.15.) which, by convention, are treated as if they were quasi-corporations.
- Control over a corporation is defined as the ability to determine general corporate policy by choosing appropriate directors, if necessary.

A single institutional unit (another corporation, a household or a government unit) secures control over a corporation by owning more than half the voting shares or otherwise controlling more than half the shareholders' voting power. In addition, government secures control over a corporation as a result of special legislation decree or regulation which empowers the government to determine corporate policy or to appoint the directors.

In order to control more than half the share-holders' voting power, an institutional unit needs not own any of the voting shares itself. A corporation C could be a subsidiary of another corporation B in which a third corporation A owns a majority of the voting shares.

Corporation C is said to be subsidiary of corporation B when: either corporation B controls more than half of the shareholders' voting power in corporation C or corporation B is a shareholder in C with the right to appoint or remove a majority of the directors of C.

- 2.27. The sector non-financial corporations is divided into three sub-sectors:
  - a) public non-financial corporations (S.11001);
  - b) national private non-financial corporations (S.11002);
  - c) foreign controlled non-financial corporations (S.11003);

Including institutions financed by voluntary contributions of a quasi-fiscal nature, levied on producers by units whose principal activity is to provide services in exchange. These contributions are considered as purchases of market services.



# Sub-sector: Public non-financial corporations (S.11001)

#### 2.28. Definition:

The sub-sector public non-financial corporations consists of all non-financial corporations and quasi-corporations that are subject to control (see paragraph 2.26.) by government units.

2.29. Public quasi-corporations are quasi-corporations owned directly by government units.

## Sub-sector: National private non-financial corporations (S.11002)

#### 2.30. Definition:

The sub-sector national private non-financial corporations consists of all non-financial corporations and quasi-corporations that are not controlled by government or by non-resident institutional units. This sub-sector includes all the non-profit institutions which are included in the non-financial corporate sector (see paragraph 2.23. d).

This sub-sector includes corporate and quasicorporate direct foreign investment enterprises (see paragraph 4.65.) not classified in the subsector foreign controlled non-financial corporations (S.11003).

# Sub-sector: Foreign controlled non-financial corporations (S.11003)

#### 2.31. Definition:

The sub-sector foreign controlled non-financial corporations consists of all non-financial corporations and quasi-corporations that are controlled (see paragraph 2.26.) by non-resident institutional units.

This sub-sector includes:

- a) all subsidiaries of non-resident corporations;
- all corporations controlled by a non-resident institutional unit that is not itself a corporation: for example, a corporation which is controlled by a foreign government; it includes corporations controlled by a group of non-resident units acting in concert:
- all branches or other unincorporated agencies of non-resident corporations or unincorporated producers which are notional resident units to be treated as non-financial quasi-corporations (see paragraph 2.25.).

#### Financial corporations (S.12)

#### 2.32. Definition:

The sector financial corporations (S.12) consists of all corporations and quasi-corporations which are principally engaged in financial intermediation (financial intermediaties) and/or in auxiliary financial activities (financial auxiliaries)<sup>8</sup>.

Financial intermediation is the activity in which an institutional unit acquires financial assets and at the same time incurs liabilities (see paragraph 2.34.) on its own account (see paragraph 2.33.) by engaging in financial transactions on the market (see paragraphs 2.37. – 2.38.). The assets and liabilities of the financial intermediaries have different characteristics, involving that the funds are transformed or repackaged with respect to maturity, scale, risk and the like in the financial intermediation process.

Auxiliary financial activities are activities closely related to financial intermediation but which are not financial intermediation themselves (see paragraph 2.39.).

- 2.33. Through the financial intermediation process, funds are channelled between third parties with a surplus on one side and those with a lack of funds on the other. A financial intermediary does not simply act as an agent for these other institutional units but places itself at risk by acquiring financial assets and incurring liabilities on its own account.
- 2.34. In the financial intermediation process, all categories of liabilities may be involved with the exception of the category other accounts payable (AE.7).

The financial assets involved in the financial intermediation process may be classified in any category with the exception of the category insurance technical reserves (AE6) but including the category other accounts receivable (factoring). In addition, financial intermediaries may invest their funds in non-financial assets including real estate. However, in order to be considered as a financial intermediary, a corporation should, in addition, incur liabilities on the market and transform funds. Therefore, real estate corporations (NACE. rev.1 division 70) are excluded.

2.35. The primary function of insurance corporations and pension funds consists of the pooling of risks. The main liabilities of these institutions are insurance technical reserves (AF.6). The counterparts of the reserves are investments by

<sup>8</sup> By convention, sector S.12 includes holding corporations which only control and direct a group of subsidiaries principally engaged in financial intermediation and/or in auxiliary financial activities (see paragraph 2.43.) and non-profit institutions recognised as independent legal entities serving financial corporations (see paragraph 2.44.).



- the insurance corporations and pension funds, which, therefore, act as financial intermediaries.
- 2.36. Mutual funds primarily incur liabilities through the issue of shares (AF.52). They transform these funds by acquiring financial assets and/or real estate. Therefore, mutual funds are classified as financial intermediaries. As with other corporations, any change in the value of their assets and liabilities other than their own shares is reflected in their own funds (see paragraph 7.05.). Because the amount of own funds normally equals the value of the mutual fund's shares, any change in the value of the fund's assets and liabilities will be reflected in the market value of these shares.

Mutual funds investing solely in real estate are also regarded as financial intermediaries.

- 2.37. Financial intermediation, generally, is limited to financial transactions on the market. In other words, acquiring assets and incurring liabilities should be with the general public or specified and relatively large sub-groups thereof. Where the activity is limited to small groups of persons or families, generally, no financial intermediation takes place. In particular, financial intermediation does not include institutional units providing treasury services to a company group. These institutional units are allocated to a sector according to the predominant function of the company group within the economic territory. However, in cases where the institutional unit providing the treasury services is subject to financial supervision, it is classified in the financial corporations sector by convention.
- 2.38. Exceptions to the general limitation of financial intermediation to financial transactions on the market may exist. Examples are municipal credit and savings-banks, which rely heavily on the municipality involved, or financial lease corporations depending on a parent group of companies in acquiring funds or in investing funds. However, their lending or their acceptance of savings should be independent of the municipality involved or the parent group, respectively, in classifying them as financial intermediaries.
- 2.39. Auxiliary financial activities comprise auxiliary activities for realising transactions in financial assets and liabilities or the transformation or repackaging of funds. Financial auxiliaries do not set themselves at risk by acquiring financial assets or incurring liabilities. They only facilitate financial intermediation.
- 2.40. The institutional units included in the sector financial corporations (S.12) are the following:

- a) private or public corporations which are principally engaged in financial intermediation and/or in auxiliary financial activities;
- b) co-operatives and partnerships recognised as independent legal entities which are principally engaged in financial intermediation and/or in auxiliary financial activities;
- c) public producers, which by virtue of special legislation are recognised as independent legal entities, which are principally engaged in financial intermediation and/or in auxiliary financial activities;
- d) non-profit institutions recognised as independent legal entities which are principally engaged in financial intermediation and/or in auxiliary financial activities, or which are serving financial corporations;
- e) holding corporations (see paragraph 2.14.)
  if the group of subsidiaries within the economic territory as a whole is principally engaged in financial intermediation and/or in auxiliary financial activities;
- f) unincorporated mutual funds comprising investment portfolios owned by the group of participants, and whose management is undertaken, in general, by other financial corporations. These funds are institutional units by convention, separate from the managing financial corporation;
- g) financial quasi-corporations:
  - unincorporated units principally engaged in financial intermediation and subject to regulation and supervision (in most cases classified in the other monetary financial institutions sub-sector or the insurance corporations and pension funds sub-sector) are deemed to enjoy autonomy of decision and to have autonomous management independent of their owners. Their economic and financial behaviour is similar to that of financial corporations. Therefore, they are treated as separate institutional units. Examples are branches of non-resident financial corporations;
  - (2) other unincorporated units principally engaged in financial intermediation but not subject to regulation and supervision are only considered as financial quasi-corporations if they meet the conditions qualifying them as quasi-corporations (see paragraph 2.13. f);
  - (3) unincorporated units principally engaged in auxiliary financial activities are



only considered as financial quasi-corporations if they meet the conditions qualifying them as quasi-corporations (see paragraph 2.13. f).

- 2.41. The financial corporations sector is subdivided into five sub-sectors:
  - a) the central bank (S.121);
  - b) other monetary financial institutions (S.122);
  - c) other financial intermediaries, except insurance corporations and pension funds (S.123);
  - d) financial auxiliaries (S.124);
  - e) insurance corporations and pension funds (S.125).

The other monetary financial institutions subsector is regarded as equivalent to the other depository corporations sub-sector as defined in the 1993 SNA 4.88 – 4.94. While the definition of the other monetary financial institutions sub-sector (see paragraph 2.48.) is intended to cover those financial intermediaries through which the effects of the monetary policy of the central bank are transmitted to the other entities of the economy, the other depository corporations sub-sector is defined in the 1993 SNA with reference to measures of broad money. The combined sub-sectors S.121 and S.122 coincide with the monetary financial institutions for statistical purposes as defined by the EMI (see paragraph 2.49.).

- 2.42. With the exception of sub-sector S.121, each sub-sector may be further subdivided into:
  - a) public financial corporations;
  - b) national private financial corporations;
  - c) foreign controlled financial corporations.

The criteria for this subdivision are the same as for non-financial corporations (see paragraphs 2.26. – 2.31.).

2.43. Holding corporations which only control and direct a group of subsidiaries principally engaged in financial intermediation and/or in auxiliary financial activities are classified in the sub-sector other financial intermediaries except insurance corporations and pension funds (S.123)<sup>9</sup>. However, holding corporations which are financial corporations themselves are to be allocated to the sub-sectors according to the main type of financial activity.

2.44. Non-profit institutions recognised as independent legal entities serving financial corporations, but not engaged in financial intermediation or auxiliary financial activities, are classified in the sub-sector financial auxiliaries (S.124).

#### Sub-sector: The central bank (S.121)

#### 2.45. Definition:

The sub-sector the central bank (\$.121) consists of all financial corporations and quasi-corporations whose principal function is to issue currency, to maintain the internal and external value of the currency and to hold all or part of the international reserves of the country.

- 2.46. The following financial intermediaries are classified in sub-sector S.121:
  - a) the national central bank, also in the case where it is part of a European System of Central Banks;
  - b) central monetary agencies of essentially public origin (e.g. agencies managing foreign exchange or issuing currency) which keep a complete set of accounts and enjoy autonomy of decision in relation to central government. Mostly these activities are performed either within central government or within the central bank. In these cases no separate institutional units exist.
- 2.47. Sub-sector S.121 does not include agencies and bodies, other than the central bank, which regulate or supervise financial corporations or financial markets. They are classified in subsector S.124 (see paragraph 2.58. g)<sup>10</sup>.

# Sub-sector: Other monetary financial institutions (S.122)

#### 2,48. Definition:

The sub-sector other monetary financial institutions (S.122) consists of all financial corporations and quasi-corporations, except those classified in the central bank sub-sector, which are principally engaged in financial intermediation and whose business is to receive deposits and/or close substitutes for deposits from institutional units other than monetary financial institutions, and, for their own account, to grant loans and/or to make investments in securities.

2.49. The monetary financial institutions (MFIs) comprise the sub-sector the central bank (S.121) and the sub-sector other monetary financial

<sup>9</sup> The classification of holding corporations within the financial corporations sector deviates from the 1993 SNA 4.100 in order to maintain consistency with the monetary financial institutions for statistical purposes as defined by the EMI and with official statistics on insurance corporations.

<sup>10</sup> This is a deviation from the 1993 SNA 4.86, and 4.101, in order to maintain consistency with the monetary financial institutions for statistical purposes as defined by the EMI.



- institutions (S.122), and coincide with the monetary financial institutions for statistical purposes as defined by the EMI (see paragraph 2.41.).
- 2.50. MFIs cannot be described simply as 'banks', because they may possibly include some financial corporations which may not call themselves banks, and some which may not be permitted to do so in some countries, while some other financial corporations describing themselves as banks may not in fact be MFIs. In general, the following financial intermediaries are classified in sub-sector S.122:
  - a) commercial banks, 'universal' banks, 'allpurpose' banks;
  - b) savings banks (including trustee savings banks and savings banks and loan associations);
  - post office giro institutions, post banks, giro banks;
  - d) rural credit banks, agricultural credit banks;
  - e) co-operative credit banks, credit unions;
  - specialised banks (e.g. merchant banks, issuing houses, private banks).
- 2.51. The following financial intermediaries may also be classified in sub-sector S.122 where it is their business to receive repayable funds from the public whether in the form of deposits or in other forms such as the continuing issue of bonds and other comparable securities. Otherwise, they should be classified in sub-sector S.123:
  - a) corporations engaged in granting mortgages (including building societies, mortgage banks and mortgage credit institutions);
  - b) mutual funds (incl. investment trusts, unit trusts and other collective investment schemes, e.g. undertakings for collective investment in transferable securities-UCITS);
  - c) municipal credit institutions.
- 2.52. Sub-sector S.122 does not include:
  - a) holding corporations which only control and direct a group consisting predominantly of other monetary financial institutions, but which are not other monetary financial institutions themselves. They are classified in sub-sector S.123 (see paragraph 2.43.);
  - non-profit institutions recognised as independent legal entities serving other monetary financial institutions, but not engaged in financial intermediation. They are classi-

fied in sub-sector S.124 (see paragraph 2.44.).

# Sub-sector: Other financial intermediaries, except insurance corporations and pension funds (S.123)

#### 2.53. Definition:

The sub-sector other financial intermediaries except insurance corporations and pension funds (S.123) consists of all financial corporations and quasi-corporations which are principally engaged in financial intermediation by incurring liabilities in forms other than currency, deposits and/or close substitutes for deposits from institutional units other than monetary financial institutions, or insurance technical reserves.

- 2.54. Sub-sector S.123 includes various types of financial intermediaries especially those which are predominantly engaged in long-term financing. In most cases this predominant maturity forms the basis of a distinction from the other monetary financial institutions sub-sector. Based on the non-existence of liabilities in the form of insurance technical reserves, the borderline with the insurance corporations and pension funds sub-sector can be determined.
- 2.55. In particular, the following financial corporations and quasi-corporations are classified in sub-sector S.123 unless they are MFIs:
  - a) corporations engaged in financial leasing;
  - b) corporations engaged in hire purchase and the provision of personal or commercial finance;
  - c) corporations engaged in factoring;
  - d) security and derivative dealers (on own account);
  - e) specialised financial corporations such as venture and development capital companies, export/import financing companies;
  - f) financial vehicle corporations, created to be holders of securitized assets;
  - g) financial intermediaries which receive deposits and/or close substitutes for deposits from MFIs only;
  - h) holding corporations which only control and direct a group of subsidiaries principally engaged in financial intermediation and/or in auxiliary financial activities, but which are not financial corporations themselves (see paragraph 2.43.).



2.56. Sub-sector S.123 does not include non-profit institutions recognised as independent legal entities serving other financial intermediaries except insurance corporations and pension funds, but not engaged in financial intermediation. They are classified in sub-sector S.124 (see paragraph 2.44.).

#### Sub-sector: Financial auxiliaries (S.124)

#### 2.57. Definition:

The sub-sector financial auxiliaries (S.124) consists of all financial corporations and quasi-corporations which are principally engaged in auxiliary financial activities, that is to say activities closely related to financial intermediation but which are not financial intermediation themselves (see paragraph 2.39.).

- 2.58. In particular, the following financial corporations and quasi-corporations are classified in sub-sector S.124:
  - a) insurance brokers, salvage and average administrators, insurance and pension consultants, etc.;
  - b) loan brokers, securities brokers, investment advisers, etc.;
  - flotation corporations that manage the issue of securities;
  - d) corporations whose principal function is to guarantee, by endorsement, bills and similar instruments;
  - e) corporations which arrange derivative and hedging instruments, such as swaps, options and futures (without issuing them);
  - f) corporations providing infrastructure for financial markets;
  - g) central supervisory authorities of financial intermediaries and financial markets when they are separate institutional units;
  - h) managers of pension funds, mutual funds, etc.;
  - i) corporations providing stock exchange and insurance exchange;
  - j) non-profit institutions recognised as independent legal entities serving financial corporations, but not engaged in financial intermediation or auxiliary financial activities (see paragraph 2.44.).
- 2.59. Sub-sector S.124 does not include holding corporations which only control and direct a group of subsidiaries principally engaged in auxiliary financial activities, but which are not financial auxiliaries themselves. They are classified in sub-sector S.123 (see paragraph 2.43.).

### Sub-sector: Insurance corporations and pension funds (S.125)

#### 2.60. Definition:

The sub-sector insurance corporations and pension funds (S.125) consists of all financial corporations and quasi-corporations which are principally engaged in financial intermediation as the consequence of the pooling of risks (see paragraph 2.35.).

- 2.61. The insurance contracts administered might relate to individuals and/or groups, whether or not participation results from a general obligation imposed by government. Furthermore, social insurance contracts (see paragraphs 4.83. 4.91.) are sometimes a considerable part of the contracts administered.
- 2.62. Sub-sector S.125 includes both captive insurance corporations and reinsurance corporations.
- 2.63. Sub-sector S.125 does not include:
  - a) institutional units which fulfil each of the two criteria listed in paragraph 2.74. They are classified in sub-sector S.1314;
  - b) holding corporations which only control and direct a group consisting predominantly of insurance corporations and pension funds, but which are not insurance corporations and pension funds themselves. They are classified in sub-sector S.123 (see paragraph 2.43.);
  - c) non-profit institutions recognised as independent legal entities serving insurance corporations and pension funds, but not engaged in financial intermediation. They are classified in sub-sector S.124 (see paragraph 2.44.).
- 2.64. The sub-sector insurance corporations and pension funds may be subdivided into:
  - a) insurance corporations;
  - b) (autonomous) pension funds.

Autonomous pension funds are pension funds which have autonomy of decision and keep a complete set of accounts. They are therefore institutional units. Non-autonomous pension funds are not institutional units and remain part of the institutional unit that sets them up.

2.65. Risks concerning individuals or groups could both be included in the activities of life and non-life insurance corporations. Some insurance corporations might limit their activities to group contracts only. These corporations are allowed to insure every group.



- 2.66. Pension funds can be described as institutions which insure group risks relating to social risks and needs (see paragraph 4.84.) of the insured persons. The typical groups of participants in such policies include employees of a single enterprise or a group of enterprises, employees of a branch or industry, and persons having the same profession. The benefits included in the insurance contract might encompass benefits which are paid after death of the insured to the widow(er) and children (mainly death in service), benefits which are paid after retirement and benefits which are paid after the insured became disabled.
- 2.67. In some countries all these types of risks could be insured equally well by life insurance corporations as by pension funds. In other countries some of these classes of risks have to be insured through life insurance corporations. In contrast to life insurance corporations, pension funds are restricted (by law) to specified groups of employees and self-employed.

#### General government (S.13)

#### 2.68. Definition:

The sector general government (S.13) includes all institutional units which are other non-market producers (see paragraph 3.26.) whose output is intended for individual and collective consumption, and mainly financed by compulsory payments made by units belonging to other sectors, and/or all institutional units principally engaged in the redistribution of national income and wealth.

- 2.69. The institutional units included in sector S.13 are the following:
  - a) general government entities (excluding public producers organised as public corporations or, by virtue of special legislation, recognised as independent legal entities, or quasi-corporations, when any of these are classified in the non-financial or financial sectors) which administer and finance a group of activities, principally providing non-market goods and services, intended for the benefit of the community<sup>11</sup>;
  - non-profit institutions recognised as independent legal entities which are other nonmarket producers and which are controlled and mainly financed by general government;

- c) autonomous pension funds if the two requirements of paragraph 2.74. are met.
- 2.70. The general government sector is divided into four sub-sectors:
  - a) central government (S.1311);
  - b) state government (S.1312);
  - c) local government (S.1313);
  - d) social security funds (S.1314).

#### Sub-sector: Central government (S.1311)

#### 2.71. Definition:

The sub-sector central government includes all administrative departments of the State and other central agencies whose competence extends normally over the whole economic territory, except for the administration of social security funds.

Included in sub-sector S.1311 are those nonprofit institutions which are controlled and mainly financed by central government and whose competence extends over the whole economic territory.

#### Sub-sector: State government (S.1312)

#### 2.72. Definition:

The state government sub-sector consists of state governments which are separate institutional units exercising some of the functions of government at a level below that of central government and above that of the governmental institutional units existing at local level, except for the administration of social security funds.

Included in sub-sector S.1312 are those nonprofit institutions which are controlled and mainly financed by state governments and whose competence is restricted to the economic territories of the states.

#### Sub-sector: Local government (S.1313)

#### 2.73. Definition:

The sub-sector local government includes those types of public administration whose competence extends to only a local part of the economic territory, apart from local agencies of social security funds.

Included in sub-sector S.1313 are those nonprofit institutions which are controlled and mainly financed by local governments and

By convention, market regulatory organisations which are either exclusively or principally simple distributors of subsidies are classified in S.13, sub-sector central government S.1311. However, those organisations which are exclusively or principally engaged in buying, holding and selling agricultural or food products are classified in S.11 {see paragraph 2.21., note (6)}.



whose competence is restricted to the economic territories of the local governments.

#### Sub-sector: Social security funds (S.1314)

#### 2.74. Definition:

The sub-sector social security funds includes all central, state and local institutional units whose principal activity is to provide social benefits and which fulfil each of the following two criteria:

- a) by law or by regulation certain groups of the population are obliged to participate in the scheme or to pay contributions;
- b) general government is responsible for the management of the institution in respect of the settlement or approval of the contributions and benefits independently from its role as supervisory body or employer (see paragraph 4.89.).

There is usually no direct link between the amount of the contribution paid by an individual and the risk to which that individual is exposed.

#### Households (S.14)

#### 2.75. Definition:

The households sector (S.14) covers individuals or groups of individuals as consumers and possibly also as entrepreneurs producing market goods and non-financial and financial services (market producers) provided that, in the latter case, the corresponding activities are not those of separate entities treated as quasi-corporations. It also includes individuals or groups of individuals as producers of goods and non-financial services for exclusively own final use (see paragraphs 3.20., 3.25. and 3.30.).

Households as consumers may be defined as small groups of persons who share the same living accommodation, who pool some, or all, of their income and wealth and who consume certain types of goods and services collectively, mainly housing and food. The criteria of the existence of family or emotional ties may be added.

The principal resources of these units are derived from the compensation of employees, property income, transfers from other sectors or the receipts from disposal of market products or the imputed receipts from output of products for own final consumption.

- 2.76. The households sector includes:
  - a) individuals or groups of individuals whose principal function is consumption;
  - b) persons living permanently in institutions who have little or no autonomy of action or

- decision in economic matters (e.g. members of religious orders living in monasteries, long-term patients in hospitals, prisoners serving long sentences, old persons living permanently in retirement homes). Such people are treated as comprising, together, a single institutional unit, that is, a single household;
- c) individuals or groups of individuals whose principal function is consumption and that produce goods and non-financial services for exclusively own final use; only two categories of services produced for own final consumption are included within the system: services of owner-occupied dwellinngs and domestic services produced by paid employees;
- d) sole proprietorships and partnerships without independent legal status – other than those treated as quasi-corporations – which are market producers;
- e) non-profit institutions serving households, which do not have independent legal status or those which do but are of only minor importance (see paragraph 2.88.).
- 2.77. The households sector is subdivided into six sub-sectors:
  - a) employers (including own-account workers) (S.141 + S.142);
  - b) employees (S.143);
  - c) recipients of property incomes (S.1441);
  - d) recipients of pensions (S.1442);
  - e) recipients of other transfer incomes (S.1443);
  - f) others (S.145).
- 2.78. Households are allocated to sub-sectors according to the largest income category (employers' income, compensation of employees, etc.) of the household as a whole. When more than one income of a given category is received within the same household, the classification must be based on the total household income within each category.

### Sub-sector: Employers (including own-account workers) (S.141 + S.142)

#### 2.79. Definition:

The sub-sector employers (including own-account workers) consists of the group of households for which the (mixed) incomes (B.3) accruing to the owners of household unincorporated enterprises from their activity as producers of market goods and services with or without paid employees are the largest



source of income for the household as a whole, even if it does not always account for more than a half of total household income.

#### Sub-sector: Employees (S.143)

#### 2.80. Definition:

The sub-sector employees consists of the group of households for which the income accruing from compensation of employees (D.1) is the largest source of income for the household as a whole.

## Sub-sector: Recipients of property incomes (S.1441)

#### 2.81. Definition:

The sub-sector recipients of property incomes consists of the group of households for which property income (D.4) is the largest source of income for the household as a whole.

#### Sub-sector: Recipients of pensions (S.1442)

#### 2.82. Definition:

The sub-sector recipients of pensions consists of the group of households for which the income accruing from pensions is the largest source of income for the household as a whole.

Pension households are households whose largest income consists of retirement or other pensions, including pensions from previous employers.

# Sub-sector: Recipients of other transfer incomes (S.1443)

#### 2.83. Definition:

The sub-sector recipients of other transfer incomes consists of the group of households for which the income accruing from other current transfers is the largest source of income for the household as a whole.

Other current transfers are all current transfers other than property income, pensions and income of persons living permanently in institutions.

#### Sub-sector: Others (S. 145)

#### 2.84. Definition:

The sub-sector others consists of persons living permanently in institutions.

Persons living permanently in institutions are classified separately because the criterion of the largest source of income does not allow a meaningful classification of these persons in one of the foregoing sub-sectors.

- 2.85. If the main income source of the household as a whole is not available for sectoring purposes, the income of the reference person constitutes the second-best characteristic to be used for classifying purposes. The reference person of a household is normally the person with the largest income. If the latter information is not available, the income of the person who states that he/she is the reference person may be used for sub-sectoring households.
- 2.86. However, other criteria may be appropriate and needed for different kinds of analysis or as the basis for policy-making, e.g. breakdown of households as entrepreneurs by activity: agricultural households; non-agricultural households (industry; services).

# Non-profit institutions serving households (S.15)

#### 2.87. Definition:

The sector non-profit institutions serving households (NPISHs) (S.15) consists of non-profit institutions which are separate legal entities, which serve households and which are private other non-market producers (see paragraph 3.32.). Their principal resources, apart from those derived from occasional sales, are derived from voluntary contributions in cash or in kind from households in their capacity as consumers, from payments made by general governments<sup>12</sup> and from property income.

2.88. Where these institutions are not very important, they are not included in this sector, their transactions being mixed up with those of households (S.14).

The NPISHs sector includes the following main kinds of NPISHs that provide non-market goods and services to households:

- a) trade unions, professional or learned societies, consumers' associations, political parties, churches or religious societies (including those financed but not controlled by governments), and social, cultural, recreational and sports clubs;
- b) charities, relief and aid organisations financed by voluntary transfers in cash or in kind from other institutional units.

Sector S.15 includes charities, relief or aid agencies serving non-resident units and excludes entities where membership gives right to a predetermined set of goods and services.

<sup>12</sup> NPIs controlled and mainly financed by general government are classified in the general government sector (see paragraph 2.69. b).



#### Rest of the world (S.2)

#### 2.89. Definition:

The rest of the world (S.2) is a grouping of units without any characteristic functions and resources; it consists of non-resident units<sup>13</sup> insofar as they are engaged in transactions with resident institutional units, or have other economic links with resident units. Its accounts provide an overall view of the economic relationships linking the national economy with the rest of the world.

- 2.90. The rest of the world is not a sector for which complete sets of accounts have to be kept, although it is often convenient to describe the rest of the world as if it were a sector. Sectors are obtained by disaggregating the total economy to obtain more homogeneous groups of resident institutional units, which are similar in respect to their economic behaviour, their objectives and functions. This is not the case for the sector rest of the world: there are recorded the transactions and other flows of non-financial and financial corporations, non-profit institutions, households and general government with non-resident institutional units and other economic relationships between residents and non-residents, e.g. claims by residents on nonresidents.
- 2.91. It should be noted that the rule whereby the accounts for the rest of the world include only transactions carried out between resident institutional units and non-resident units is subject to the following exceptions:
  - a) the services of transport (up to the border of the exporting country) provided by resident units in respect of imported goods are shown in the rest of the world accounts with f.o.b. imports, even though they are produced by resident units (see paragraph 3.144.);
  - b) transactions in foreign assets between residents belonging to different sectors are shown in the detailed financial accounts for the rest of the world; although they do not affect the country's financial position vis-àvis the rest of the world, they affect the financial relationships of individual sectors with the rest of the world;
  - c) transactions in the country's liabilities between non-residents belonging to different geographical zones are shown in the geographical breakdown of the rest of the world accounts. Although these transactions do not affect the country's overall liability to

- the rest of the world, they affect its liabilities to different parts of the world.
- 2.92. The sector rest of the world (S.2) is subdivided into:
  - a) the European Union (S.21):
    - (1) the member countries of the EU (S.211);
    - (2) the Institutions of the EU (S.212).
  - b) third countries and international organisations (S.22).

#### Sector classification of producers units for main standard legal forms of ownership

- 2.93. The following overview and paragraphs 2.94. 2.101. summarise the principles underlying the classification of producer units into sectors, using the standard terminology for describing the main types of institutions.
- 2.94. Private and public corporations which are market producers are classified as follows:
  - a) those principally engaged in the production of goods and non-financial services: in sector S.11, non-financial corporations (see paragraph 2.23. a);
  - b) those principally engaged in financial intermediation and auxiliary financial activities: in sector S.12, financial corporations (see paragraphs 2.40. a and 2.40. f).
- 2.95. Co-operatives and partnerships recognised as independent legal entities and which are market producers are classified as follows:
  - a) those principally engaged in the production of goods and non-financial services: in sector S.11, non-financial corporations (see paragraph 2.23. b);
  - b) those principally engaged in financial intermediation and auxiliary financial activities: in sector S.12, financial corporations (see paragraph 2.40. b).
- 2.96. Public producers which by virtue of special legislation are recognised as independent legal entities and which are market producers are classified as follows:
  - a) those principally engaged in the production of goods and non-financial services: in sector S.11, non-financial corporations (see paragraph 2.23. c);
  - b) those principally engaged in financial intermediation and auxiliary financial activities:

<sup>13</sup> Included are the Institutions of the EU and international organisations (see also paragraph 2.06.).



Table 2.3 Sector classification of producer units for main standard legal forms of ownership

STANDARD LEGAL	L DESCRIPTION	MARKET PRODUC	CERS	OTHER NON-MARKET PRODUCERS		
		PRINCIPALLY ENGAGED IN THE PRODUCTION OF GOODS AND NON-FINANCIAL SERVICES	PRINCIPALLY ENGAGED IN FINANCIAL INTERMEDIATION	PUBLIC PRODUCERS (see paragraph 3.28.)	PRIVATE PRODUCERS (see paragraph 3.29.)	
Private and public	corporations	S.11 non-financial corporations (see paragraph 2.23. a)	S.12 financial corporations (see paragraphs 2.40. a and 2.40. f)			
Co-operatives and recognised as inde entities		S.11 non-financial corporations (see paragraph 2.23. b)	S.12 financial corporations (see paragraph 2.40. b)			
Public producers w special legislation a independent legal	re recognised as	S.11 non-financial corporations (see paragraph 2.23. c)	S.12 financial corporations (see paragraph 2.40. c)			
Public producers not recognised as independent legal entities	those with the characte-ristics of quasi-corporations	S.11 non-financial corporations (see paragraph 2.23. f)	S.12 financial corporations (see paragraph 2.40. g)			
	the rest			S.13 general government (see paragraph 2.69 a)		
Non-profit institution independent legal		S.11 non-financial corporations (see paragraph 2.23. d)	S.12 financial corporations (see paragraph 2.40. d)	S.13 general government (see paragraph 2.69 b)	S.15 non-profit institutions serving households* see paragraph 2.87.)	
Partnerships not recognised as independent legal entities	those with the characte-ristics of quasi-corporations	S.11 non-financial corporations (see paragraph 2.23. f)	S.12 financial corporations (see paragraph 2.40. g)			
Sole proprietorships	the rest	S.14 households (see paragraph 2.75.)	S.14 households (see paragraph 2.75.)			
Holding corporations whose preponderant type of activity of the group of corporations controlled by them is the	goods and non- financial services	S.11 non-financial corporations (see paragraph 2.23. e)				
production of	financial services		S.12 financial corporations (see paragraph 2.40. e)			

With the exception of non-profit institutions of minor importance (see paragraph 2.88)



- in sector S.12, financial corporations (see paragraph 2.40. c).
- 2.97. Public producers not recognised as independent legal entities and which are market producers are classified as follows:
  - a) if they are quasi-corporations (see paragraph 2.13. f):
    - those principally engaged in the production of goods and non-financial services: in sector S.11, non-financial corporations (see paragraph 2.23. f);
    - (2) those principally engaged in financial intermediation and financial auxiliary activities: in sector S.12, financial corporations (see paragraph 2.40. g).
  - b) if they are not quasi-corporations: in sector S.13, general government, as they remain an integral part of the units which control them (see paragraph 2.69. a).
- 2.98. Non-profit institutions (associations, foundations) recognised as independent legal entities are classified as follows:
  - a) those which are market producers and principally engaged in the production of goods and non-financial services: in sector S.11, non-financial corporations (see paragraph 2.23. d);
  - b) those principally engaged in financial intermediation and auxiliary financial activities: in sector S.12, financial corporations (see paragraph 2.40. d);
  - c) those which are non-market producers:
    - (1) in sector S.13, general government, if they are public producers controlled and mainly financed by general government (see paragraph 2.69. b);
    - (2) in sector S.15, non-profit institutions serving households, if they are private producers(see paragraph 2.87.).
- 2.99. Sole proprietorships and partnerships not recognised as independent legal entities and which are market producers are classified as follows:
  - a) if they are quasi-corporations (see paragraph 2.13. f):

- (1) those principally engaged in the production of goods and non-financial services: in sector S.11, non-financial corporations (see paragraph 2.23. f);
- (2) those principally engaged in financial intermediation and financial auxiliary activities in sector S.12 financial corporations (see paragraph 2.40. g).
- b) if they are not quasi-corporations, they are classified in sector S.14, households (see paragraph 2.75.).
- 2.100. Holding corporations (i.e. corporations which direct a group of companies) are classified as follows:
  - a) in sector S.11, non-financial corporations, if the preponderant type of activity of the group of corporations which are market producers, as a whole is the production of goods and non-financial services (see paragraph 2.23. e);
  - b) in sector S.12, financial corporations, if the preponderant type of activity of the group of corporations as a whole is financial intermediation (see paragraph 2.40. e).
- 2.101. The Table 2.3 illustrates in schematic form the various cases which are enumerated above.

# LOCAL KIND-OF-ACTIVITY UNITS AND INDUSTRIES

- 2.102. In practice, most institutional units producing goods and services are engaged in a combination of activities at the same time. They may be engaged in a principal activity, some secondary activities and some ancillary activities (see paragraphs 3.10. 3.13.).
- 2.103. An activity can be said to take place when resources such as equipment, labour, manufacturing techniques, information networks or products are combined, leading to the creation of specific goods or services. An activity is characterised by an input of products (goods and services), a production process and an output of products.



Activities can be determined by reference to a specific level of NACE rev. 1<sup>14</sup>.

- 2.104. If a unit carries out more than one activity, all the activities which are not ancillary activities are ranked according to the gross value added. On the basis of the preponderant gross value added generated, a distinction can then be made between principal activity and secondary activities. Ancillary activities are not isolated to form distinct entities or separated from the principal or secondary activities of entities they serve.
- 2.105. In order to analyse flows occurring in the process of production and in the use of goods and services, it is necessary to choose units which emphasise relationships of a technico-economic kind. This requirement means that as a rule institutional units must be partitioned into smaller and more homogeneous units with regard to the kind of production. Local kind-of-activity units are intended to meet this requirement as a first but practice-oriented operational approach.

#### The local kind-of-activity unit

#### 2.106. Definition:

The local kind-of-activity unit (local KAU) is the part of a KAU which corresponds to a local unit<sup>15</sup>. The KAU groups all the parts of an institutional unit in its capacity as producer contributing to the performance of an activity at class level (4 digits) of the NACE rev. 1 and corresponds to one or more operational subdivisions of the institutional unit. The institutional unit's information system must be capable of indicating or calculating for each local KAU at least the value of production, intermediate consumption, compensation of employees, the operating surplus and employment and gross fixed capital formation.

The local unit is an institutional unit producing goods and services or a part thereof situated in a geographically identified place.

A local KAU may correspond to an institutional unit as producer or a part thereof; on the other hand, it can never belong to two different institutional units.

2.107. If an institutional unit producing goods and services contains a principal activity and also one or several secondary activities, it should be subdivided into the same number of KAUs, and

the secondary activities should be classified under different headings from the principal activity. On the other hand, the ancillary activities are not separated from the principal or secondary activities. But KAUs falling within a particular heading of the classification system can produce products outside the homogeneous group on account of secondary activities connected with them which cannot be separately identified from available accounting documents. Thus a KAU may carry out one or more secondary activities.

#### The industry

#### 2.108. Definition:

An industry consists of a group of local KAUs engaged in the same, or similar, kind-of-activity. At the most detailed level of classification, an industry consists of all the local KAUs falling within a single class (4 digits) of NACE rev. 1 and which are therefore engaged in the same activity as defined in the NACE rev. 1.

Industries comprise both local KAUs producing market goods and services and local KAUs producing non-market goods and services. An industry by definition consists of a group of local KAUs engaged in the same type of productive activity, irrespective of whether or not the institutional units to which they belong produce market or non-market output.

- 2.109. Industries may be classified in three categories:
  - a) industries producing market goods and services (market industries) and goods and services for own final use<sup>16</sup>;
  - b) industries producing non-market goods and services of general government: non-market industries of general government;
  - c) industries producing non-market goods and services of non-profit institutions serving households: non-market industries of nonprofit institutions serving households.

#### CLASSIFICATION OF INDUSTRIES

2.110. The classification used for grouping local KAUs into industries is the NACE rev. 1.

<sup>14</sup> NACE Rev. 1: Statistical Classification of Economic Activities in the European Community in accordance with the Council Regulation n° 3037/90 of 9 October 1990.

<sup>15</sup> The local KAU is called establishment in the SNA and ISIC Rev. 3.

Services for own final use concern only housing services produced by owner-occupiers and domestic services produced by employing paid staff (see paragraph 3.21.).



# UNITS OF HOMOGENEOUS PRODUCTION AND HOMOGENEOUS BRANCHES

2.111. The local KAU meets the requirements of production process analysis only approximately (see paragraphs 2.105. and 2.107.). The unit which is optimal for this kind of analysis, i.e. input-output analysis, is the unit of homogeneous production.

#### The unit of homogeneous production

#### 2.112. Definition:

The distinguishing feature of a unit of homogeneous production is a unique activity which is identified by its inputs, a particular process of production and its outputs. The products which constitute the inputs and outputs are themselves distinguished not only by their physical characteristics and the extent to which they are processed but also by the technique of production used: they can be identified by reference to a classification of products (see paragraph 2.118.).

2.113. If a goods and services producing institutional unit carries out a principal activity and also one or more secondary activities, it will be partitioned into the same number of units of homogeneous production. Ancillary activities are not separated from the principal or secondary activities. Just like the local KAU, the unit of homogeneous production may correspond to an institutional unit or a part thereof; on the other hand, it can never belong to two different institutional units.

#### The homogeneous branch

#### 2.114. Definition:

The homogeneous branch consists of a grouping of units of homogeneous production. The set of activities covered by a homogeneous branch is identified by reference to a product classification. The homogeneous branch produces those goods or services specified in the classification and only those products.

2.115. Homogeneous branches are units designed for economic analysis. Units of homogeneous production cannot usually be observed directly; data collected from the units used in statistical enquiries have to be re-arranged to form homogeneous branches.

- 2.116. Homogeneous branches may be classified in three categories:
  - a) homogeneous branches producing market goods and services (market branches) and goods and services for own final use<sup>17</sup>;
  - b) homogeneous branches producing nonmarket goods and services of general government: non-market branches of general government;
  - c) homogeneous branches producing nonmarket goods and services of non-profit institutions serving households: non-market branches of non-profit institutions serving households.
- 2.117. The homogeneous branches producing market goods and services and goods and services for own final use consist of all units of homogeneous production of whatever institutional sector which are exclusively engaged in the production of market goods and services or of goods and services for own final use. The production of market goods and services within the general government or non-profit institutions sectors (including those intended for themselves) are treated as units of homogeneous production and classified in an appropriate market branch.

The non-market homogeneous branches of general government producing non-market goods and services consist of all units of homogeneous production in the general government sector which produce non-market goods and services.

The non-market homogeneous branches of non-profit institutions serving households consist of all units of homogeneous production in the non-profit institutions serving households sector which produce non-market goods and services.

# THE CLASSIFICATION OF HOMOGENEOUS BRANCHES

2.118. The classification of homogeneous branches used in the input-output tables is based on the Classification of Products by Activity (CPA)<sup>18</sup>. The CPA is a product classification whose elements are structured according to the industrial origin criterion, industrial origin being defined by NACE rev. 1.

<sup>17</sup> Services for own final use concern only housing services produced by owner-occupiers and domestic services produced by employing paid staff (see paragraph 3.21.).

<sup>18</sup> CPA: Classification of Products by Activity in accordance with the Council Regulation nº 3696/93 of 29 October 1993.

# CHAPTER 3 TRANSACTIONS IN PRODUCTS

#### 3.01. Definition:

Products are all goods and services that are created within the production boundary. The latter is defined in paragraph 3.07.

3.02. The following main categories of transactions in products are distinguished in the ESA:

ransaction categories	Code
Output	P.1
Intermediate consumption	P.2
Final consumption expenditure	P.3
Actual final consumption	P.4
Gross capital formation	P.5
Exports of goods and services	P.6
Imports of goods and services	P.7

- 3.03. Transactions in products are recorded in the following accounts:
  - a) in the goods and services account, output and imports are recorded as resources and the other transactions in products are registered as uses;
  - b) in the production account, output is recorded as a resource and intermediate consumption is recorded as a use;
  - c) in the use of disposable income account, final consumption expenditure is recorded as a use;
  - d) in the use of adjusted disposable income account, actual final consumption is recorded as a use;
  - e) in the capital account, gross capital formation is registered as a use (a change in assets):
  - f) in the external account of goods and services, imports of goods and services are recorded as a resource, while exports of goods and services are registered as uses.
- 3.04. In the supply table, output and imports are recorded as supplies. In the use table, intermediate consumption, gross capital formation, final consumption expenditure and exports are registered as uses. In the symmetric input-output table, output and imports are recorded as supplies and the other transactions in products as uses.
- Supplies of products are valued at basic prices (see paragraph 3.48.). Uses of products are

valued at purchasers' prices (see paragraph 3.06.). For some types of supplies and uses, more specific valuation principles are used, e.g. for imports and exports of goods.

#### 3.06. Definition:

At the time of purchase, the purchaser's price is the price the purchaser actually pays for the products; including any taxes less subsidies on the products (but excluding deductible taxes like VAT on the products); including any transport charges paid separately by the purchaser to take delivery at the required time and place; after deductions for any discounts for bulk or off-peak-purchases from standard prices or charges; excluding interest or services charges added under credit arrangements; excluding any extra charges incurred as a result of failing to pay within the period stated at the time the purchases were made.

If the time of use does not coincide with the time of purchase, adjustments should be made in such a way to take account of the changes in price due to the lapsing of time (in a manner symmetrical with changes in the prices of the inventories). Such modifications are especially important if the prices of the products involved change drastically within a year.

#### PRODUCTION AND OUTPUT

#### 3.07. Definition:

Production is an activity carried out under the control and responsibility of an institutional unit that uses inputs of labour, capital and goods and services to produce goods and services. Production does not cover purely natural processes without any human involvement or direction, like the unmanaged growth of fish stocks in international waters (but fish farming is production).

#### 3.08 Production includes:

- a) the production of all individual or collective goods or services that are supplied to units other than their producers (or intended to be so supplied);
- b) the own-account production of all goods that are retained by their producers for their own final consumption or gross fixed capital formation. Own account production for gross fixed capital formation includes the



production of fixed assets such as construction, the development of software and mineral exploration for own gross fixed capital formation (for the concept of gross fixed capital formation, see paragraphs 3.100. – 3.127.).

Own-account production of goods by households pertains in general to:

- (1) own-account construction of dwellings;
- (2) the production and storage of agricultural products;
- (3) the processing of agricultural products, like the production of flour by milling, the preservation of fruit by drying and bottling; the production of dairy products like butter and cheese and the production of beer, wine and spirits;
- (4) the production of other primary products, like mining salt, cutting peat and carrying water;
- (5) other kinds of processing, like weaving cloth, the production of pottery and making furniture.

Own-account production of a good by households should be recorded if this type of production is significant, i.e. if it is believed to be quantitatively important in relation to the total supply of that good in a country.

By convention, in the ESA, only own-account construction of dwellings and the production, storage and processing of agricultural products is included; all other own-account production of goods by households are deemed to be insignificant for EU countries.

- c) the own-account production of housing services by owner-occupiers;
- d) domestic and personal services produced by employing paid domestic staff;
- e) volunteer activities that result in goods, e.g.
  the construction of a dwelling, church or
  other building are to be recorded as production. Volunteer activities that do not
  result in goods, e.g. caretaking and cleaning
  without payment, are excluded.

All such activities are included even if they are illegal or not-registered at tax, social security, statistical and other public authorities.

3.09. Production excludes the production of domestic and personal services that are produced and consumed within the same household (with the exception of employing paid domestic staff and the services of owner-occupied dwellings). Cases in point are:

- a) cleaning, decoration and maintenance of the dwelling as far as these activities are also common for tenants;
- b) cleaning, servicing and repair of household durables;
- c) preparation and serving of meals;
- d) care, training and instruction of children;
- e) care of sick, infirm or old people;
- f) transportation of members of the household or their goods.

#### Principal, secondary and ancillary activities

#### 3.10. Definition:

The principal activity of a local KAU is the activity whose value added exceeds that of any other activity carried out within the same unit. The classification of the principal activity is determined by reference to NACE rev. 1, first at the highest level of the classification and then at more detailed levels.

#### 3.11. Definition:

A secondary activity is an activity carried out within a single local KAU in addition to the principal activity. The output of the secondary activity is a secondary product.

#### 3.12. Definition:

The output of an ancillary activity is not intended for use outside the enterprise. An ancillary activity is a supporting activity undertaken within an enterprise in order to create the conditions within which the principal or secondary activities of local KAUs can be carried out. Ancillary activities typically produce outputs that are commonly found as inputs into almost any kind of productive activity, small as well as large.

Ancillary activities may be, e.g. purchasing, sales, marketing, accounting, data processing, transportation, storage, maintenance, cleaning and security services. Enterprises may have a choice between engaging in ancillary activities or purchasing such services on the market from specialist service producers.

Own-account capital formation is not considered to be an ancillary activity.

- 3.13. Ancillary activities are treated as integral parts of the principal or secondary activities with which they are associated. As a result:
  - a) the output of an ancillary activity is not explicitly recognised and recorded separately. It follows that the use of this output is also not recorded;



 all the inputs consumed by an ancillary activity – materials, labour, consumption of fixed capital, etc. are treated as inputs into the principal or secondary activity which it supports.

#### Output (P.1)

#### 3.14. Definition:

Output consists of the products created during the accounting period.

Particular cases included are:

- a) the goods and services which one local KAU provides to a different local KAU belonging to the same institutional unit;
- b) the goods which are produced by a local KAU and remain in inventories at the end of the period in which they are produced, whatever their subsequent use.

However, goods or services produced and consumed within the same accounting period and within the same local KAU are not separately identified. They are therefore not recorded as part of the output or intermediate consumption of that local KAU.

- 3.15. When an institutional unit contains more than one local KAU, the output of the institutional unit is the sum of the outputs of its component local KAUs, including outputs delivered between the component local KAUs.
- 3.16. Three types of output are distinguished in the ESA:
  - a) market output (P.11);
  - b) output produced for own final use (P.12);
  - c) other non-market output (P.13).

This distinction is also applied to local KAUs and institutional units:

- a) market producers;
- b) producers for own final use;
- c) other non-market producers.

The distinction between market, for own final use and other non-market is fundamental, because it determines the valuation principles to be applied to output: market output, output produced for own final use and total output of market producers and producers for own final use are valued at basic prices, while the total output of other non-market producers (local KAUs) is valued from the costs side. The total output of an institutional unit is valued as the sum of the total outputs of its local KAUs and depends thus also on the distinction between market, for own final use and other non-market (see paragraphs 3.54. – 3.56.). Further-

more, the distinction is also used to classify institutional units by sector (see paragraphs 3.27. – 3.37.).

The distinctions are defined in a top-down way, i.e. the distinction is first defined for institutional units, then for local KAUs and then for their output. As a consequence, the exact meaning of the distinction on the product level (i.e. the definition of the concepts of market output, output for own final use and other non-market output) can only be understood by looking also at features of the institutional unit and the local KAU that produce that output.

After the general definitions of the three types of output and of the three types of producers (see paragraphs 3.17. – 3.26.), the distinction between market, for own final use and other non-market is presented in a top-down way.

#### 3.17. Definition:

Market output consists of output that is disposed of on the market (see paragraph 3.18.) or intended to be disposed of on the market.

#### 3.18. Market output includes:

- a) products sold at economically significant prices;
- b) products bartered;
- c) products used for payments in kind (including compensation of employees in kind and mixed income in kind);
- d) products supplied by one local KAU to another within the same institutional unit to be used as intermediate inputs or for final uses;
- e) products added to the inventories of finished goods and work-in-progress intended for one or other of the above uses (including natural growth of animal and vegetable products and uncompleted structures for which the buyer is unknown).

#### 3.19. Definition:

In the ESA, the economically significant price of a product is defined partly in relation to the institutional unit and local KAU that has produced the output (see paragraphs 3.27. – 3.40.). For example, by convention all the output of unincorporated enterprises owned by households sold to other institutional units is sold at economically significant prices, i.e. is to be regarded as market output. For the output of some other institutional units, output is only sold at economically significant prices when more than 50% of the production costs is covered by sales.



#### 3.20. Definition:

Output produced for own final use consists of goods or services that are retained either for final consumption by the same institutional unit or for gross fixed capital formation by the same institutional unit.

- 3.21. Products retained for own final consumption can only be produced by the household sector. Typical examples are:
  - a) agricultural products retained by farmers;
  - b) housing services produced by owner-occupiers;
  - household services produced by employing paid staff.
- 3.22. Products used for own gross fixed capital formation can be produced by any sector. Examples are:
  - a) special machine tools produced by engineering enterprises;
  - dwellings, or extensions to dwellings, produced by households;
  - c) own-account construction, including communal construction undertaken by groups of households.

#### 3.23. Definition:

Other non-market output covers output that is provided free, or at prices that are not economically significant, to other units.

#### 3.24. Definition:

Market producers are local KAUs or institutional units the major part of whose output is market output.

It should be noted that if a local KAU or institutional unit is a market producer its main output is by definition market output, as the concept of market output is defined after having applied the distinction market, for own final use and other non-market to the local KAU and institutional unit that have produced that output.

#### 3.25. Definition:

Producers for own final use are local KAUs or institutional units the major part of whose output is for own final use within the same institutional unit.

#### 3.26. Definition:

Other non-market producers are local KAUs or institutional units whose major part of output is provided free or at not economically significant prices.

### Institutional units: distinction between market, for own final use and other non-market

3.27. For the institutional units as producers, the distinction between market, for own final use and other non market is summarised in Table 3.1. The implications for the classification by sectors are also shown.

The table shows that in order to determine whether an institutional unit should be classi-

Table 3.1 The distinction between market producers, producers for own final use and other non-market producers for institutional units

Type of inst	titutional unit	Classification			
Private or public?		NPI or not?	Sales cover more than 50% of production costs?	Type of producer	Sector(s)
1. Private producers	1.1 Unincorporated enterprises owned by households (excluding quasi-corporate enterprises owned by households)			1.1 = Market or for own final use	Households
	1.2 Other private producers (including quasi-corporate enterprises owned by households)	1.2.1 Private NPIs	1.2.1.1 Yes 1.2.1.2 No	1.2.1.1 = Market 1.2.1.2 = Other non- market	Corporations NPISH
	nousenolus)	1.2.2 Other private producers that are not NPI		1.2.2= Market	Corporations
2. Public producers			2.1 Yes 2.2 No	2.1 = Market 2.2 = Other non-market	Corporations Gen. Government



- fied as a market producer, a producer for ownfinal use or an other non-market producer several distinctions should be applied subsequently.
- 3.28. The first distinction is that between private and public producers. A public producer is a producer that is controlled by the general government. In case of NPIs, a public producer is an NPI that is controlled and mainly financed by the general government. All other producers are private producers. Control is defined as the ability to determine the general (corporate) policy or programme of an institutional unit by appointing appropriate directors or managers, if necessary. Owning more than half the shares of a corporation is a sufficient, but not a necessary, condition for control (see paragraph 2.26.).
- 3.29. As Table 3.1 shows, private producers are found in all sectors except the sector general government. In contrast, public producers are only found in the corporations sectors (non-financial corporations and financial corporations) and in the general government sector.
- 3.30. A specific category of private producers are the unincorporated enterprises owned by households. These are always market producers or producers for own final use. The latter occurs in case of the production of services of owner-occupied dwellings and the own-account production of goods. All unincorporated enterprises owned by households are classified to the household sector. An exception should only be made for quasi-corporate enterprises owned by households. These are market producers and classified to the non-financial and financial corporations sectors.
- 3.31. For the other private producers, a distinction should be made between private non-profit institutions and other private producers.

#### Definition:

A NPI is defined as a legal or social entity created for the purpose of producing goods and services whose status does not permit them to be a source of income, profit or other financial gains for the units that establish, control or finance them. In practice, their productive activities are bound to generate either surpluses or deficits but any surpluses they happen to make cannot be appropriated by other institutional units.

All the other private producers that are not NPIs are market producers. They are classified to the non-financial and financial corporations sectors.

3.32. In order to determine the type of producer and the sector for the private NPIs, a 50% criterion should be applied:

- a) if more than 50% of the production costs are covered by sales, the institutional unit is a market producer and classified to the non-financial and financial corporations sectors;
- b) if less than 50% of the production costs are covered by sales, the institutional unit is an other non-market producer and classified to the sector NPISH. But other non-market NPIs that are controlled and mainly financed by general government are classified to the general government sector.
- 3.33. In distinguishing market and other non-market producers by means of the 50% criterion, sales and production costs are defined as follows:
  - a) sales cover the sales excluding taxes on products but including all payments made by general government or the Institutions of the European Union and granted to any kind of producer in this type of activity, i.e. all payments linked to the volume or value of output are included, but payments to cover an overall deficit are excluded.

This definition of sales corresponds to that of output at basic prices except that:

- output at basic prices is only defined after it has been decided on whether the output is market or other non-market: sales are only used in valuing market output; other non-market output is valued at costs;
- (2) the payments made by general government to cover on overall deficit of public corporations and quasi-corporations are part or other subsidies on products as defined in paragraph 4.35. c. As a consequence, market output at basic prices includes also the payments made by general government to cover an overall deficit.
- b) production costs are the sum of intermediate consumption, compensation of employees, consumption of fixed capital and other taxes on production. For this criterion other subsidies on production are not deducted. To ensure consistency of the concepts sales and production costs when applying the 50% criterion, the production costs should exclude all costs made for own-account capital formation.

The 50% criterion should be applied by looking over a range of years: only if the criterion holds for several years or holds for the present year and is expected to hold for the near future, it should be applied strictly. Minor fluctuations in the size of sales from one year to another do



- not necessitate a reclassification of institutional units (and their local KAUs and output).
- 3.34. Sales may consist of various elements. For example, in case of the health care services provided by a hospital sales may correspond to:
  - a) purchases by employers to be recorded as income in kind paid to their employees and final consumption expenditure by these employees;
  - b) purchases by private insurance companies;
  - c) purchases by social security funds and general government to be classified as social benefits in kind;
  - d) purchases by households without reimbursement (final consumption expenditure).

Only other subsidies on production and gifts (e.g. from charities) received are not treated as sales.

Similarly, the sale of transport services by an enterprise may correspond to intermediate consumption by producers, income in kind provided by employers, social benefits in kind provided by the government and purchases by households without reimbursement.

- 3.35. Private non-profit institutions serving businesses are a special case. They are usually financed by contributions or subscriptions from the group of businesses concerned. The subscriptions are treated not as transfers but as payments for services rendered, i.e. as sales. These NPIs are therefore market producers and are classified in the non-financial and financial corporations sectors.
- In applying the 50% criterion to the sales and 3.36. production costs of private or public NPIs, including in sales all the payments linked to volume of output may be misleading in some specific cases. This can apply e.g. to the financing of the output of private and public schools: the payments by the general government can be linked to the number of pupils but be the subject of negotiation with the general government. In such a case, these payments need not be regarded as sales though they have an explicit link with the volume of output, e.g. with the number of pupils. This implies that a school mainly financed by such payments is an other non-market producer. When the school is a public producer, i.e. when it is mainly financed and controlled by the government, it should be classified in the sector general government. When the school is a private other non-market producer, it should be classified in the sector NPISHs.

3.37. Public producers can be market producers or other non-market producers. If the 50% criterion decides that the institutional unit should be regarded as a market producer, it is classified in the non-financial and financial corporations sectors. The 50% criterion decides also when a government unit should be treated as a quasicorporation owned by the government: only when it meets the 50% criterion, a quasi-corporation should be created. If the institutional unit is an other non-market producer, it is classified in the sector general government. The distinction between NPIs and other producers is thus irrelevant for classifying public producers.

# Local KAUs and their outputs: distinction between market, for own final use and other non-market

- 3.38. After having applied the distinction market, for own final use and other non-market to institutional units as producers, the distinction can be applied to local KAU and their outputs. This relation is shown in Table 3.2.
- 3.39. For institutional units qualifying as market producers, the principal local KAU is of course also a market producer. The secondary local KAU can be a market producer, but also a producer for own final use. However, the secondary local KAU can by convention not be an other nonmarket producer. This implies that the (secondary) local KAUs in the sectors non-financial corporations and financial corporations are all market producers or producers for own final use.
- 3.40. For institutional units that are other non-market producers, the principal local KAU will also be an other non-market producer. The secondary local KAUs can be market producers or other non-market producers. This implies that the sectors general government and NPISH can contain some (secondary) local KAUs that are market producers (although all the institutional units in these sectors are other non-market producers). In order to determine whether the secondary local KAUs are market or other non-market producers the 50% criterion should be applied.
- 3.41. After having applied the distinction market, for own final use and other non-market to institutional units and their local KAUs, the distinction can be applied to the outputs of local KAUs. This relation is shown in Table 3.3.
- 3.42. By convention, local KAUs as market producers and as producers for own final use can not supply other non-market output. Their output can thus only be recorded as market output or output for own final use and valued correspondingly (see paragraphs 3.46. 3.52.).



Table 3.2 Institutional units, local KAUs and output and the distinction between market, for own final use and other non-market

Institutional unit	Principal local	Secondary local KAU(s)	Principal output of principal local KAU	Secondary output of principal local KAU	Principal output of secondary local KAU	Secondary output of secondary local KAU
Market	Market		Market output	Market output		
producer	producer			Output for own final use		
		Market producer			Market output	Market output
		producer				Output for own final use
		Producer for own final use			Output for own final use	Market output
Producer for	Producer for	OTTI III disc	Output for	Market output	OTT III asc	
Other non-	Other non-		Other non-	Market output	-	
market producer	market producer		market output	Output for own final use		
				Other non- market output		
		Market producer			Market output	Market output
		producer				Output for
		Other non- market			Other non- market output	own final use Market output
		producer				Output for own
						final use Other non- market output

3.43. Local KAUs as other non-market producers can supply as secondary output market outputs and output for own final use. The output for own final use consists of own-account capital formation. The occurrence of market output should in principle be determined by applying the 50% criterion to individual products: market output is output that is sold at least 50% of its production costs. This might be the case for

instance when government hospitals charge economically significant prices for some of their services. Other examples are sales of reproductions by government museums and sales of weather forecasts by meteorological institutes.

3.44. In statistical practice, it may be difficult to make a clear distinction between the different products of local KAUs of government institu-

Table 3.3 The distinction market, for own final use and other non-market for local KAUs and their output

	Market producers	Producers for own final use	Other non- market producers	Total
Aarket output	X	X	X	Total market output
Output for own final use	Х	X	X	Total output for own final use
Other non-market output	0	0	X	Total other non-market output
Total	Total output by market producers	Total output by producers for own final use	Total output by other non-market producers	Total output

X = large output; x = small output; 0 = no output (by convention)



tions and NPISHs. Even more, this is true for the production costs in relation to the different products. In that case, a simple solution is to treat all revenues of other non-market producers from their secondary activity(activities) as the revenues for one type of market output. This applies for example to a museum's revenues from the sale of posters and cards<sup>1</sup>.

Other non-market producers may also have 3.45. revenues from the sale of their other non-market output at <u>not</u> economically significant prices, e.g. the museum's revenues from tickets for entrance. These revenues pertain to other non-market output. However, if both types of revenues (revenues from tickets and those from the sale of posters and cards) are difficult to distinguish, they can all be treated as either revenues for market output or revenues from other non-market output. The choice between these two alternative registrations should depend on the assumed relative importance of both types of revenues (from tickets versus those from the sale of posters and cards).

#### Time of recording and valuation of output

- 3.46. Output is to be recorded and valued when it is generated by the production process.
- 3.47. All output is to be valued at basic prices, but specific conventions hold for:
  - a) the valuation of other non-market output;
  - b) the valuation of total output of an other non-market producer (local KAU);
  - c) the valuation of the total output of an institutional unit of which a local KAU is an other non-market producer.

(See paragraphs 3.53. - 3.56.).

#### 3.48. Definition:

The basic price is the price receivable by the producers from the purchaser for a unit of a good or service produced as output minus any tax payable on that unit as a consequence of its production or sale (i.e. taxes on products), plus any subsidy receivable on that unit as a consequence of its production or sale (i.e. subsidies on products). It excludes any transport charges invoiced separately by the producer. It includes any transport margins charged by the producer on the same invoice, even when they are included as a separate item on the invoice.

3.49. Output for own final use (P.12) is to be valued at the basic prices of similar products sold on

the market; as a consequence, net operating surplus or mixed income can occur for such output. This also applies to services of owner-occupied dwellings (see paragraph 3.64.). However, it will usually be necessary to value output of own-account construction by costs of production.

- 3.50. Additions to work-in-progress are valued in proportion to the estimated current basic price of the finished product.
- 3.51. If the value of output treated as work-in-progress is to be estimated in advance, it should be based on the actual costs incurred, plus a mark-up for the estimated operating surplus or an estimate of mixed income. The provisional estimates should subsequently be replaced by those obtained by distributing the actual value (when it becomes known) of the finished products. The latter is the sum of the values of:
  - a) finished products sold or bartered;
  - b) entries of finished products into inventories, less withdrawals;
  - c) finished products for own final use.
- 3.52. For buildings and structures acquired in an incomplete state, a value is estimated based on costs to date, including a mark up for operating surplus or mixed income. This mark-up results when the value can be estimated on the basis of the prices of similar buildings and structure. The amounts of stage payments may be used to approximate the values of gross fixed capital formation undertaken by the purchaser at each stage (assuming no advance payments or arrears).

If the own-account construction of a structure is not yet completed within a single accounting period, the value of the output and the corresponding gross fixed capital formation should be estimated by applying the fraction of the total costs of production incurred during the relevant period to the estimated current basic price. If it is not possible to estimate the basic price of the finished structure, it must be valued by its total costs of production. If some or all of the labour is provided free, as may happen with communal construction by households, an estimate of what the cost of paid labour would have been included in the estimated total production costs using wage rates for similar kinds of labour in the vicinity or region.

3.53. The total output of an other non-market producer (a local KAU) is to be valued at the total costs of production, i.e. the sum of:

<sup>1</sup> Though these revenues may not be sufficient to cover 50% of all the costs of the museum shop, e.g. because that also includes compensation of employees of the museum shop personnel.



- a) intermediate consumption (P.2);
- b) compensation of employees (D.1);
- c) consumption of fixed capital (K.1);
- d) other taxes on production (D.29) less other subsidies on production (D.39).

Other subsidies on production should be deducted. However, it should be realised that other subsidies on production to other non-market producers will often be absent in practice or only involve very small amounts (see paragraph 4.36.).

By convention, interest payments are not included as costs of other non-market production (though they could be regarded as major costs of production in some cases, e.g. in case of housing corporations). The costs of other non-market production also do not include an imputation for the rental value of the non-residential buildings owned and used in other non-market production.

- 3.54. The total output of an institutional unit is the sum of the total output of its constituent local KAUs. This applies also to institutional units that are other non-market producers.
- 3.55. In the absence of secondary market output by other non-market producers (local KAUs), other non-market output is to be valued at the costs of production. In the case of secondary market output by other non-market producers, other non-market output is valued as a residual item, i.e. as the difference between the total costs of production of other non-market producer minus their revenues from market output.
- In principle, market output by other non-mar-3.56. ket producers is to be valued at basic prices. However, even though an other non-market local KAU may have sales receipts, its total output covering both its market and its other non-market output (and possibly also output for own final use), is still valued by the production costs. The value of its market output is given by its receipts from sales of market products, the value of its other non-market output being obtained residually as the differences between on the one hand the values of its total output and, on the other hand, its market output and output for own final use. The value of its receipts from the sale of other non-market goods or services at prices that are not economically significant remain as part of the value of its other non-market output.
- 3.57. For some specific types of output, the times of recording and the valuation of output are subject to the following clarifications and exceptions, given in order of CPA sections.

3.58. A. Products of agriculture, hunting and forestry; B. Fish.

The output of agricultural products should be recorded as being produced continuously over the entire period of production (and not simply when the crops are harvested or animals slaughtered).

Growing crops, standing timber and stocks of fish or animals reared for purposes of food should be treated as inventories of work-in-progress during the process, and transformed into inventories of finished products when the process is completed.

3.59. D. Manufactured products; F. Construction work.

When a contract of sale is agreed in advance for the construction of a building or other structure extending over several accounting periods, the output produced each period is treated as being sold to the purchaser at the end of the period: i.e. in the purchaser's fixed capital formation rather than work-in-progress in the construction industry. In effect, the output produced is treated as being sold to the purchaser in stages as the latter takes legal possession of the output. When the contract calls for stage payments, the value of the output may often be approximated by the value of stage payments made each period. In the absence of a contract of sale, however, the incomplete output produced each period is recorded as work-in-progress.

3.60. G. Wholesale and retail trade services; repair services of motor vehicles, motorcycles and personal and household goods.

The output of wholesale and retail services is measured by the trade margins realised on the goods they purchase for resale.

### Definition:

A trade margin is the difference between the actual or imputed price realised on a good purchased for resale and the price that would have to be paid by the distributor to replace the good at the time it is sold or otherwise disposed of.

By convention, holding gains and losses are not included in the trade margin. However, in practice, data sources may not allow to separate out all the holding gains and losses.

3.61. H. Hotel and restaurant services.

The value of the output of the services of hotels, restaurants and cafes includes the value of the food, beverages, etc. consumed.

3.62. I. Transport, storage and communication services.



The output of transport services is measured by the value of the amounts receivable for transporting goods or persons. Transportation for own use within the local KAU is considered ancillary activity and is not separately identified and recorded.

The output of storage services is measured as the value of an addition to work-in-progress, either additional output in the sense of transportation over time (e.g. storage on behalf of other local KAUs) or a physical change (e.g. in case of the maturing of wine).

The output of travel agency services is measured as the value of service charges of agencies (fees or commission charges) and not by the full expenditures made by travellers to the travel agency. The latter may e.g. also include charges for transport by third parties.

The output of tour operator services is measured by the full expenditure made by travellers to the tour operator.

The distinction between travel agency services and tour operator services is that travel agency services amount only to intermediation on behalf of the traveller, while tour operator services create a new product, i.e. a tour is arranged of which the prices of its various components (e.g. travel, accommodation and entertainment) are not recognisable as such for the traveller.

3.63. J. Financial intermediation services (this includes insurance services and pension funding services).

The output of financial intermediation for which no explicit charges are made is measured, by convention, as the total property income received by the units providing the services minus their total interest payments, excluding the value of any income received from the investment of their own funds (as such income does not arise from financial intermediation), and, in the case of secondary insurance activities by a financial intermediary, excluding the income from investment of insurance technical reserves. Holding gains and losses should be ignored in measuring this output, because throughout the system holding gains are not recorded in the production account but in a separate account (other changes in assets account). This applies also to holding gains on foreign exchange and securities by professional dealers (though their holding gains may be generally positive and be regarded by the dealers themselves as part of their normal revenues). However, the trade margins on foreign exchange and securities (i.e. the common differences between the purchasers' prices for the dealer and the purchasers' price for the buyer) are to be included in output, like for wholesale and retail traders. Analogously, there may also be data problems in distinguishing such trade margins from the holding gains; these should be overcome as best as possible.

The output of services of financial intermediation provided by central banks should be measured in the same way as those provided by other financial intermediaries.

The activity of money lenders who lend only their own funds is not treated as the production of services.

Financial intermediaries may also provide various financial services and business services for which fees or commissions are explicitly charged. Cases in point can be e.g. currency exchange and advice about investments, the purchase of real estate or advice on taxation. The output of such services is valued on the basis of the fees or commissions charged.

Output of insurance services (service charge) is measured as:

total actual premiums earned

plus total premium supplements

(equal to the income from the investment of the insurance technical

reserves)

minus the total claims due

minus the change in the actuarial reserves and reserves for with-profits insur-

ince.

Holding gains and losses are to be ignored in the measurement of the output of insurance services: they are not to be regarded as income from investment of the insurance technical reserves and they are not to be considered as changes in the actuarial reserves and reserves for with-profits insurance.

Notice that insurance technical reserves may be invested in secondary activities of the insurance company, e.g. the letting of dwellings or offices. In that case, the net operating surplus on these secondary activities is income from the investment of insurance technical reserves.

Similarly, the output of pension funding services is measured as:

total actual pension contributions

plus total supplementary contributions

(equal to the income from investment of the pension funds technical reserves)



minus the benefits due

minus the change in the actuarial reserves.

3.64. K. Real estate, renting and business services.

The output of services of owner-occupied dwellings should be valued at the estimated value of rental that a tenant would pay for the same accommodation, taking into account facsuch as location, neighbourhood amenities, etc. as well as the size and quality of the dwelling itself. For garages located separately from dwellings, which are used by the owner for final consumption purposes in connection with using the dwelling, a similar imputation is to be made. No imputation is to be made for garages used by their private owner only for the purpose of parking near the workplace. The rental value of owner-occupied dwellings abroad, e.g. holiday homes, should not be recorded as part of domestic production, but as imports of services and the corresponding net operating surplus as primary income received from the Rest of the World. For owner-occupied dwellings owned by non-residents, analogous entries should be made. In case of time-sharing apartments, a proportion of the service charge should be recorded as such.

The output of real estate services of nonresidential buildings is measured by the value of the rentals due.

The output of operating leasing services (renting out machinery or equipment, etc.) is measured by the value of rental which the lessee pays to the lessor. It is clearly distinguished from financial leasing which is a method of financing the acquisition of fixed assets, i.e. by making a loan from the lessor to the lessee. In the case of financial leasing rentals consist (mainly) of repayments and interest payments, and the value of services is very small compared with the total rentals paid (see Annex II 'Leasing and hire purchase of durable goods').

When possible, a separate local KAU should be distinguished for research and development activities (R&D). When this is not possible, all R&D of a significant size (compared to the principal activity) should be recorded as a secondary activity of the local KAU.

The output of R&D services is measured as follows:

 a) R&D by specialised commercial research laboratories or institutes is valued at the revenues from sales, contracts, commissions, fees, etc. in the usual way;

- b) the output of R&D for use within the same enterprise should, in principle, be valued on the basis of the estimated basic prices that would be paid if the research were sub-contracted commercially. However, in practice, it is likely to have to be valued on the basis of the total production costs;
- c) R&D by government units, universities, non-profit research institutes, etc. is usually other non-market production and is thus valued on the basis of the costs of production. Revenues from the sale of R&D by other non-market producers of R&D are to be recorded as revenues from secondary market output.

Expenditure on R&D should be distinguished from that on education and training. Expenditure on R&D does not include the costs of developing software as a principal or secondary activity. However, their accounting treatment is nearly the same; the only difference is that software is regarded as a produced intangible asset and is not patented.

3.65. L. Public administration and defence services, compulsory social security services.

Public administration, defence services and compulsory social security services are always provided as other non-market services and should thus be valued accordingly.

3.66. M. Education services; N. Health and social services.

For education services and health services it may often be necessary to draw precise borderlines between market and other non-market producers and between their market and other non-market output. For example, for some types of education and medical treatment nominal fees can be levied by government institutions (or by other institutions due to specific subsidies), but for other education and special medical treatments they may charge commercial tariffs. Another common case in point is that the same type of service (e.g. higher education) is provided by, on the one hand, the government (or its intermediation) and, on the other hand, commercial institutes. Then, often large differences exist between the prices charged and the quality of the services.

Education and health services exclude R&D activities; health services exclude education in health care, e.g. by academic hospitals.

3.67. O. Other community, social and personal services.



The production of books, recordings, films, software, tapes, disks, etc. is a two stage process and measured accordingly:

- (1) The output from the production of originals (an intangible fixed asset) is measured by the price paid if sold, or, if not sold, by the basic price paid for similar originals, its production costs or the discounted value of the future receipts expected from using it in production;
- (2) The owner of this asset may use it directly or to produce copies in subsequent periods. If the owner has licensed other producers to make use of the original in production, the fees, commissions, royalties, etc. he receives from the licenses are his output of his services. However, the sale of the intangible asset is negative fixed capital formation.
- 3.68. P. Private households with employed persons

The output of household services produced by employing paid staff is by convention valued by the compensation of employees paid; this includes any compensation in kind such as food or accommodation.

## **INTERMEDIATE CONSUMPTION (P.2)**

### 3.69. Definition:

Intermediate consumption consists of the value of the goods and services consumed as inputs by a process of production, excluding fixed assets whose consumption is recorded as consumption of fixed capital. The goods and services may be either transformed or used up by the production process.

- 3.70. Intermediate consumption includes the following borderline cases:
  - a) the value of all the goods or services used as inputs into ancillary activities. Common examples are purchasing, sales, marketing, accounting, data processing, transportation, storage, maintenance, security, etc. These goods and services are not distinguished from those consumed by the principal (or secondary) activities of a local KAU;
  - b) the value of goods and services which are received from another local KAU of the same institutional unit (only if they comply to the general definition in paragraph 3.69.);
  - the costs of using rented fixed assets, e.g. the operational leasing of machines or cars;

- d) the subscriptions, contributions or dues paid to non-profit business associations;
- e) items not treated as gross capital formation, like:
  - (1) small tools which are inexpensive and used for relatively simple operations, such as saws, hammers, screwdrivers and other hand tools; small devices, such as pocket calculators. By convention, in the ESA, all expenditure on such durables which does not exceed 500 ECU (in prices of 1995) per item (or, when bought in quantities, for the total amount bought), should be recorded as intermediate consumption;
  - the ordinary, regular maintenance and repair of fixed assets used in production;
  - (3) military weapons of destruction and the equipment needed to deliver them (but not light weapons or armoured vehicles acquired by police and security forces, which are treated as gross fixed capital formation);
  - (4) services of research and development, staff training, market research and similar activities, purchased from an outside agency or provided by a separate local KAU of the same institutional unit.
- f) payments for the use of intangible non-produced assets like patented assets, trade marks, etc. (excluding payments for the purchase of such property rights: these are treated as acquisitions of an intangible nonproduced assets);
- g) expenditure by employees, reimbursed by the employer, on items necessary for the employers' production, like contractual obligations to purchase on own-account tools or safety-wear;
- expenditure by employers which is to their own benefit as well as to that of their employees, because it is necessary for the employers' production. Cases in point are:
  - reimbursement of employees for travelling, separation, removal and entertainment expenses incurred in the course of their duties;
  - (2) providing amenities at the place of work;
    - a more extensive list is presented in the paragraphs on compensation of employees (D.1).



- non-life insurance service charges paid by local KAUs (see also Annex III 'Insurance'): in order to record only the service charge as intermediate consumption the premiums paid should be discounted for, e.g. claims paid out and the net change in actuarial reserves. The latter can be allocated to local KAUs as a proportion of the premiums paid;
- j) only for the total economy: all financial intermediation services indirectly measured (FISIM) provided by resident producers.
- 3.71. Intermediate consumption excludes:
  - a) items treated as gross capital formation, like:
    - (1) valuables;
    - (2) mineral exploration;
    - (3) major improvements which go considerably beyond what is required simply to keep the fixed assets in good working order, e.g. renovation, reconstruction or enlargement;
    - (4) software purchased or produced on own-account.
  - b) expenditure by employers treated as wages and salaries in kind (see paragraph 4.05.);
  - c) use by market or own-account producer units of collective services provided by government units (treated as collective consumption expenditure by government);
  - d) goods or services produced and consumed within the same accounting period and within the same local KAU (they are also not recorded as output);
  - e) payments for government licenses and fees that are treated as taxes on production (see paragraphs 4.79. – 4.80.).

# Time of recording and valuation of intermediate consumption

- 3.72. Products used for intermediate consumption should be recorded and valued at the time they enter the process of production. They are to be valued at the purchasers' prices for similar goods or services at that time.
- 3.73. In practice, producer units do not usually record the actual use of goods in production directly. They record the purchases intended to be used as inputs and the changes in the amounts of such goods held in inventory. Intermediate consumption has therefore to be estimated by subtracting from the purchases the changes in inventories of inputs (see paragraphs 3.120. 3.124. for the correct valuation of the latter).

## FINAL CONSUMPTION (P.3, P.4)

- 3.74. Two concepts of final consumption are used:
  - a) final consumption expenditure (P.3);
  - b) actual final consumption (P.4).

Final consumption expenditure is a concept that refers to a sector's expenditure on consumption goods and services. In contrast, actual final consumption refers to its acquisition of consumption goods and services. The difference between these concepts lies in the treatment of certain goods and services financed by the government or NPISHs but supplied to households as social transfers in kind.

## Final consumption expenditure (P.3)

3.75. Definition:

Final consumption expenditure consists of expenditure incurred by resident institutional units on goods or services that are used for the direct satisfaction of individual needs or wants or the collective needs of members of the community. Final consumption expenditure may take place on the domestic territory or abroad.

- 3.76. Household final consumption expenditure includes the following borderline cases:
  - a) services of owner-occupied dwellings;
  - b) income in kind, like:
    - goods and services received as income in kind by employees;
    - (2) goods or services produced as outputs of unincorporated enterprises owned by households that are retained for consumption by members of the household. Cases in point are food and other agricultural goods, housing services by owner-occupiers and household services produced by employing paid staff (servants, cooks, gardeners, chauffeurs, etc.).
  - c) items not treated as intermediate consumption, like:
    - materials for small repairs to and interior decoration of dwellings of a kind typically carried out by tenants as well as owners;
    - (2) materials for repairs and maintenance to consumer durables, including vehicles.
  - d) items not treated as capital formation, in particular consumer durables, that continue to perform their function in several account-



- ing periods; this includes the transfer of ownership of some durables from an enterprise to a household (see transactions in existing goods, paragraph 3.148.);
- e) financial services directly charged;
- f) insurance services by the amount of the implicit service charge (see paragraph 3.63.);
- g) pension funding services by the amount of the implicit service charge (see paragraph 3.63.);
- h) payments by households for licences, permits, etc. which are regarded as purchases of services (see paragraphs 4.79., 4.80.);
- i) the purchase of output at not economically significant prices, e.g. entrance fees for a museum (see paragraph 3.45.).
- 3.77. Household final consumption expenditure excludes:
  - a) social transfers in kind, like expenditures initially incurred by households but subsequently reimbursed by social security, e.g. some medical expenses;
  - b) items treated as intermediate consumption or gross capital formation, like:
    - expenditures by households owning unincorporated enterprises when incurred for business purposes – e.g. on durable goods such as vehicles, furniture or electrical equipment (gross fixed capital formation), and also on non-durables such as fuel (intermediate consumption);
    - expenditure that an owner-occupier incurs on the decoration, maintenance and repair of the dwelling not typically carried out by tenants (treated as intermediate consumption in producing housing services);
    - (3) the purchase of dwellings (treated as gross fixed capital formation);
    - (4) expenditure on valuables (treated as gross capital formation).
  - c) items treated as acquisitions of a non-produced assets, in particular the purchase of land;
  - d) all those payments by households which are to be regarded as taxes, such as licences to own vehicles, boats or aircraft and also licences to hunt, shoot or fish (see paragraphs 4.79. 4.80.);
  - e) subscriptions, contributions and dues paid by households to NPISHs, like trade unions,

- professional societies, consumers' associations, churches and social, cultural, recreational and sports clubs;
- f) voluntary transfers in cash or in kind by households to charities, relief and aid organisations.
- 3.78. Final consumption expenditure of NPISHs includes two separate categories:
  - a) The value of the goods and services produced by NPISHs other than own-account capital formation and other than expenditure made by households and other units;
  - Expenditures by NPISHs on goods or services produced by market producers that are supplied without any transformation to households for their consumption as social transfers in kind.
- 3.79. Final consumption expenditure by government includes two categories of expenditures, similar to those by NPISHs:
  - a) The value of the goods and services produced by general government itself other than own-account capital formation and sales;
  - b) Purchases by general government of goods and services produced by market producers that are supplied to households – without any transformation – as social transfers in kind. This implies that general government just pays for goods and services that the sellers provide to households.
- 3.80. Corporations do not make final consumption expenditures. Their purchases of the same kind of goods or services as used by households for final consumption are either used for intermediate consumption or provided to employees as compensation of employees in kind, i.e. imputed household final consumption expenditure. Even where, for example through advertising, they finance individual consumption, this expenditure is treated as intermediate.

## Actual final consumption (P.4)

3.81. Definition:

Actual final consumption consists of the goods or services that are acquired by resident institutional units for the direct satisfaction of human needs, whether individual or collective.

3.82. Definition:

Goods and services for individual consumption ('individual goods and services') are acquired by a household and used to satisfy the needs and wants of members of that household. In-



dividual goods and services have the following characteristics:

- a) It must be possible to observe and record the acquisition of the good or services by an individual household or member thereof and also the time at which it took place;
- b) the household must have agreed to the provision of the good or service and take whatever action is necessary to make it possible, for example by attending a school or clinic;
- c) the good or service must be such that its acquisition by one household or person, or possibly by a small, restricted group of persons, precludes its acquisition by other households or persons.

### 3.83. Definition:

Services for collective consumption ('collective services') are provided simultaneously to all members of the community or all members of a particular section of the community, such as all households living in a particular region. Collective services have the following characteristics:

- a) they can be delivered simultaneously to every member of the community or to particular sections of the community, such as those in a particular region or locality;
- b) the use of such services is usually passive and does not require the explicit agreement or active participation of all the individuals concerned;
- c) the provision of a collective service to one individual does not reduce the amount available to other in the same community or section of the community. There is no rivalry in acquisition.
- All household final consumption expenditure is individual. By convention, all goods and services provided by NPISHs are treated as individual.
- 3.85. For the goods and services provided by government units, the borderline between individual and collective goods and services is drawn on the basis of the Classification of the Functions of Government (COFOG).

By convention, all government final consumption expenditures under each of the following headings should be treated as expenditures on individual consumption services except for expenditures on general administration, regulation, research, etc. in each category:

- a) 04 Education;
- b) 05 Health:

- c) 06 Social Security and Welfare;
- d) 08.01 Sport and recreation;
- e) 08.02 Culture.

In addition, expenditures under the following sub-headings should also be treated as individual when they are important:

- a) 07.11 (part of) the provision of housing;
- b) 07.31 (part of) the collection of household refuse;
- c) 12.12 (part of) the operation of transport system.

The collective consumption expenditure is the remainder of the government final consumption expenditure. It consists in particular of:

- a) management and regulation of society;
- b) the provision of security and defence;
- c) the maintenance of law and order, legislation and regulation;
- d) the maintenance of public health;
- e) the protection of the environment;
- f) research and development;
- g) infrastructure and economic development.
- 3.86. The relationships between the various concepts employed can be shown in a table (see p. 52).
- 3.87. Final consumption expenditure of NPISHs is by convention all individual. As a consequence, total actual final consumption is equal to the sum of households actual final consumption and actual final consumption of general government.
- 3.88. By convention, there are no social transfers in kind with the Rest of the World (though there are such transfers in monetary terms). As a consequence, total actual final consumption is equal to total final consumption expenditure.

# Time of recording and valuation of final consumption expenditure

- 3.89. As explained in chapter 1., goods and services should in general be recorded when the payables are created, that is, when the purchaser incurs a liability to the seller. This implies that expenditure on a good is to be recorded at the time its ownership changes; expenditure on a service is recorded when the delivery of the service is completed.
- 3.90. Expenditure on a good acquired under a hire purchase or similar credit agreement (and also under a financial lease) should be recorded at the time the good is delivered even if there is no legal change of ownership at this point.



	Sector making expenditure				
	Government	NPISHs	Households	Total acquisitions	
Individual consump- tion	(= Social transfers in kind)	(= Social transfers in kind)	X	Households actual individual final consumption	
Collective consump-	X	0	0	Government'sactual collective final consumption	
Total	Government's final cons. expenditure	NPISHs final cons. expenditure	Households final cons. expenditure	Actual final consumption = Total final cons. expenditure	

- Own-account consumption should be recorded when the output retained for own final consumption is produced.
- 3.92. The final consumption expenditure of households is recorded at purchasers' prices. This is the price the purchaser actually pays for the products at the time of the purchase. A more detailed definition can be found in paragraph 3.06.
- 3.93. Goods and services supplied as compensation of employees in kind are valued at basic prices when produced by the employer and at the purchasers' prices of the employer when bought in by the employer.
- 3.94. Retained goods or services for own consumption are valued at basic prices.
- 3.95. Final consumption expenditures by general government or NPISHs on products produced by themselves are recorded at the time they are produced, which is also the time of delivery of such services by government or NPISHs. For the final consumption expenditure on goods and services supplied via market producers, the time of delivery is the time of recording.
- 3.96. Final consumption expenditures by general government or NPISHs are equal to the sum of their output, plus the expenditure on products supplied to households via market producers (i.e. social transfers in kind) minus the payments by other units minus own-account capital formation.

# Time of recording and valuation of actual final consumption

- 3.97. Goods and services are acquired by institutional units when they become the new owners of the goods or when the delivery of goods or services to them is completed.
- 3.98. Acquisitions (actual final consumption) are valued at the purchasers' prices for the units that incur the expenditures.

Transfers in kind other than social transfers in kind from government and NPISHs are treated as if they were transfers in cash. Accordingly, the values of the goods or services are actually recorded as expenditures by the institutional units or sectors that acquire them.

3.99. The values of the two aggregates of final consumption expenditure and actual final consumption are the same. The goods and services acquired by resident households through social transfers in kind, thus, are valued at the same prices at which they are valued in the expenditure aggregates.

## **GROSS CAPITAL FORMATION (P.5)**

- 3.100. Gross capital formation consists of:
  - a) gross fixed capital formation (P.51);
  - b) changes in inventories (P.52);
  - c) acquisitions less disposals of valuables (P.53).
- 3.101. Gross capital formation means gross of consumption of fixed capital. Net capital formation is arrived at by deducting consumption of fixed capital from gross capital formation.

## Gross fixed capital formation (P.51)

### 3.102. Definition:

Gross fixed capital formation (P.51) consists of resident producers' acquisitions, less disposals, of fixed assets during a given period plus certain additions to the value of non-produced assets realised by the productive activity of producer or institutional units. Fixed assets are tangible or intangible assets produced as outputs from processes of production that are themselves used repeatedly, or continuously, in processes of production for more than one year.

3.103. Gross fixed capital formation consists of both positive and negative values:



- a) positive values:
  - (1) new or existing fixed assets purchased;
  - fixed assets produced and retained for producers' own use (including own account production of fixed assets not yet completed or fully mature);
  - (3) new or existing fixed assets acquired through barter;
  - (4) new or existing fixed assets received as capital transfers in kind;
  - (5) new or existing fixed assets acquired by the user under a financial lease;
  - (6) major improvements to fixed assets and existing historic monuments;
  - (7) natural growth of those natural assets that yield repeat products.
- b) negative values, i.e. disposals of fixed assets recorded as negative acquisitions:
  - (1) existing fixed assets sold;
  - (2) existing fixed assets surrendered in barter;
  - (3) existing fixed assets surrendered as capital transfers in kind.
- 3.104. The disposals components of fixed assets exclude:
  - a) consumption of fixed capital (which includes anticipated normal accidental damage);
  - exceptional losses, such as those due to drought or other natural disasters (recorded as an other change in the volume of assets).
- 3.105. The following types of gross fixed capital formation may be distinguished:
  - a) acquisitions, less disposals, of tangible fixed assets:
    - (1) dwellings;
    - (2) other buildings and structures;
    - (3) machinery and equipment;
    - and cultivated assets, e.g. trees and livestock.
  - b) acquisitions, less disposals, of intangible fixed assets:
    - (1) mineral exploration;
    - (2) computer software;
    - (3) entertainment, literary or artistic originals;
    - (4) other intangible fixed assets.

- major improvements to tangible non-produced assets, in particular those pertaining to land (though the acquisition of non-produced assets is not included);
- d) costs associated with the transfers of ownership of non-produced assets, like land and patented assets (though the acquisition of these assets themselves is not included).
- 3.106. Major improvements to land include:
  - a) reclamation of land from sea by the construction of dikes, sea walls or dams for this purpose;
  - b) clearance of forests, rocks, etc. to enable land to be used in production for the first time:
  - c) draining of marshes or the irrigation of deserts by the construction of dikes, ditches and irrigation channels;
  - d) prevention of flooding or erosion by the sea or rivers by the construction of breakwaters, sea walls or flood barriers.

These activities may lead to the creation of substantial new structures such as sea walls, flood barriers and dams but these are not themselves used directly to produce other goods and services in the way that most structures are. Their construction is undertaken to obtain more or better land, and it is the land, a non-produced asset, that is needed for production. For example, a dam built to produce electricity serves quite a different purpose from a dam built to keep out the sea. Only building the latter type of dam should be classified as an improvement to land.

- 3.107. Gross fixed capital formation includes borderline cases like:
  - a) acquisitions of houseboats, barges, mobile homes and caravans used as residences of households and any associated structures such as garages;
  - structures and equipment used by the military (similar to those utilised by civilian producers) such as airfields, docks, roads and hospitals;
  - c) light weapons and armoured vehicles used by non-military units;
  - d) changes in livestock used in production year after year, such as breeding stock, dairy cattle, sheep reared for wool and draught animals;
  - e) changes in trees that are cultivated year after year, such as fruit trees, vines, rubber trees, palm trees, etc.;



- f) improvements to existing fixed assets that go well beyond the requirements of ordinary maintenance and repairs;
- g) the acquisition of fixed assets by financial leasing.
- 3.108. Gross fixed capital formation excludes:
  - a) transactions included in intermediate consumption, like:
    - (1) purchase of small tools for production purposes (see paragraph 3.70. e);
    - (2) ordinary maintenance and repairs;
    - (3) purchase of military weapons and their supporting systems;
    - (4) the purchase of fixed assets to be used under an operational leasing contract (see also Annex II 'Leasing and hire purchase of durable goods').
  - b) transactions recorded as changes in inventories;
    - (1) animals raised for slaughter, including poultry;
    - (2) trees grown for timber (work-in-progress).
  - machinery and equipment acquired by households for purposes of final consumption (final consumption expenditure);
  - d) holding gains and losses on fixed assets (other changes in assets);
  - e) catastrophic losses on fixed assets (other changes in assets), e.g. destruction of cultivated assets and livestock by outbreaks of disease (and not normally covered by insurance) or damage due to abnormal flooding, wind damage or forest fires (see chapter 6.).
- 3.109. Gross fixed capital formation in the form of improvements to existing fixed assets is to be classified with acquisitions of new fixed assets of the same kind.
- 3.110. Intangible fixed assets typically consist of new information, specialised knowledge, etc. and comprise:
  - a) mineral exploration comprising costs of actual test drilling, aerial or other surveys, transportation costs, etc.;
  - b) computer software and large data bases to be used in production for more than one year;
  - c) literary and artistic originals of manuscripts, renderings, models, films, sound recordings, etc.

- 3.111. For both fixed assets and non-produced non-financial assets, the costs of ownership transfer incurred by their new owner consist of:
  - a) charges incurred in taking delivery of the asset (new or existing asset) at the required location and time, such as transport charges, installation charges, erection charges, etc.;
  - b) professional charges or commissions incurred, such as fees paid to surveyors, engineers, lawyers, valuers, etc., and commissions paid to estate agents, auctioneers, etc.;
  - c) taxes payable by the new owner on the transfer of ownership of the asset.

All these costs are to be recorded as gross fixed capital formation by the new owner. Note that the taxes are to be treated as taxes on the services of intermediaries and not as taxes on the asset bought.

## Time of recording and valuation of gross fixed capital formation

3.112. Gross fixed capital formation is recorded when the ownership of the fixed assets is transferred to the institutional unit that intends to use them in production.

Modification to this general rule is needed in case of:

- a) financial leasing (a change of ownership is then imputed);
- b) own-account fixed capital formation.

Assets acquired under a financial lease are recorded as if the user becomes the owner when he takes possession of the goods. Own account capital formation is recorded when produced.

- 3.113. Gross fixed capital formation is valued at purchasers' prices including installation charges and other costs of ownership transfer. When produced on own-account it is valued at the basic prices of similar fixed assets (which implies a mark-up for net operating surplus or mixed income) or at the costs of production if such prices are not available.
- 3.114. Acquisitions of intangible fixed assets are valued in different ways:
  - a) for mineral exploration: by the costs of actual test drillings and borings, and the costs incurred to make it possible to carry out tests, such as aerial or other surveys;
  - b) for computer software: by purchasers' prices when purchased on the market, or at its estimated basic price (or at its costs of



- production if not feasible) when developed in-house;
- c) for entertainment, literary or artistic originals: valued at the price paid by the purchaser when it is sold, or if not sold, at the basic price paid for similar originals, its production costs or the discounted value of the future receipts expected from using it in production.
- 3.115. Disposals of existing fixed assets by sale are valued at the (basic) prices after deducting any costs of ownership transfer incurred by the seller.
- Costs of ownership transfer can apply to both produced assets, including fixed assets, and non-produced assets, such as land.

These costs are integrated in the purchasers' prices in the case of produced assets. They must be separated from the purchases and sales themselves in the case of land and other non-produced assets and recorded under a separate heading in the classification of gross fixed capital formation.

## Changes in inventories (P.52)

3.117. Definition:

Changes in inventories are measured by the value of the entries into inventories less the value of withdrawals and the value of any recurrent losses of goods held in inventories.

- 3.118. Due to physical deterioration, or accidental damage or pilfering, recurrent losses may occur to all kinds of goods in inventories, such as:
  - a) losses of materials and supplies;
  - b) losses in the case of work-in-progress;
  - c) losses of finished goods;
  - d) losses of goods for resale (e.g. shoplifting).
- 3.119. Inventories consists of the following categories:
  - a) materials and supplies:

materials and supplies consist of all commodities held in stock with the intention of using them as intermediate inputs in production; this includes commodities held in stock by the government. Items such as gold, diamonds, etc. are included when intended for industrial use or other production:

b) work-in-progress:

work-in-progress consists of output produced that is not yet finished. It is recorded in the inventories of its producer. It can take a variety of different forms, e.g.:

- (1) growing crops;
- (2) maturing trees and livestock;
- uncompleted structures (except those produced under a contract of sale agreed in advance or on own-account which are treated as fixed capital formation);
- (4) uncompleted other fixed assets, e.g. ships and oil rigs;
- (5) partially completed research for a legal or consultant's dossier;
- (6) partially completed film productions;
- (7) partially completed computer programs.

Work-in-progress must be recorded for any production process that is not finished at the end of the given period. In particular, this is significant in quarterly accounts, e.g. agricultural crops not being completed within a quarter of a year.

Reductions in work-in-progress take place when the production process is completed. At that point, all work-in-progress is transformed into a finished product.

c) finished goods:

finished goods as part of inventories consist of outputs that their producer does not intend to process further before supplying them (also when supplied for intermediate input into other processes of production);

d) goods for resale:

goods for resale are goods acquired for the purpose of reselling them in their present state.

## Time of recording and valuation of changes in inventories

3.120. The time of recording and valuation of changes in inventories should be consistent with that of other transactions in products. This applies in particular to intermediate consumption (e.g. for materials and supplies), output (e.g. workin-progress and output from storage of agricultural products) and gross fixed capital formation (e.g. work-in-progress). Consistency is also required for processing-to-order flows. For example, if goods are processed abroad and it involves a substantial physical change in the goods, the goods are to be included in exports (and, later, in imports) (see paragraph 3.135.). This export is reflected by a concomitant reduction in the inventories and the related import is later also recorded as an increase in the



- inventories (when not immediately used or sold).
- 3.121. Changes in inventories should be valued at the time of entering the inventories (for goods entering) or at the time of withdrawal (for goods withdrawn).
- 3.122. The prices used should be consistent with those of other flows, implying more specifically that:
  - a) output of finished goods transferred into the producer's inventories are valued as if they were sold at that time, at current basic prices;
  - additions to work-in-progress is valued in proportion to the estimated current basic price of the finished product;
  - reductions in work-in-progress as withdrawn from inventories when production is finished are valued at current basic prices of the unfinished product;
  - d) goods transferred out of inventories for sale are valued at basic prices;
  - e) goods for resale entering the inventories of wholesalers and retailers, etc. are valued at their actual or estimated purchasers' prices of the trader;
  - f) goods for resale withdrawn from inventories are valued at the purchasers' prices at which they can be replaced at the time they are withdrawn (not when acquired).
- 3.123. Losses as a result of physical deterioration, insurable accidental damage or pilfering are recorded and valued as follows:
  - a) for materials and supplies: as materials and supplies actually withdrawn to be used up in production (intermediate consumption);
  - for work-in-progress: as deduction from the additions accruing to production carried out in the same period;
  - for finished goods and goods for resale: treated as withdrawals at the current price of undeteriorated goods.
- 3.124. The previous paragraphs have described the conceptually correct valuation of each individual transaction in and out of inventories necessary to be consistent with the valuation of output, intermediate consumption and final uses. In practice, this will often prove too difficult to apply and approximation methods should be used:

- a) when changes in the volume of inventories are fairly regular, a practical method which comes close to the theoretical valuation principle is to multiply the volume change of the inventories by the average prices for the period (purchasers' prices for inventories held by users or by wholesalers or retailers, basic prices for inventories held by their producers);
- b) in case the prices of the goods involved remain fairly constant, even large fluctuations in the volume of inventories may not invalidate a simple approximation, i.e. the multiplication of the volume change with the average price;
- c) if both the volume and the prices of the inventories change substantially within the accounting period, more sophisticated approximation methods are required. For example, quarterly valuation of the changes in inventories or the use of a priori information about the distribution of the fluctuation within the accounting period (fluctuations may be largest at the end of the calendar year, during harvest time, etc.);
- d) if only information about the values at the beginning and end of the period are available (e.g. in case of whole sale or retail trade in which inventories often exist of many different products), the changes in volume between the beginning and end of the period should also be estimated. This can be done by estimating (assuming) turn-over rates by type of product.

Note that seasonal changes in prices may partly reflect a difference in quality, e.g. clearance prices or off-season prices for fruit and vegetables. These changes in quality should be treated as changes in the volume.

## Acquisitions less disposals of valuables (P.53)

### 3.125. Definition:

Valuables are non-financial goods that are not used primarily for production or consumption, do not deteriorate (physically) over time under normal conditions and that are acquired and held primarily as stores of value.

- 3.126. Valuables encompass the following types of goods:
  - a) precious stones and metals, such as diamonds, non-monetary gold, platinum, silver, etc.;
  - b) antiques and other art objects, such as paintings, sculptures, etc.;



 other valuables, such as jewellery fashioned out of precious stones and metals and collectors items.

These types of goods are to be recorded as acquisition or disposal of valuables in case of:

- a) the acquisition or disposal of non-monetary gold, silver, etc. by (central) banks and other financial intermediaries;
- b) the acquisition or disposal of these goods by enterprises whose principal or secondary activity does not involve the production or trade in such types of goods; as a consequence, this acquisition or disposal is not included in the intermediate consumption or fixed capital formation of these enterprises;
- the acquisition or disposal of such goods by households; as a consequence, such acquisitions are not included in final consumption expenditure by households.

In the ESA, by convention also the following cases are recorded as acquisition or disposal of valuables:

- a) the acquisition or disposal of these goods by jewellers and art dealers (following the general definition of valuables the acquisition of these goods by jewellers and art dealers should be recorded as changes in inventories);
- b) the acquisition or disposal of these goods by museums (following the general definition of valuables the acquisition by a museum of these goods should be recorded as fixed capital formation).

This convention avoids frequent reclassification between the three main types of capital formation, i.e. between acquisition less disposal of valuables, fixed capital formation and changes in inventories, e.g. in the case of transactions of such goods between households and art dealers.

3.127. The production of valuables is valued at basic prices (see paragraph 3.67. on production of originals). All other acquisitions of valuables are valued at the purchasers' prices paid for them, including any agents' fees or commissions. They also include trade margins when bought from dealers. Disposals of valuables are valued at the prices received by sellers, after deducting any fees or commissions paid to agents or other intermediaries. Disregarding the production of valuables, in aggregate, acquisitions less disposals between resident sectors cancel out, leaving only agents or dealers margins.

## IMPORTS AND EXPORTS OF GOODS AND SERVICES (P.6 and P.7)

### 3.128. Definition:

Exports of goods and services consist of transactions in goods and services (sales, barter, gifts or grants) from residents to non-residents.

#### 3.129. Definition:

Imports of goods and services consist of transactions in goods and services (purchases, barter, gifts or grants) from non-residents to residents.

- 3.130. Imports and exports of goods and services do not include:
  - a) establishment trade, i.e.:
    - deliveries to non-residents by non-resident affiliates of resident enterprises, e.g. sales abroad by foreign affiliates of a multinational owned/controlled by residents;
    - (2) deliveries to residents by resident affiliates of non-resident enterprises, e.g. sales by domestic affiliates of a foreign multinational.
  - b) primary income flows to or from the rest of the world, such as compensation of employees, interest and revenues from direct investment. The revenues from direct investment may include an indisguishable part for the provision of various services, e.g. training of employees, management services and the use of patents and trade marks;
  - c) the sale or purchase of financial assets or non-produced assets, like land and patents.
- 3.131. Imports and exports of goods and services should be distinguished into:
  - a) Intra-EU deliveries;
  - b) Imports and exports outside the EU.

For convenience they will both be referred to as imports and exports here.

### Imports and exports of goods (P.61 and P.71)

- 3.132. Imports and exports of goods occur when there are changes of ownership of goods between residents and non-residents (whether or not there are also corresponding physical movements of goods across frontiers).
- 3.133. However, in four instances the change of ownership principle is modified in recording imports and exports of goods:



- a) financial leasing: a change of ownership from lessor to lessee is to be imputed for goods under a financial lease; it is to be recorded when the lessee takes possession of the good (see Annex II 'Leasing and hire purchase of durable goods');
- b) deliveries between affiliated enterprises (branch or subsidiary, or foreign affiliate): a change of ownership is to be imputed whenever goods are delivered between affiliated enterprises;
- c) goods for significant processing to order or repair are recorded both in imports and exports although no change of ownership occurs;
- d) merchanting: no import or export is recorded when merchants or commodity dealers buy from non-residents and then sell again to non-residents within the same accounting period. A similar treatment is to be employed for merchanting by non-residents.
- 3.134. In the following cases exports of goods occur without the goods ever crossing the country's frontier.
  - a) Goods produced by resident units operating in international waters are sold directly to non-residents in foreign countries (oil, natural gas, fishery products, maritime salvage, etc.);
  - b) transportation equipment or other movable equipment not tied to a fixed location need not cross the frontier of the exporting country as a result of being sold by a resident to a non-resident;
  - goods are lost or destroyed after changing ownership before they have crossed the frontier of the exporting country.

Analogous cases pertain to imports of goods.

- 3.135. Imports and exports of goods include transactions between residents and non-residents in:
  - a) non-monetary gold, i.e. gold not used for the purposes of monetary policy;
  - silver bullion, diamonds and other precious metals and stones;
  - paper money and coins not in circulation and unissued securities (valued as goods, not at face value);
  - d) electricity, gas and water;
  - e) livestock driven across frontiers;
  - f) parcel post;
  - g) government exports including goods financed by grants and loans;

- b) goods transferred to or from the ownership of a buffer stock organisation;
- i) goods delivered by a resident enterprise to its non-resident affiliates;
- j) goods received by a resident enterprise from its non-resident affiliates;
- k) smuggled goods;
- other unrecorded shipments, such as gifts and those of less than a stated minimum value;
- m) goods processed to order abroad when a substantial physical change in the goods is involved. Similar goods processed on the domestic territory on behalf of non-residents;
- n) investment goods repaired abroad when a substantial amount of reconstruction work or manufacturing is involved. Similar goods repaired on the domestic territory on behalf of non-residents.
- 3.136. Imports and exports of goods exclude the following goods which nevertheless may cross the national frontier:
  - a) goods in transit through a country;
  - b) goods shipped to or from a country's own embassies, military bases or other enclaves inside the national frontiers of another country;
  - c) transportation equipment and other movable kinds of equipment which leave a country temporarily, without any change of ownership (e.g. construction equipment for installation or construction purposes abroad);
  - d) equipment and other goods which are sent abroad for minor processing, maintenance, servicing or repair;
  - e) other goods which leave a country temporarily, being generally returned within a year in their original state and without change of ownership (e.g. goods sent abroad for exhibition and entertainment purposes, goods under an operating lease, including leases for several years, goods returned because expected sales did not materialise);
  - f) goods on consignment lost or destroyed after crossing a frontier before change of ownership occurs.
- 3.137. In principle, imports and exports of goods should be recorded when the ownership of the goods is transferred. In practice, a change of ownership is considered to occur at the time the parties to the transaction record it in their books or accounts. This may not coincide with



the various stages of the contractual process, like:

- a) the time of commitment (contract date);
- b) the time of provision of goods and services and acquisition of a claim for payment (transfer date);
- c) the time of settlement of that claim (payment date).
- 3.138. Imports and exports of goods are to be valued free on board at the border of the exporting country (f.o.b.). This value consists of:
  - a) the value of the goods at basic prices;
  - b) plus the related transport and distributive services up to that point of the border, including the cost of loading on to a carrier for onward transportation (where appropriate) (see Table 3.4, second column in the second part of the table);
  - c) plus any taxes less subsidies on the goods exported; for intra-EU deliveries this includes VAT and other taxes on the goods paid in the exporting country.

In the supply and use and symmetric inputoutput tables, imports of goods for individual product groups have to be valued differently: at the cost-insurance-freight (c.i.f.) price at the border of the importing country.

### Definition:

The c.i.f. price is the price of a good delivered at the frontier of the importing country, or the price of a service delivered to a resident, before the payment of any import duties or other taxes on imports or trade and transport margins within the country<sup>2</sup>.

- 3.139. Proxies or substitute measures for the f.o.b. value may be necessary under certain circumstances, such as:
  - a) barter of goods should be valued at the basic prices that would have been received if the goods had been sold for cash;
  - b) transactions between affiliated enterprises: as a rule, actual transfer values should be used. However, if they largely differ from market prices, they should be replaced by an estimated market price equivalent, or at least be separately identified for analytical purposes;
  - goods transferred under a financial lease: the goods should be valued on the basis of the purchasers' price paid by the lessor (not

- by the cumulative value of the rental payments);
- d) imports of goods to be estimated on the basis of customs data (for extra-EU trade) or INTRASTAT-information (for intra-EU trade). Both data sources do not apply f.o.b. valuation, they use respectively the c.i.f. value at the EU border and c.i.f. values at the national border. As f.o.b.-values are only used at the most aggregate level and c.i.f.-values are used at the product group level, these modifications have only to be applied at the most aggregate level, i.e. the c.i.f./f.o.b. adjustment;
- e) imports and exports of goods to be estimated on the basis of survey information or various types of ad hoc information. In such instances, usually only the total value of sales split out by product can be obtained. As a consequence, the estimate will be based on purchasers' prices and not on f.o.b. values.

## Imports and exports of services (P.62 and P.72)

3.140. Definition:

Exports of services consist of all services rendered by residents to non-residents.

3.141. Definition:

Imports of services consist of all services rendered by non-residents to residents.

- 3.142. Exports of services include the following borderline cases:
  - a) transportation of exported goods after they have left the frontier of the exporting country when provided by a resident carrier (cases 2 and 3 in Table 3.4);
  - b) transportation of imported goods by a resident carrier:
    - (1) up to the frontier of the exporting country when goods are valued f.o.b. to offset the transportation value included in the f.o.b.-value (case 3 in Table 3.5);
    - (2) up to the frontier of the importing country when goods are valued c.i.f. to offset the transportation value included in the c.i.f.-value (cases 3 and 2 c.i.f. in Table 3.5).
  - transportation of goods by residents on behalf of non-residents which does not involve imports or exports of the goods (e.g. the transport of goods that do not leave the

<sup>2</sup> For the trade and transport margins included, see also Table 3.5, third column in second part of the table.



- country as exports or the transport of goods outside the domestic territory);
- d) international or national passenger transportation on behalf of non-residents by resident carriers;
- e) minor processing and repair activities on behalf of non-residents;
- f) construction services when a construction site office abroad is not treated as a quasicorporation. This applies to construction projects lasting less than a year and whose output is not gross fixed capital formation {see paragraph 2.09. and in particular the corresponding note (4)};
- g) installation of equipment abroad when a project is of limited duration by its nature;
- h) financial services by the amount of the explicit commissions and fees;
- i) insurance services by the amount of the services charge;
- j) expenditure by non-resident tourists and business travellers (by convention classified as services; however, for the purposes of the supply and use and symmetric input-output tables, a global breakdown by products may be necessary);
- k) expenditure by non-residents on health and education services provided by residents; this includes the provision of these services on the domestic territory as well as abroad;
- l) services of owner-occupied holidays homes of non-residents (see paragraph 3.64.);
- m) royalties and license fees, receipts of which are associated with the authorised use of intangible non-produced non-financial assets and property rights, such as patents, copyrights, trademarks, industrial processes, franchises, etc., and with the use through licensing agreements of produced originals or prototypes, such as manuscripts, paintings, etc.
- 3.143. For imports of services most borderline cases are the mirror-image of those for exports of services; therefore, only a limited number of specific clarifications are necessary for imports of services.
- 3.144. Imports of transport services include the following borderline cases:
  - a) transportation of exported goods up to the frontier of the exporting country when provided by a non-resident carrier to offset the transportation value included in the f.o.b.value of the exported goods (case 4 in Table 3.4);

- b) transportation of imported goods by a nonresident carrier:
  - (1) from the frontier of the exporting country as a separate transportation service when imported goods are valued f.o.b. (cases 4 and 5 f.o.b. in Table 3.5);
  - (2) from the frontier of the importing country as a separate transportation service when imported goods are valued c.i.f. (in this case the value of the transportation service between the frontiers of the exporting and the importing country is already included in the c.i.f.-value of the good; case 4 in Table 3.5).
- c) transportation of goods by non-residents on behalf of residents which does not involve imports or exports of goods (e.g. transport of goods in transit or transport outside the domestic territory);
- d) international or national passenger transportation on behalf of residents by non-resident carriers.

Imports of transport services do not include transportation of exported goods after they have left the frontier of the exporting country when provided by a non-resident carrier (cases 5 and 6 in Table 3.4). Exports of goods are valued f.o.b. and all such transport services are thus to be regarded as transactions between non-residents, i.e. between a non-resident carrier and a non-resident importer. This applies even when these transportation services are paid under export-c.i.f.-contracts by the exporter.

- 3.145. Imports in respect of direct purchases abroad by residents cover all purchases of goods and services made by residents while travelling abroad for business or personal purposes. Two categories must be distinguished because they require different treatment:
  - a) expenditures by business travellers are intermediate consumption;
  - b) expenditures by other travellers on personal trips are household final consumption expenditure.
- 3.146. Imports and exports of services are recorded at the time at which they are rendered, which mostly coincides with the time at which the services are produced. Imports of services are to be valued at purchasers' price and exports of services at basic prices.



## Table 3.4 The treatment of transportation of exported goods

Explanation of how to read this table: the first part of this table indicates that there are six different possibilities of transportation of exported goods, depending on whether the carrier is resident or not and depending on where the transport takes place: from a place on the domestic territory to the national border, from the national border to the border of the importing country or from the border of the importing country to a place within the importing country. In the second part of this table, for each of these six possibilities, it is indicated whether they are to be recorded as exports of goods, exports of services, imports of goods or imports of services.

Domestic territory	Territory in between	Territory of importing country
1. resident carrier ⇒	2. resident carrier ⇒	3. resident carrier ⇒
4. non-resident carrier ⇒	<ol><li>5. non-resident carrier ⇒</li></ol>	6. non-resident carrier ⇒

	Exports of goods (f.o.b.)	Exports of services	Imports of goods (c.i.f./f.o.b.)	Imports of services
1.	Х	-	-	-
2.	-	X	-	-
3.	-	×	-	-
4.	X	-	-	X
5.	-	-	-	-
6.	-	-	-	_

## Table 3.5 The treatment of transportation of imported goods

Explanation of how to read this table: The first part of this table indicates that there are six different possibilities of transportation of imported goods, depending on whether the carrier is resident or not and depending on where the transport takes place: from a place in the exporting country to the border of this exporting country, from the border of the exporting country to the border of the importing country and from the border of the importing country to a place within the importing country. In the second part of this table, for each of these six possibilities, it is indicated whether they are to be recorded as imports of goods, imports of services, exports of goods or exports of services. In some instances (cases 2 and 5), this recording depends on the valuation principle applied for imported goods.

Note that the transition from valuation of imported goods at c.i.f. to f.o.b. consists of: a)c.i.f./f.o.b. adjustment, i.e. from 2 c.i.f. to 2 f.o.b. (reduces total imports and exports); b)c.i.f./f.o.b. reclassification, i.e. from 5 c.i.f. to 5 f.o.b. (leaves total imports and exports unchanged).

Domestic territory	Territory in between	Territory of exporting country
1. resident carrier ←	2. resident carrier ←	<ol><li>resident carrier ←</li></ol>
<ol><li>non-resident carrier ←</li></ol>	5. non-resident carrier ←	6. non-resident carrier ←

	Valuation of imported goods	Imports of goods	Imports of services	Exports of goods (f.o.b.)	Exports of services
1.	c.i.f./f.o.b.	-	-	-	-
2.	f.o.b.	-	-	-	-
	c.i.f.	X	-	-	X
3.	c.i.f./f.o.b.	X	-	-	X
4.	c.i.f./f.o.b.	-	X	-	-
5.	f.o.b.	-	x	_	_
	c.i.f.	X	-	-	-
6.	c.i.f./f.o.b.	X	-	-	-



## TRANSACTIONS IN EXISTING GOODS

### 3.147. Definition:

Existing goods are goods that already have had a user (other than inventories).

## 3.148. Existing goods include:

- a) existing buildings and other fixed capital goods which are sold by producer units to other units:
  - (1) to be re-used as such;
  - (2) to be demolished or broken up; the resulting products usually become raw materials (e.g. scrap iron) used for the production of new goods (e.g. steel).
- b) valuables which are sold from one unit to another;
- existing consumer durables which are sold by households or military authorities to other units:
  - (1) to be re-used as such;
  - (2) to be broken up and converted into demolition materials.
- d) existing non-durable goods (e.g. waste paper, rags, old clothes, old bottles, etc.) which are sold by any unit, either to be used again or to become raw material for the manufacture of new goods (recovered goods).
- 3.149. The transfer of existing goods is recorded as a negative expenditure (acquisition) for the seller and a positive expenditure (acquisition) for the purchaser.
- 3.150. This has the following consequences:
  - a) when the sale of an existing fixed asset or valuable takes place between two resident producers, the positive and negative values recorded for gross fixed capital formation cancel out for the economy as a whole except for the costs of ownership transfer;
  - b) when an existing immovable fixed asset (e.g. a building) is sold to a non-resident, by convention the latter is treated as purchasing a financial asset, i.e. the equity of a notional resident unit. This notional resident unit is then deemed to purchase the fixed asset. As a consequence; the sale and purchase of the fixed asset takes place between residents;

- c) when an existing movable fixed asset, such as a ship or aircraft, is exported, no positive gross fixed capital formation is recorded elsewhere in the economy to offset the seller's negative gross fixed capital formation;
- d) some durable goods, such as vehicles, may be classified as fixed assets or as consumer durables depending upon the owner and the purpose for which they are used. If, therefore, the ownership of such a good is transferred from an enterprise to a household to be used for final consumption, negative gross fixed capital formation is recorded for the enterprise and positive consumption expenditure for the household. In the less common case where ownership of such a good is transferred from a household to an enterprise, for the household negative final consumption expenditure should be recorded and for the enterprise positive gross fixed capital formation;
- e) transactions in existing valuables are to be recorded as the acquisition of a valuable (positive gross capital formation) by the purchaser and as the disposal of a valuable (negative gross capital formation) by the seller. In case of a transaction with the Rest of the World, the import or export of a good is to be recorded (see paragraph 3.135.). The sale of a valuable by a household is not to be recorded as negative final consumption expenditure;
- f) when existing military durables are sold abroad by the government, this should be recorded as an export of goods and as negative intermediate (and final) consumption by the government.
- 3.151. For the selling costs incurred by the former owner (costs of ownership transfer), a holding loss has to be recorded. A similar entry is to be made for the part of his original acquisition costs that has not been written down as consumption of fixed capital.
- 3.152. Transactions in existing goods should be recorded at the time ownership changes. The valuation principles to be applied are those appropriate to the type(s) of transactions in products involved.

## **CHAPTER 4**

## **DISTRIBUTIVE TRANSACTIONS**

### 4.01. Definition:

Distributive transactions consist of transactions by means of which the value added generated by production is distributed to labour, capital and government, and of transactions involving the redistribution of income and wealth.

The system draws a distinction between current and capital transfers, with the latter deemed to redistribute saving or wealth rather than income.

# COMPENSATION OF EMPLOYEES (D.1)

### 4.02. Definition:

Compensation of employees (D.1) is defined as the total remuneration, in cash or in kind, payable by an employer to an employee in return for work done by the latter during the accounting period.

Compensation of employees is broken down into:

- a) wages and salaries (D.11): wages and salaries in cash; wages and salaries in kind;
- b) employers' social contributions (D.12): employers' actual social contributions (D.121); employers' imputed social contributions (D.122).

## Wages and salaries (D.11)

### Wages and salaries in cash

4.03. Wages and salaries in cash include the values of any social contributions, income taxes, etc. payable by the employee even if they are actually withheld by the employer and paid directly to social insurance schemes, tax authorities, etc. on behalf of the employee:

wages and salaries in cash include the following kinds of remuneration:

- a) basic wages and salaries payable at regular intervals;
- enhanced rates of pay for overtime, night work, weekend work, disagreeable or hazardous circumstances;
- c) cost of living allowances, local allowances and expatriation allowances;

- d) bonuses based on productivity or profits, Christmas and New Year bonuses excluding employee social benefits (see paragraph 4.07. c), '13th – 14th month' pay (annual supplementary pay);
- e) allowances for transport to and from work, excluding allowances or reimbursement of employees for travelling, separation, removal and entertainment expenses incurred in the course of their duties (see paragraph 4.07. a);
- f) holiday pay for official holidays or annual holidays;
- g) commissions, tips, attendance and directors' fees paid to employees;
- h) ad-hoc bonuses or other exceptional payments linked to the overall performance of the enterprise made under incentive schemes;
- i) payments made by employers to their employees under saving schemes;
- exceptional payments to employees who leave the enterprise, if those payments are not linked to a collective agreement;
- k) housing allowances paid in cash by employers to their employees.

### Wages and salaries in kind

### 4.04. Definition:

Wages and salaries in kind consist of goods and services, or other benefits, provided free or at reduced prices by employers, that can be used by employees in their own time and at their own discretion, for the satisfaction of their own needs or wants or those of other members of their households. Those goods and services, or other benefits, are not necessary for the employers' production process. For the employees, those wages and salaries in kind represent an additional income: they would have paid a market price if they had bought these goods or services by themselves.

### 4.05. The most common are:

 a) meals and drinks, including those consumed when travelling on business (because they would have been taken anyway) but excluding special meals or drinks necessitated by exceptional working condi-



- tions. Price reductions obtained in free or subsidised canteens, or obtained by luncheon vouchers, are to be included in wages and salaries in kind;
- b) own account and purchased housing or accommodation services of a type that can be used by all members of the household to which the employee belongs;
- c) uniforms or other forms of special clothing which employees choose to wear frequently outside of the workplace as well as at work;
- d) the services of vehicles or other durables provided for the personal use of employees;
- e) goods and services produced as outputs from the employer's own processes of production, such as free travel for the employees of railways or airlines, free coal for miners, or free food for employees in agriculture;
- f) the provision of sports, recreation or holiday facilities for employees and their families;
- g) transportation to and from work, except when organised in the employer's time, car parking;
- h) crèches for the children of employees;
- i) payments made by employers to works councils or similar bodies;
- j) bonus shares distributed to employees;
- k) remuneration in kind may also include the value of the interest foregone by employers when they provide loans to employees at reduced, or even zero, rates of interest. This value may be estimated as the amount the employee would have to pay if average mortgage (when buying houses) or consumer loan (when buying other goods and services) interest rates were charged, less the amount of interest actually paid. An imputed payment from the employee is rerouted in the primary distribution of income account back to the employer.
- 4.06. Goods and services, or other advantages, should be valued at basic prices when produced by the employer, and at purchasers' prices when purchased by the employer (that is, the price actually paid by the employer).

When provided free, the whole value of the wages and salaries in kind is calculated according to the basic prices (or purchasers' prices of the employer when purchased by him) of the goods and services, or other advantages, in question.

When provided at reduced prices, the value is given by the difference between the calculation explained above and the amount paid by the employee.

- 4.07. Wages and salaries do not include:
  - a) expenditure by employers which is to their own benefit as well as to that of their employees, because it is necessary for the employers' production process:
    - allowances or reimbursement of employees for travelling, separation, removal and entertainment expenses incurred in the course of their duties;
    - (2) expenditure on providing amenities at the place of work, medical examinations required because of the nature of the work, supplying working clothes which are worn exclusively, or mainly, at work;
    - (3) accommodation services at the place of work of a kind which cannot be used by the households to which the employees belong – cabins, dormitories, huts and so on;
    - (4) special meals or drinks necessitated by exceptional working conditions;
    - (5) allowances paid to employees for the purchase of tools, equipment or special clothing needed exclusively, or primarily, for their work, or that part of their wages or salaries which, under their contracts of employment, employees are required to devote to such purchases.

Such expenditure on goods and services that employers are obliged to provide to their employees in order for them to be able to carry out their work is treated as intermediate consumption by employers.

- b) The amounts of wages and salaries which employers continue to pay to their employees temporarily in the case of sickness, maternity, industrial injury, disability, redundancy, etc. These payments are treated as unfunded employee social benefits (D.623), with the same amounts being shown under employers' imputed social contributions (D.122);
- c) other unfunded employee social benefits, in the form of children's, spouses', family, education or other allowances in respect of dependants, and in the form of the provision of free medical services (other than



- those necessitated by the nature of the work) to employees or their families.
- d) any taxes payable by the employer on the wage and salary bill for example, a payroll tax. Such taxes are treated as other taxes on production.

## Employers' social contributions (D.12)

4.08. An amount equal to the value of the social contributions incurred by employers in order to secure for their employees the entitlement to social benefits needs to be recorded under compensation of employees. Employers' social contributions may be either actual or imputed.

## Employers' actual social contributions (D.121)

### 4.09. Definition:

Employers' actual social contributions (D.121) consist of the payments made by employers for the benefit of their employees to insurers (social security funds and private funded schemes). These payments cover statutory, conventional, contractual and voluntary contributions in respect of insurance against social risks or needs (see paragraph 4.92.a).

Although paid directly by employers to the insurers, these employers' contributions are treated as a component of the compensation of employees, who are then deemed to pay them over to the insurers.

## Employers' imputed social contributions (D.122)

## 4.10. Definition:

Employers' imputed social contributions (D.122) represent the counterpart to unfunded social benefits (less eventual employees' social contributions) paid directly by employers to their employees or former employees and other eligible persons<sup>1</sup> without involving an insurance enterprise or autonomous pension fund, and without creating a special fund or segregated reserve for the purpose.

The fact that certain social benefits are paid directly by employers, and not through the medium of social security funds or other insurers, in no way detracts from their character as social welfare benefits. However, since the costs of these benefits form part of employers' labour costs, they should also be included in the compensation of employees.

In the accounts of the sectors, the costs of direct 4.11. social benefits appear first among uses in the generation of income account, as a component of the compensation of employees, and a second time among uses in the secondary distribution of income account, as social benefits. In order to balance the latter account, it is assumed that the households of employees pay back to the employers' sectors the employers' imputed social contributions which finance together with eventual employees' social contributions the direct social welfare benefits provided to them by these same employers. This notional circuit is similar to that for employers' actual social contributions, which pass through the accounts of households and are then deemed to be paid by them to the insurers.

For the valuation of employers' imputed social contributions, the amount of which does not necessarily coincide with that of direct social benefits, reference should be made to heading D.612.

- 4.12. Time of recording of compensation of employees:
  - a) wages and salaries (D.11) are recorded in the period during which the work is done.
     However, ad-hoc bonuses or other exceptional payments, 13th month, etc. are recorded when they are due to be paid;
  - b) employers' actual social contributions (D.121) are recorded in the period during which the work is done;
  - c) employers' imputed social contributions (D.122):
    - representing the counterpart of compulsory direct social benefits are recorded in the period during which the work is done;
    - (2) representing the counterpart of voluntary direct social benefits are recorded at the time these benefits are provided.
- 4.13. The compensation of employees may consist of:
  - a) the compensation of resident employees by resident employers;
  - b) the compensation of resident employees by non-resident employers;
  - c) the compensation of non-resident employees by resident employers.

<sup>1</sup> Employers' imputed social contributions include an amount equal in value to the wages and salaries which employers temporarily continue to pay in the event of the sickness, maternity, industrial injury, disability, redundancy, etc. of their employees, if that amount can be separated.



These different items are recorded in the ESA as follows:

- the compensation of resident and non-resident employees by resident employers groups together items a) and c) and appears among uses in the generation of income account of the sectors and industries to which the employers belong;
- (2) the compensation of resident employees by resident and non-resident employers groups together items a) and b) and appears among resources in the allocation of primary income account of households;
- (3) item b), compensation of resident employees by non-resident employers appears among uses in the external account of primary incomes and current transfers;
- (4) item c), compensation of non-resident employees by resident employers appears among resources in the external account of primary incomes and current transfers.

# TAXES ON PRODUCTION AND IMPORTS (D.2)

#### 4.14. Definition:

Taxes on production and imports (D.2) consist of compulsory, unrequited payments, in cash or in kind which are levied by general government, or by the Institutions of the European Union, in respect of the production and importation of goods and services, the employment of labour, the ownership or use of land, buildings or other assets used in production. These taxes are payable whether or not profits are made.

- 4.15. Taxes on production and imports are divided into:
  - a) taxes on products (D.21):
    - (1) value added type taxes (VAT) (D.211);
    - (2) taxes and duties on imports excluding VAT (D.212):
      - import duties (D.2121);
      - taxes on imports excluding VAT and import duties (D.2122);
    - (3) taxes on products, except VAT and import taxes (D.214).
  - b) other taxes on production (D.29).

## Taxes on products (D.21)

#### 4.16 Definition:

Taxes on products (D.21) are taxes that are payable per unit of some good or service produced or transacted. The tax may be a specific amount of money per unit of quantity of a good or service, or it may be calculated ad valorem as a specified percentage of the price per unit or value of the goods and services produced or transacted. As a general principle, taxes in fact assessed on a product, irrespective of which institutional unit pays the tax, are to be included in taxes on products, unless specifically included in another heading.

## Value added type taxes (VAT) (D.211)

#### 4.17. Definition:

A value added type tax (VAT) is a tax on goods or services collected in stages by enterprises and which is ultimately charged in full to the final purchasers

This heading value added type taxes (D.211) comprises the value added tax which is collected by the General government and which is applied to national and imported products, as well as, where appropriate, other deductible taxes applied under similar rules to those governing VAT, for simplicity henceforth called 'VAT'.

Producers are obliged to pay only the difference between the VAT on their sales and the VAT on their purchases for their own intermediate consumption or gross fixed capital formation.

VAT is recorded net in the sense that:

- a) outputs of goods and services and imports are valued excluding invoiced VAT;
- b) purchases of goods and services are recorded inclusive of non-deductible VAT. VAT is recorded as being borne by purchasers, not sellers, and then only by those purchasers who are not able to deduct it. The greater part of VAT is therefore recorded in the system as being paid on final uses, mainly on household consumption. A part of VAT may, however, be paid by enterprises, mainly by those which are exempted from VAT.



For the total economy, VAT is equal to the difference between total invoiced VAT and total deductible VAT.

## Taxes and duties on imports excluding VAT (D.212)

### 4.18 Definition:

Taxes and duties on imports excluding VAT (D.212) comprise compulsory payments levied by general government or the Institutions of the European Union on imported goods, excluding VAT, in order to admit them to free circulation on the economic territory, and on services provided to resident units by non-resident units.

## These payments include:

- a) import duties (D.2121): these consist of customs duties, or other import charges, payable according to customs tariff schedules on goods of a particular type when they enter for use in the economic territory of the country of utilisation;
- b) taxes on imports, excluding VAT and import duties (D.2122):

this heading includes:

- (1) levies on imported agricultural products;
- (2) monetary compensatory amounts levied on imports;
- (3) excise duties and special taxes on certain imported products, provided such duties and taxes on similar products of domestic origin are paid by the producer branch itself;
- (4) general sales taxes payable on imports of goods and services;
- (5) taxes on specific services provided by non-resident enterprises to resident units within the economic territory;
- (6) profits of public enterprises exercising a monopoly over the imports of some good or service, which are transferred to the State.

Net taxes and duties on imports excluding VAT are calculated by deducting import subsidies (D.311) from taxes and duties on imports excluding VAT (D.212).

## Taxes on products, except VAT and import taxes (D.214)

### 4.19. Definition:

Taxes on products, except VAT and import taxes (D.214) consist of taxes on goods and services that become payable as a result of the production, export, sale, transfer, leasing or delivery of those goods or services, or as a result of their use for own consumption or own capital formation.

### 4.20. This heading includes, in particular:

- a) excise duties and consumption taxes (other than those included in taxes and duties on imports);
- b) stamp taxes on the sale of specific products, such as alcoholic beverages or tobacco, and on legal documents or cheques;
- c) taxes on financial and capital transactions, payable on the purchase or sale of non-financial and financial assets, including foreign exchange. They become payable when the ownership of land or other assets changes, except as a result of capital transfers (mainly inheritances and gifts). They are treated as taxes on the services of intermediaries;
- d) car registration taxes;
- e) taxes on entertainment;
- f) taxes on lotteries, gambling and betting, other than those on winnings;
- g) taxes on insurance premiums;
- h) other taxes on specific services: hotels or lodging, housing services, restaurants, transportation, communication, advertising;
- i) general sales or turnover taxes (excluding VAT type taxes): these include manufacturers' wholesale and retail sales taxes, purchase taxes, turnover taxes;
- profits of fiscal monopolies which are transferred to the State, except those exercising a monopoly over the imports of some good or services (included in D2.122). Fiscal monopolies are public enterprises which have been granted a legal monopoly over the production or distribution of a particular kind of good or service in order to raise revenue and not in order to further the interests of public economic or social policy. When a public enterprise is granted monopoly powers as a matter of deliberate economic or social policy because of the special nature of the good or service or the technology of production - for example, public utilities, post offices and telecommunications, railways and so on – it should



not be treated as a fiscal monopoly. As a general rule, fiscal monopolies are typically engaged in the production of goods or services which may be heavily taxed in other countries; they tend to be confined to the production of certain consumer goods (alcoholic beverages, tobacco, matches, etc.) or fuels;

- k) export duties and monetary compensatory amounts collected on exports.
- 4.21. Net taxes on products are obtained by deducting subsidies on products (D.31) from taxes on products (D.21).

## Other taxes on production (D.29)

#### 4.22. Definition:

Other taxes on production (D.29) consist of all taxes that enterprises incur as a result of engaging in production, independently of the quantity or value of the goods and services produced or sold.

They may be payable on the land, fixed assets or labour employed in the production process or on certain activities or transactions.

- 4.23. Other taxes on production (D.29) include in particular:
  - a) taxes on the ownership or use of land, buildings, or other structures utilised by enterprises in production (including owneroccupiers of dwellings);
  - taxes on the use of fixed assets (vehicles, machinery, equipment) for purposes of production, whether such assets are owned or rented;
  - c) taxes on the total wage bill and payroll taxes;
  - d) taxes on international transactions (travel abroad, foreign remittances, or similar transactions with non-residents) for purposes of production;
  - e) taxes paid by enterprises in order to obtain business and professional licences if those licences are being granted automatically on payment of the amounts due. However, if the government carries out checks on the suitability or safety of the business premises, on the reliability or safety of the equipment employed, on the professional competence of the staff employed, or on the quality or standard of goods or services produced as a condition for granting such a licence, the payments are treated as purchases of services rendered, unless the amounts charged for the licences are out of all proportion to

- the costs of the checks carried out by the government;
- f) taxes on pollution resulting from production activities. These consist of taxes levied on the emission or discharge into the environment of noxious gases, liquids or other harmful substances. They do not include payments made for the collection and disposal of waste or noxious substances by public authorities, which constitute intermediate consumption of enterprises;
- g) under-compensation of VAT resulting from the flat rate system, frequently found in agriculture.
- 4.24. This heading excludes taxes on the personal use of vehicles etc. by households, which are recorded under current taxes on income, wealth, etc.

## Taxes on production and imports paid to the Institutions of the European Union

- 4.25. The taxes on production and imports paid to the Institutions of the European Union include, in particular:
  - a) taxes paid directly by resident producer units to the Institutions of the European Union (the ECSC levy on mining and iron and steel producing enterprises);
  - b) taxes collected by national governments on behalf of the Institutions of the European Union, namely:
    - (1) receipts from the common agricultural policy:
      - levies on imported agricultural products, monetary compensatory amounts levied on exports and imports, sugar production levies and the tax on isoglucose, co-responsibility taxes on milk and cereals;
    - (2) receipts from trade with third countries: customs duties levied on the basis of the Integrated Tariff of the European Union (TARIC);
    - receipts from VAT in each Member State.
- 4.26. Recording of taxes on production and imports: taxes on production and imports are recorded when the activities, transactions or other events occur which create the liabilities to pay taxes.
- 4.27. However, some economic activities, transactions or events, which under tax legislation ought to impose on the units concerned the obligation to pay taxes, permanently escape



the attention of the tax authorities. It would be unrealistic to assume that such activities, transactions or events give rise to financial assets or liabilities in the form of payables or receivables. For this reason, the amounts to be recorded in the system are determined by the amounts due for payment only when evidenced by tax assessments, declarations or other instruments which create liabilities in the form of clear obligations to pay on the part of taxpayers. The system does not impute missing taxes not evidenced by tax assessments.

Taxes evidenced by tax assessments but which are never paid (for instance, because of bankruptcy) are treated as if they had been paid; there are two eventualities:

- a) the writing-off of bad debt by the government, which recognises that its claim can no longer be collected; this writing-off is recorded in the other changes in the volume of assets accounts of the government and the defaulting debtor;
- b) the cancellation of the debt by mutual agreement between the government and the debtor. This cancellation is treated as a capital transfer from the government to the debtor in the capital account, with a simultaneous extinction of a claim in the financial account.
- 4.28. The total value of the taxes which should be recorded includes any interest charged on arrears of taxes due and any fines imposed by taxation authorities if it is impossible to record such interest and fines separately from taxes; it also includes any charges which may be imposed in connection with the collection or recovery of taxes outstanding. Correspondingly, it is reduced by the amount of any tax rebates made by general government as a matter of economic policy and any tax refunds made as a result of over-payments.
- 4.29. In the system of accounts, taxes on production and imports (D.2) appear:
  - a) among uses in the generation of income account of the total economy;
  - among resources in the allocation of primary income account of the general government sector and in the external account of primary incomes and current transfers.

Taxes on products are recorded as resources in the goods and services account of the total economy. This enables the resources of goods and services – valued exclusive of taxes on products – to be balanced with the uses, which are valued inclusive of these taxes.

Other taxes on production (D.29) appear among uses in the generation of income accounts of the industries or sectors which pay them.

## **SUBSIDIES (D.3)**

### 4.30. Definition:

Subsidies (D.3) are current unrequited payments which general government or the Institutions of the European Union make to resident<sup>2</sup> producers, with the objective of influencing their levels of production, their prices or the remuneration of the factors of production.

Other non-market producers can receive other subsidies on production only if those payments depend on general regulations applicable to market and non-market producers as well. By convention, subsidies on products are not recorded on other non-market output (P.13).

- 4.31. Subsidies granted by the Institutions of the European Union cover only current transfers made directly by them to resident producer units.
- 4.32. Subsidies are classified into:
  - a) subsidies on products (D.31):
    - (1) import subsidies (D.311);
    - (2) other subsidies on products (D.319).
  - b) other subsidies on production (D.39).

## Subsidies on products (D.31)

### 4.33. Definition:

Subsidies on products (D.31) are subsidies payable per unit of a good or service produced or imported. The subsidy may be a specific amount of money per unit of quantity of a good or service, or it may be calculated ad valorem as a specified percentage of the price per unit. A subsidy may also be calculated as the difference between a specified target price and the market price actually paid by a buyer. A subsidy on a product usually becomes payable when the good is produced, sold or imported. By convention, subsidies on products can only pertain to market output (P.11) or to output for own final use (P.12).

<sup>2</sup> Subsidies are granted by the Institutions of the European Union to units resident anywhere in the Community.



## Import subsidies (D.311)

## 4.34. Definition:

Import subsidies (D.311) consist of subsidies on goods and services that become payable when the goods cross the frontier for use in the economic territory or when the services are delivered to resident institutional units. They may include losses incurred as a matter of deliberate government policy by government trading organisations whose function is to purchase products from non-residents and then sell them at lower prices to residents.

## Other subsidies on products (D.319)

- 4.35. Other subsidies on products (D.319) include:
  - a) subsidies on products used domestically: these consist of subsidies payable to resident producers in respect of their production which is used or consumed within the economic territory;
  - b) losses of government trading organisations whose function is to buy the products of resident producers and then sell them at lower prices to residents or non-residents, when they are incurred as a matter of deliberate government economic or social policy;
  - c) subsidies to public corporations and quasicorporations to compensate for persistent losses which they incur on their productive activities as a result of charging prices which are lower than their average costs of production as a matter of deliberate government or European economic and social policy;
  - d) direct subsidies on exports payable directly to resident producers when the goods leave the economic territory or the services are provided to non-residents except repayments at the customs frontier of taxes on products previously paid and waiving of the taxes that would be due if the goods were to be sold or used inside the economic territory.

## Other subsidies on production (D.39)

## 4.36. Definition:

Other subsidies on production (D.39) consist of subsidies except subsidies on products which resident producer units may receive as a consequence of engaging in production.

For their other non-market output, other nonmarket producers can receive other subsidies on production only if those payments from general government depend on general regulations applicable to market and non-market producers as well.

- 4.37. This heading includes in particular:
  - a) subsidies on payroll or work force: these consist of subsidies payable on the total wage or salary bill, or total work force, or on the employment of particular types of persons such as physically handicapped persons or persons who have been unemployed for long periods, or on the costs of training schemes organised or financed by enterprises;
  - b) subsidies to reduce pollution: these consist of current subsidies intended to cover some or all of the costs of additional processing undertaken to reduce or eliminate the discharge of pollutants into the environment;
  - c) grants for interest relief made to resident, producer units, even when they are intended to encourage capital formation<sup>3</sup>. In effect, these are current transfers designed to lighten producers' operating costs. They are treated in the accounts as subsidies to the producers benefiting from them, even when the difference in the interest is, in practice, paid directly by the government to the credit institution making the loan;
  - d) over-compensation of VAT resulting from the flat rate system, frequently found in agriculture.
- 4.38. The following are not treated as subsidies:
  - a) current transfers from general government to households in their capacity as consumers. These are treated either as social benefits or as miscellaneous current transfers (D.75);
  - b) current transfers between different parts of general government in their capacity as producers of non-market goods and services, except other subsidies on production (D.39). The current transfers are shown under the heading current transfers within general government (D.73);
  - c) investment grants (D.92);
  - d) extraordinary payments into social insurance funds, in so far as these payments are designed to increase the actuarial reserves of these funds. Such payments are shown

<sup>3</sup> However, when a grant serves the dual purpose of financing both the amortisation of the debt and the payment of interest on it, and when it is not possible to apportion it between the two elements, the whole of the grant is treated as an investment grant.



- under the heading other capital transfers (D.99);
- e) transfers made by general government to non-financial corporations and quasi-corporations to cover losses accumulated over several financial years, or exceptional losses due to factors outside the control of the enterprise, are classified under the heading other capital transfers (D.99);
- f) the cancellation of debts which producer units have incurred towards the government (resulting, for example, from loans advanced by a government agency to a non-financial enterprise which has accumulated trading losses over several financial years). In general, these transactions are treated in the accounts as other capital transfers (D.99) (see paragraph 4.165 f);
- g) payments made by general government or by the rest of the world for damage to, or losses of, capital goods as a result of acts of war, other political events or national disasters are shown under the heading other capital transfers (D.99);
- h) shares and other equities in corporate enterprises purchased by general government, which are shown under the heading shares and other equity (AF.5);
- i) payments made by a general government agency which has assumed responsibility for abnormal pension charges affecting a public enterprise. These payments must be recorded under miscellaneous current transfers (D.75);
- j) payments made by general government to market producers to pay entirely, or in part, for goods and services that those market producers provide directly and individually to households in the context of social risks or needs (see paragraph 4.84.), and to which the households have a legally established right. These payments are included in individual consumption expenditure of general government (P.31) and subsequently in social benefits in kind (D.631) and actual individual consumption of households (P.41).
- 4.39. Time of recording: Subsidies are recorded when the transaction or the event (production, sale, import, etc.) which gives rise to the subsidy occurs.

## Particular cases:

 a) subsidies which take the form of the difference between the purchase price and the selling price charged by a government trading agency are recorded at the time the

- goods are bought by the agency, if the selling price is known at that time;
- b) subsidies intended to cover a loss incurred by a producer are recorded at the time the general government agency decides to cover the loss.
- 4.40. In the system of accounts, subsidies appear:
  - a) among negative uses in the generation of income account of the total economy;
  - among negative resources in the allocation of primary income account of the general government sector and in the external account of primary incomes and current transfers.

Subsidies on products are recorded as negative resources in the goods and services account of the total economy. This enables the resources of goods and services to be balanced with the uses.

Other subsidies on production (D.39) appear among negative uses in the generation of income accounts of the industries or sectors which receive them.

Consequences of a system of multiple exchange rates on taxes on production and imports and on subsidies: multiple exchange rates are not currently applicable among the Member States of the EU. In such a system:

- a) implicit taxes on imports are treated as taxes on imports excluding VAT and import duties (D.2122);
- b) implicit taxes on exports are treated as taxes on products, except VAT and import taxes (D.214);
- c) implicit subsidies on imports are treated as import subsidies (D.311);
- d) implicit subsidies on exports are treated as other subsidies on products (D.319).

## **PROPERTY INCOME (D.4)**

## 4.41. Definition:

Property income (D.4) is the income receivable by the owner of a financial asset or a tangible non-produced asset in return for providing funds to, or putting the tangible non-produced asset at the disposal of, another institutional unit.

Property incomes are classified in the following way in the system:

- a) interest (D.41);
- b) distributed income of corporations (D.42):



- (1) dividends (D.421);
- (2) withdrawals from income of quasi-corporations (D.422).
- reinvested earnings on direct foreign investment (D.43);
- d) property income attributed to insurance policy holders (D.44);
- e) rents (D.45).

## Interest (D.41)

### 4.42. Definition:

Under the terms of the financial instrument agreed between them, interest (D.41) is the amount that the debtor becomes liable to pay to the creditor over a given period of time without reducing the amount of principal outstanding.

4.43. Creditors lend funds to debtors that lead to creation of one or other of the financial instruments listed below.

This form of property income is receivable by the owners of certain kinds of financial assets:

- a) deposits (AF.2);
- b) securities other than shares (AF.3);
- c) loans (AF.4);
- d) other accounts receivable (AF.7).

## Interest on deposits, loans and accounts receivable and payable

4.44. The interest receivable and payable on these financial assets and liabilities is determined by applying the relevant rate of interest to the principal outstanding at each point of time throughout the accounting period.

### Interest on securities

### Interest on bills and similar short-term instruments

4.45. The difference between the face value and the price paid at the time of issue (i.e. the discount) measures the interest payable over the life of the bill. The increase in the value of a bill due to the accumulation of accrued interest does not constitute a holding gain because it is due to an increase in the principal outstanding and not a change in the price of the asset. Other changes in the value of the bill are treated as holding gains/losses.

## Interest on bonds and debentures

4.46. Bond and debentures are long-term securities that give the holder the unconditional right to: a fixed or contractually determined variable money income in the form of coupon payments, or a stated fixed sum on a specified date or dates when the security is redeemed, or both these two terms:

- a) zero-coupon bonds: there are no coupon payments. The interest based on the difference between the redemption price and the issue price has to be distributed over the years to the maturity of the bond. The interest accruing each year is reinvested in the bond by its holder, thus counterpart entries equal to the value of the accrued interest must be recorded in the Financial Account as the acquisition of more bond by the holder and as a further issue of more bond by the issuer or debtor (i.e. as a growth in the 'volume' of the original bond);
- b) other bonds, including deep-discounted bonds. The interest has two components:
  - the amount of the money income receivable from coupon payments each period;
  - (2) the amount of interest accruing each period attributable to the difference between the redemption price and the issue price, calculated in the same way as for zero-coupon bonds.
- c) index-linked securities: the amounts of the coupon payments and/or the principal outstanding are linked to a price index. The change in the value of the principal outstanding between the beginning and the end of a particular accounting period due to the movement in the relevant index is treated as interest accruing in that period, in addition to any interest due for payment in that period. The interest accruing as a result of the indexing is effectively reinvested in the security and must be recorded in the financial accounts of the holder and issuer.

### Interest rate swaps and forward rate agreements

4.47. Swaps are contractual arrangements between two institutional units who agree to exchange streams of payables on the same amount of indebtedness over time. Common varieties of swaps are interest rate swaps and currency swaps.

The streams of interest payments resulting from swap arrangements should be recorded net of the payments between the two parties to the swap; any payments to third parties, such as specialised brokers, for arranging the swaps are recorded as purchases of services.

The same principle is applied to transactions under forward rate agreements.



### Interest on financial leases

4.48. A financial lease is an alternative to lending as a method of financing the purchase of machinery and equipment. It is a contract which channels funds from a lender to a borrower: the lessor purchases the equipment and the lessee contracts to pay rentals which enable the lessor, over the period of the contract, to recover all, or virtually all, of his costs including interest.

The lessor is treated as making a loan to the lessee equal to the value of the purchaser's price paid for the asset, this loan being gradually paid off in full over the period of the lease. The rental paid each period by the lessee is therefore treated as having two components: a repayment of principal and a payment of interest. The rate of interest on the imputed loan is implicitly determined by the total amount paid in rentals over the life of the lease in relationship to the purchaser's price of the asset. The share of the rental that represents interest gradually declines over the life of the lease as the principal is repaid. The initial loan by the lessee, together with the subsequent repayments of principal, are recorded in the Financial Accounts of the lessor and lessee. The interest payments are recorded under interest in their respective Primary Distribution of Income Accounts.

### Other interests

- 4.49. The following are also treated as interest:
  - a) interest charged on bank overdrafts, extra interest paid on deposits left longer than originally agreed, and payments to certain bond holders which are determined by lottery;
  - b) interest received by mutual funds (see paragraph 2.51 b), from the investments they have made, and which is assigned to shareholders, even if it is capitalised. It excludes holding gains or losses on financial instruments belonging to unit trusts, which are not recorded as property income.

### Time of recording

4.50. Interest is recorded on an accrual basis: that is, interest is recorded as accruing continuously over time to the creditor on the amount of principal outstanding. The interest accruing in each accounting period must be recorded whether or not it is actually paid or added to the principal outstanding. When it is not ac-

- tually paid, the increase in the principal must also be recorded in the Financial Account as a further acquisition of that kind of financial asset by the creditor and an equal acquisition of a liability by the debtor.
- 4.51. Interest is to be recorded before the deduction of any taxes levied on it. Interest received and paid is always recorded inclusive of grants for interest relief, even if those grants are directly paid to financial institutions and not to the beneficiaries (see subsidies).

The value of the services provided by financial intermediaries not being allocated among different customers, the actual payments or receipts of interest to or from financial intermediaries are not adjusted to eliminate the margins that represent the implicit charges made by financial intermediaries. An adjustment item is needed in the allocation of primary income account of financial intermediaries and of a nominal industry to which, by convention, the whole output of financial intermediaries is allocated as intermediate consumption.

- 4.52. In the system of accounts, interest is shown:
  - a) among resources and among uses in the allocation of primary income account of the sectors<sup>4</sup>;
  - among resources and among uses in the external account of primary incomes and current transfers.

## Distributed income of corporations (D.42)

### Dividends (D.421)

## 4.53. Definition:

Dividends (D.421) are a form of property income received by owners of shares (AE5) to which they become entitled as a result of placing funds at the disposal of corporations. Raising equity capital through the issue of shares is an alternative way of raising funds to borrowing. In contrast to loan capital, however, equity capital does not give rise to a liability that is fixed in monetary terms and it does not entitle the holders of shares of a corporation to a fixed or predetermined income.

<sup>4</sup> This practice differs from that of most business accounting, where interest paid is normally shown as a fixed charge similar to other costs of production in the operating account,



- 4.54. This heading also includes:
  - a) shares issued to shareholders in payment of the dividend for the financial year. However, issues of bonus shares which represent the capitalisation of own funds in the form of reserves and undistributed profits and give rise to new shares to shareholders in proportion for their holdings are not included;
  - b) dividends received by mutual funds (see paragraph 2.51 b) from the investments they have made, and which are assigned to shareholders, even if they are capitalised. It excludes holding gains or losses on financial instruments belonging to unit trusts, which are not recorded as property income;
  - c) the income paid to general government by public enterprises which are recognised as independent legal entities though not formally constituted as corporate enterprises.
- 4.55. Time of recording: Dividends are recorded at the time they are due to be paid as determined by the corporation.

In the system of accounts, dividends appear:

- a) among uses in the allocation of primary income account of the sectors in which the corporations are classified;
- b) among resources in the allocation of primary income account of the sectors in which shareholders are classified;
- among uses and resources in the external account of primary incomes and current transfers.

## Withdrawals from the income of quasi-corporations (D.422)

### 4.56. Definition:

Withdrawals from the income of quasi-corporations (D.422) consist of the amounts which entrepreneurs actually withdraw for their own use from the profits earned by the quasi-corporations which belong to them.

- 4.57. These amounts are to be recorded before the deduction of any current taxes on income, wealth, etc. which are deemed always to be paid by the owners of the businesses.
- 4.58. When a quasi-corporation makes a trading profit, the unit which owns it may choose to leave part or all of the profit in the business, especially for investment purposes. This income left in the business appears as saving by the quasi-corporation, and only the profits actually withdrawn by the owner units are recorded in the accounts under the heading

withdrawals from the income of quasi-corporations.

- When profits are earned in the rest of the world 4.59. by the branch-offices, agencies, etc. of resident enterprises, in so far as these branch-offices etc. are treated as non-resident units, retained earnings appear as reinvested earnings on direct foreign investment (D.43). Only the income actually transferred to the parent enterprise is treated in the accounts as withdrawals from the income of quasi-corporations received from the rest of the world. The same principles are applied to deal with the relations between branch-offices, agencies, etc. operating on the economic territory and the nonresident parent enterprise to which they belong.
- 4.60. This heading includes the net operating surplus received by residents as owners of land and buildings in the rest of the world, or by non-residents as owners of land or buildings on the economic territory. In effect, in respect of all transactions in land and buildings carried out on the economic territory of a country by non-resident units, the latter are considered, in accordance with the conventions adopted in the ESA, to be notional resident units in which the non-resident owners own the equity.

The rental value of owner-occupied dwellinngs abroad is registered as imports of services and the corresponding net operating surplus as primary income received from the rest of the world; the rental value of owner-occupied dwellings belonging to non-residents is registered as exports of services and the corresponding net operating surplus as primary income paid to the rest of the world.

- 4.61. The heading withdrawals from the income of quasi-corporations does not include amounts which their owners receive:
  - a) from the sale of existing fixed capital goods;
  - b) from the sale of land and intangible assets;
  - from withdrawals of capital (e.g. the total or partial liquidation of their equity in the quasi-corporation).

These amounts are treated as withdrawals from equity in the financial account. Conversely, any funds provided by the owner(s) of a quasi-corporation for the purpose of acquiring assets or reducing its liabilities is treated as additions to its equity. However, if the quasi-corporation is owned by government, and if it runs a persistent operating deficit as a matter of deliberate government economic and social policy, any regular transfers of funds into the enterprise made by government to cover its losses should be treated as subsidies.



- 4.62. Time of recording: Withdrawals from the income of quasi-corporations are recorded when they are made by the owners.
- 4.63. In the system of accounts, withdrawals from the income of quasi-corporations appear:
  - a) among uses in the allocation of primary income account of the sectors in which the quasi-corporations are classified;
  - among resources in the allocation of primary income account of the owner sectors;
  - among uses and resources in the external account of primary incomes and current transfers.

## Reinvested earnings on direct foreign investment (D.43)

### 4.64. Definition:

Reinvested earnings on direct foreign investment (D.43) are equal to: the operating surplus of the direct foreign investment enterprise

plus any property incomes or current transfers receivable

minus any property incomes or current transfers payable, including actual remittances to foreign direct investors and any current taxes payable on the income, wealth, etc., of the direct foreign investment enterprise.

- A direct foreign investment enterprise is an 4.65. incorporated or unincorporated enterprise in which an investor resident in another economy owns 10 per cent or more of the ordinary shares or voting power (for an incorporated enterprise) or the equivalent (for an unincorporated enterprise). Direct foreign investment enterprises comprise those entities that are identified as subsidiaries (investor owns more than 50 per cent), associates (investor owns 50 per cent or less) and branches (wholly or jointly owned unincorporated enterprises), either directly or indirectly owned by the investor. Consequently, 'direct foreign investment enterprises' is a broader concept than 'foreign controlled corporations'.
- 4.66. Actual distributions may be made out of the entrepreneurial income of direct foreign investment enterprises in the form of dividends or withdrawals of income from quasi-corporations.

In addition, retained earnings are treated as if they were distributed and remitted to foreign direct investors in proportion to their ownership of the equity of the enterprise and then reinvested by them.

- Reinvested earnings on direct foreign investment can be either positive or negative.
- 4.67. Time of recording: Reinvested earnings on direct foreign investment are recorded when they are earned.

In the system of accounts, reinvested earnings on direct foreign investment appear:

- a) among uses and resources in the allocation of primary income account of the sectors;
- b) among uses and resources in the external account of primary incomes and current transfers.

## Property income attributed to insurance policy holders (D.44)

### 4.68. Definition:

Property income attributed to insurance policy holders corresponds to total primary incomes received from the investment of insurance technical reserves. Insurance technical reserves are invested by insurance enterprises and pension funds in financial assets or land (from which net property income, i.e. after deducting any interest paid, is received) or in buildings (which generate net operating surpluses). Any net income received that results from the investment of insurance enterprises' own funds is to be excluded in proportion to the ratio between own funds and a sum of own funds and insurance technical reserves.

4.69. Since technical reserves are assets of insurance policy holders, the receipts from investing them are shown in the accounts as being paid by insurance enterprises and pension funds to the policy holders in the form of property income attributed to insurance policy holders.

As this income is retained by insurance enterprises and pension funds in practice, it is therefore treated as being paid back to the insurance enterprises and pension funds in the form of premium and contribution supplements that are additional to actual premiums and contributions payable.

These premium and contribution supplements on non-life insurance policies and on life insurance policies taken out under social insurance schemes are recorded together with the actual premiums and contributions in the secondary distribution of income accounts of the units concerned.

The premium supplements on individual life insurance not taken out under social insurance schemes, like the actual premiums, are not current transfers and are therefore not recorded in the secondary distribution of income accounts. They are directly included as one of



- the elements contributing to the change in the 'net equity of households in life insurance reserves and in pension funds reserves' recorded in the financial accounts of the units concerned.
- 4.70. Time of recording: Property income attributed to insurance policy holders is recorded when it accrues.
- 4.71. In the system of accounts, the property income attributed to insurance policy holders appears:
  - a) among resources in the allocation of primary income account of policy holders;
  - b) among uses in the allocation of primary income account of the insurers;
  - among resources and among uses in the external account of primary incomes and current transfers.

## Rents (D.45)

### Rents on land

4.72. The rent received by a landowner from a tenant constitutes a form of property income.

This heading also includes the rents payable to the owners of inland waters and rivers for the right to exploit such waters for recreational or other purposes, including fishing.

A landowner may be liable to pay land taxes or incur certain maintenance expenses solely as a consequence of owning the land. By convention, such taxes and expenses are treated as payable by the person entitled to use the land, who is deemed to deduct them from the rent that he would otherwise be obliged to pay to the landowner.

4.73. Rents on land do not include the rentals of buildings and of dwellings situated on it; those rentals are treated as the payment for a market service provided by the owner to the tenant of the building or dwelling, and are shown in the accounts as the intermediate or final consumption of the tenant unit. If there is no objective basis on which to split the payment between rent on land and rental on the buildings situated on it, the whole amount is treated as rent when the value of the land is believed to exceed the value of the buildings on it and as rental otherwise.

### Rents on sub-soil assets

4.74. This heading includes the royalties that accrue to owners of deposits of minerals or fossil fuels (coal, oil or natural gas) who grant leases to other institutional units permitting them to explore or to extract such deposits over a specified period of time.

- 4.75. Time of recording of rents: Rents are recorded in the period when payable.
- 4.76. In the system of accounts, rents are recorded:
  - a) among resources and among uses in the allocation of primary income account of sectors;
  - b) among resources and among uses in the external account of primary incomes and current transfers.

# CURRENT TAXES ON INCOME, WEALTH, ETC. (D.5)

### 4.77. Definition:

Current taxes on income, wealth, etc. (D.5) cover all compulsory, unrequited payments, in cash or in kind, levied periodically by general government and by the rest of the world on the income and wealth of institutional units, and some periodic taxes which are assessed neither on the income nor the wealth.

Current taxes on income, wealth, etc. are divided into:

- a) taxes on income (D.51);
- b) other current taxes (D.59).

### Taxes on income (D.51)

#### 4.78. Definition:

Taxes on income (D.51) consist of taxes on incomes, profits and capital gains. They are assessed on the actual or presumed incomes of individuals, households, corporations or NPIs. They include taxes assessed on holdings of property, land or real estate when these holdings are used as a basis for estimating the income of their owners.

### Taxes on income include:

- a) taxes on individual or household income (income from employment, property, entrepreneurship, pensions, etc.), including taxes deducted by employers (pay-as-youearn taxes). Taxes on the income of owners of unincorporated enterprises are included here;
- taxes on the income or profits of corporations;
- c) taxes on holding gains;
- d) taxes on winnings from lottery or gambling, payable on the amounts received by winners as distinct from taxes on the turnover of producers that organise gambling or lot-



teries which are treated as taxes on products.

## Other current taxes (D.59)

- 4.79. Other current taxes (D.59) include:
  - a) current taxes on capital which consist of taxes that are payable periodically on the ownership or use of land or buildings by owners, and current taxes on net wealth and on other assets (jewellery, other external signs of wealth) except taxes mentioned in D.29 (which are paid by enterprises as a result of engaging in production) and those mentioned in D.51 (taxes on income);
  - b) poll taxes, levied per adult or per household, independently of income or wealth;
  - expenditure taxes, payable on the total expenditures of persons or households;
  - d) payments by households for licences to own or use vehicles, boats or aircraft (which are not used for business purposes), or for licences to hunt, shoot or fish, etc.<sup>5</sup>;
  - e) taxes on international transactions (travel abroad, foreign remittances, foreign investments, etc.), except those payable by producers and import duties paid by households.
- 4.80. Current taxes on income, wealth, etc. do not include:
  - a) inheritance taxes, death duties or taxes on gifts inter vivos, which are deemed to be levied on the capital of the beneficiaries and are shown under the heading capital taxes (D.91);
  - b) occasional or exceptional levies on capital or wealth, which are shown under the heading capital taxes (D.91);
  - c) taxes on land, buildings or other assets owned or rented by enterprises and used by them for production, such taxes being treated as other taxes on production (D.29);
  - d) payments by households for licences other than licences on the use of vehicles, boats or aircraft, or licences to hunt, shoot or fish: driving or pilot's licences, television or radio licences, firearm licences, museum or library admissions, garbage disposal fees, etc. which are treated in most cases as pur-

- chases of services rendered by government<sup>5</sup>.
- 4.81. The total value of the taxes which should be recorded includes any interest charged on arrears of taxes due and any fines imposed by taxation authorities if it is impossible to record such interest and fines separately; it also includes any charges which may be imposed in connection with the recovery and assessment of taxes outstanding. Correspondingly, it is reduced by the amount of any rebates made by general government as a matter of economic policy and any refunds made as a result of over-payments.
- 4.82. Recording of current taxes on income, wealth, etc.: current taxes on income, wealth, etc. are recorded at the time when activities, transactions or other events occur which create the liabilities to pay.

However, some economic activities, transactions or events, which under tax legislation ought to impose on the units concerned the obligation to pay taxes, permanently escape the attention of the tax authorities. It would be unrealistic to assume that such activities, transactions or events give rise to financial assets or liabilities in the form of payables or receivables. For this reason, the amounts to be recorded in the system are determined by the amounts due for payment only when evidenced by tax assessments, declarations or other instruments which create liabilities in the form of clear obligations to pay on the part of taxpayers. The system does not impute missing taxes not evidenced by tax assessments.

Taxes evidenced by tax assessments but which are never paid (for instance, because of bankruptcy) are treated as if they had been paid; there are two eventualities:

- a) the writing-off of bad debt by the government, which recognises that its claim can no longer be collected; this writing-off is recorded in the other changes in the volume of assets accounts of the government and the defaulting debtor;
- b) the cancellation of the debt by mutual agreement between the government and the debtor. This cancellation is treated as a capital transfer from the government to the debtor in the capital account, with a simultaneous extinction of a claim in the financial account.

The borderline between taxes and purchases of services from government is defined according to the same criteria as those used in the case of payments made by enterprises: if the licences are being granted automatically on payment of the amounts due, their payment is treated as taxes. But if the government uses the issue of licences to organise some proper regulatory function (such as checking the competence, or qualifications, of the person concerned), the payments made should be treated as purchases of services from government rather than payments of taxes, unless the payments are clearly out of all proportion to the cost of providing the services.



In some cases, the liability to pay income taxes can only be determined in a later accounting period than that in which the income accrues. Some flexibility is therefore needed in the time at which such taxes are recorded. Income taxes deducted at source, such as PAYE taxes and regular prepayments of income taxes, may be recorded in the periods in which they are paid and any final tax liability on income can be recorded in the period in which the liability is determined.

In the system of accounts, current taxes on income, wealth, etc. are recorded:

- a) among uses in the secondary distribution of income account of the sectors in which the taxpayers are classified;
- among resources in the secondary distribution of income account of general government;
- among uses and resources in the external account of primary incomes and current transfers.

# SOCIAL CONTRIBUTIONS AND BENEFITS (D.6)

### 4.83. Definition:

Social benefits are transfers to households, in cash or in kind, intended to relieve them from the financial burden of a number of risks or needs, made through collectively organised schemes, or outside such schemes by government units and NPISHs; they include payments from general government to producers which individually benefit households and which are made in the context of social risks or needs.

- 4.84. The list of risks or needs which may give rise to social benefits is, by convention, fixed as follows:
  - a) sickness;
  - b) invalidity, disability;
  - c) occupational accident or disease;
  - d) old age;
  - e) survivors;
  - f) maternity;
  - g) family;
  - h) promotion of employment;
  - i) unemployment;

- j) housing<sup>6</sup>;
- k) education;
- 1) general neediness.

### 4.85. Social benefits include:

- a) current and lump-sum transfers from schemes which receive contributions, cover the entire community or large sections of the community and are imposed and controlled by government units (social security schemes);
- b) current and lump sum transfers from schemes organised by enterprises on behalf of their employees, ex-employees or dependants (private funded and unfunded enterprises' schemes). Contributions may be made by employees or employers; they may also be made by self-employed persons;
- c) current transfers from government units and NPISHs which are not conditional on previous payment of contributions (assistance).

## 4.86. Social benefits exclude:

- a) insurance claims based on policies taken out solely on the own initiative of the insured, independently of his employer or government;
- b) insurance claims on policies taken out with the sole purpose of obtaining a discount, even if those policies follow from a collective agreement.
- 4.87. In order for an individual policy to be treated as part of a social insurance scheme, the eventualities or circumstances against which the participants are insured must correspond to the risks or needs listed in paragraph 4.84 above, and in addition, one or more of the following conditions must be satisfied:
  - a) participation in the scheme is obligatory either by law for a specified category of worker, whether employees, self or nonemployed, or under the terms and conditions of employment of an employee, or group of employees;
  - b) the scheme is a collective one operated for the benefit of a designated group of workers, whether employees, self or nonemployed, participation being restricted to members of that group;
  - an employer makes a contribution (actual or imputed) to the scheme on behalf of an

<sup>6</sup> In the case of housing, payments made by public authorities to tenants in order to reduce their rents are social benefits, with the exception of special benefits paid by public authorities in their capacity as employers.



employee, whether or not the employee also makes a contribution.

4.88. Social insurance schemes are schemes in which workers are obliged, or encouraged, by their employers or by general government to take out insurance against certain eventualities or circumstances that may adversely affect their welfare or that of their dependants.

Social insurance schemes may be classified according to the following types:

- a) social security schemes, covering the entire community, or large sections of the community, that are imposed, controlled and financed by government units;
- b) private funded schemes, which consist of:
  - schemes in which the social contributions are paid to third parties (insurance enterprises, autonomous pension funds);
  - (2) schemes in which employers maintain special reserves which are segregated from their other reserves, even though such schemes do not constitute separate institutional units from the employers. These are referred to as non-autonomous pension funds. The reserves are treated as assets that belong to the beneficiaries and not the employers.
- c) unfunded schemes in which employers pay social benefits to their employees, ex-employees or their dependants out of their own resources without creating special reserves for the purpose.
- 4.89. Social insurance schemes organised by government units for their own employees are classified as private funded schemes or unfunded schemes as appropriate and not as social security schemes.
- 4.90. Social contributions may be divided into actual contributions payable under the first two categories of schemes mentioned in 4.88. above and imputed contributions payable under unfunded schemes.
- Social contributions may be divided into those that are compulsory by law and those that are not.

### Social contributions (D.61)

## Actual social contributions (D.611)

- 4.92. Actual social contributions include:
  - a) employers' actual social contributions (D.6111). These correspond to flow D.121.

Employers' actual social contributions are paid by employers to social security funds, insurance enterprises or autonomous as well as non autonomous pension funds administering social insurance schemes to secure social benefits for their employees.

As employers' actual social contributions are made for the benefit of their employees, their value is recorded as one of the components of compensation of employees together with wages and salaries in cash and in kind. The social contributions are then recorded as being paid by the employees as current transfers to the social security funds, insurance enterprises or autonomous as well as non autonomous pension funds;

- b) employees' social contributions (D.6112): these are social contributions payable by employees to social security, private funded and unfunded schemes. Employees' social contributions consist of the actual contributions payable plus, in the case of private funded schemes, the contribution supplements payable out of the property income attributed to insurance policy holders received by employees participating in the schemes, minus the service charges. All the service charges are treated as charges against the employees' contributions and not the employers';
- c) social contributions by self-employed and non-employed persons (D.6113): these are social contributions payable for their own benefit by persons who are not employees namely, self-employed persons (employers or own-account workers), or non-employed persons. They also include the value of the contribution supplements payable out of the property income attributed to insurance policy holders received by participating individuals that they are recorded as paying back to the insurance enterprises in addition to their other contributions.
- 4.93. Payments of actual social contributions may be compulsory by virtue of a statute or regulation, or they may be paid as a result of collective agreements in a particular industry or agreements between employer and employees in a particular enterprise, or because they are written into the contract of employment itself. In certain cases, the contributions may be voluntary.

The voluntary contributions referred to here cover:



- a) social contributions which persons who are not, or who are no longer, legally obliged to contribute pay or continue to pay to a social security fund;
- social contributions paid to insurance enterprises (or friendly societies and pension funds classified in the same sector) as part of supplementary insurance schemes organised by enterprises for the benefit of their employees and which the latter join voluntarily;
- c) contributions to friendly societies with membership open to employees or self-employed workers.
- 4.94. To distinguish between social contributions that are compulsory and those that are not, a supplementary level is introduced in the classification:
  - a) compulsory employers' actual social contributions (D.61111);
  - b) voluntary employers' actual social contributions (D.61112);
  - c) compulsory employees' social contributions (D.61121);
  - d) voluntary employees' social contributions (D.61122);
  - e) compulsory social contributions by self and non-employed persons (D.61131);
  - f) voluntary social contributions by self and non-employed persons (D.61132).
- 4.95. Actual social contributions to social security funds or other government agencies are recorded gross as distributive transactions.

On the other hand, social contributions paid under private funded schemes to insurance enterprises, and to friendly societies and autonomous pension funds included in the same sector, are recorded net, i.e. after deducting that part of the contribution which represents the value of the insurance service provided to (resident and non-resident) households. Under the conventions adopted, this part of the contribution represents, in effect, the payment for a market service which forms part of the final consumption of households or, in the case of contributions paid by non-resident households, part of exports of services.

In the case of non-autonomous private funded social insurance schemes, where employers maintain their own segregated reserves, no service charge is deducted from contributions paid by the employees. As such schemes do not constitute separate institutional units from the employers, the costs of managing and ad-

- ministering the funds are assimilated with the employers' general production costs.
- 4.96. Time of recording: Employers' actual social contributions (D.6111) and employees' social contributions (D.6112) are recorded at the time when the work that gives rise to the liability to pay the contributions is carried out. Social contributions by self-employed and non-employed persons (D.6113) are recorded when the liabilities to pay are created.
- 4.97. In the system of accounts, actual social contributions are recorded:
  - a) among uses in the secondary distribution of income account of households;
  - among uses in the external account of primary incomes and current transfers (in the case of non-resident households);
  - among resources in the secondary distribution of income account of resident insurers or employers;
  - d) among resources in the external account of primary incomes and current transfers (in the case of non-resident insurers or employers).

## Imputed social contributions (D.612)

- 4.98. Imputed social contributions (D.612) represent the counterpart to social benefits (less eventual employees' social contributions) paid directly by employers (i.e. not linked to employers' actual contributions) to their employees or former employees and other eligible persons. They correspond to flow D.122. Their value should, in principle, be based on actuarial considerations.
- 4.99. It is necessary to introduce imputed social contributions if the social benefits distributed directly by employers are to be included in the accounts under the heading social benefits and if the cost of these benefits (for the part which is not covered by employees' actual contributions) is to be included in the compensation of employees paid by the employer.

When employers provide social benefits themselves directly to their employees, exemployees or dependants out of their own resources without involving a social security fund, an insurance enterprise or an autonomous pension fund, and without creating a special fund or segregate reserve for the purpose, beneficiaries may be considered as being protected against various specific needs, or circumstances, even though no payments are being made to cover them.

Remuneration should therefore be imputed for employees equal in value to the amount of



social contributions that would be needed to secure the de facto entitlements to the social benefits they accumulate. These amounts depend not only on the levels of the benefits currently payable but also on the ways in which employers' liabilities under such schemes are likely to evolve in the future as a result of factors such as expected changes in the numbers, age distribution and life expectancies of their present and previous employees. Thus, the values that should be imputed for the contribution ought, in principle, to be based on the same kind of actuarial considerations that determine the levels of premiums charged by insurance enterprises. When as a result of political events or economic changes, the ratio between the number currently employed and the number receiving pensions changes appreciably and becomes abnormal, the value of the imputed contributions for current employees should be estimated, which will be different from the actual value of the pensions paid out. A reasonable percentage of wages and salaries paid to current employees can be used for this purpose.

In practice, however, it may be difficult to decide how large such imputed contributions should be. The enterprise may make estimates itself, perhaps on the basis of the contributions paid into similar funded schemes, in order to calculate its likely liabilities in the future. Otherwise, the only practical alternative may be to use the unfunded social benefits payable by the enterprise during the same accounting period (after deducting actual contributions made by employees themselves) as an estimate of the imputed remuneration that would be needed to cover the imputed contributions. While there are obviously many reasons why the value of the imputed contributions that would be needed may diverge from the unfunded social benefits actually paid in the same period, such as the changing composition and age structure of the enterprise's labour force, the benefits actually paid in the current period (less employees' social contributions) may nevertheless provide sufficient estimates of the contributions and associated imputed remuneration.

4.100. Employers are recorded, in the generation of income account, as paying to their existing employees as a component of their compensation an amount described as imputed social contributions equal in value to the estimated social contributions that would be needed to provide for the unfunded social benefits to which they become entitled. Employees are recorded, in the secondary distribution of income account, as paying back to their em-

- ployers the same amount of imputed social contributions (i.e. current transfers) as if they were paying them to a separate social insurance scheme.
- 4.101. Time of recording: Imputed social contributions which represent the counterpart of compulsory direct social benefits are recorded at the time the obligation to pay the benefits arises.

Imputed social contributions which represent the counterpart of voluntary direct social benefits are recorded at the time the benefits are provided.

- 4.102. In the system of accounts, imputed social contributions are recorded:
  - a) among uses in the secondary distribution of income account of households and in the external account of primary incomes and current transfers;
  - among resources in the secondary distribution of income account of the sectors to which the employers belong and in the external account of primary incomes and current transfers.

### Social benefits other than social transfers in kind (D.62)

4.103. The heading D.62 is made up of four sub-headings:

### Social security benefits in cash (D.621)

They are payable to households by social security funds (excluding reimbursements, see D.6311).

Those benefits are provided under social security schemes.

### Private funded social benefits (D.622)

They are (in cash or in kind), payable to households by insurance enterprises or other institutional units administering private funded social insurance schemes.

### Unfunded employee social benefits (D.623)

They are (in cash or in kind), payable to their employees, their dependants or survivors by employers administering unfunded social insurance schemes. They typically include:

- a) the continued payment of normal, or reduced, wages during periods of absence from work as a result of ill health, accident, maternity, etc.;
- b) the payment of family, education or other allowances in respect of dependants;



- c) the payment of retirement or survivors' pensions to ex-employees or their survivors, and the payment of severance allowances to workers or their survivors in the event of redundancy, incapacity, accidental death, etc. (if linked to collective agreements);
- d) general medical services not related to the employee's work;
- e) convalescent and retirement homes.

Unfunded employee social benefits payable by employers to their former employees or other eligible persons should be recorded including employers' actual social contributions, i.e. payments made by the employers for the benefit of the persons concerned to insurers.

### Social assistance benefits in cash (D.624)

They are payable to households by government units or NPISHs to meet the same needs as social insurance benefits but which are not made under a social insurance scheme incorporating social contributions and social insurance benefits. Such benefits do not include current transfers paid in response to events or circumstances that are not normally covered by social insurance schemes (i.e. transfers made in response to natural disasters, recorded under other current transfers or under other capital transfers).

### Social transfers in kind (D.63)

#### 4.104. Definition:

Social transfers in kind (D.63) consist of individual goods and services provided as transfers in kind to individual households by government units and NPISHs, whether purchased on the market or produced as non-market output by government units or NPISHs. They may be financed out of taxation, other government income or social security contributions, or out of donations and property income in the case of NPISHs.

Although some of the non-market services produced by NPISHs have some of the characteristics of collective services, all the non-market services produced by NPISHs are, for simplicity and by convention, treated as individual in nature. Services provided free, or at prices that are not economically significant, to households are described as individual services to distinguish them from collective services provided to the community as a whole, or large sections of the community. Individual services consist mainly of education and health services, although other kinds of services such as housing services, cultural and recreational services are also frequently provided.

The heading social transfers in kind (D.63) includes social benefits in kind and transfers of individual non-market goods or services:

### Social benefits in kind (D.631)

4.105. Social benefits in kind are social transfers in kind intended to relieve the households from the financial burden of social risks or needs (see paragraph 4.84.). They can be subdivided into those where beneficiary households actually purchase the goods and services themselves and are then reimbursed, and those where the relevant services are provided directly to the beneficiaries. In this second case, general government unit or NPISHs produce or purchases, entirely or in part, goods and services which are directly provided by their producers to the beneficiaries.

### Social security benefits, reimbursements (D.6311)

These benefits consist of reimbursement by social security funds of approved expenditures made by households on specified goods or services.

When a household purchases a good or service for which it is subsequently reimbursed, in part or in whole, by a social security fund, the household can be regarded as if it were acting on behalf of the social security fund. In effect, the household provides a short-term credit to the social security fund that is liquidated as soon as the household is reimbursed.

The amount of the expenditure reimbursed is recorded as being incurred directly by the social security fund at the time the household makes the purchase, while the only expenditure recorded for the household is the difference, if any, between the purchaser's price paid and the amount reimbursed. Thus, the amount of the expenditure reimbursed is not treated as a current transfer in cash from the social security funds to households.

### Other social security benefits in kind (D.6312)

These consist of social transfers in kind, except reimbursements, made by social security funds to households. Most of other social security benefits in kind are likely to consist of medical or dental treatments, surgery, hospital accommodation, spectacles or contact lenses, medical appliances or equipment, and similar goods or services in the context of social risks or needs. The service is provided directly to the beneficiaries, without reimbursement, by market or non-market producers and should be valued accordingly. Any payments made by the householders themselves should be deducted.



### Social assistance benefits in kind (D.6313)

These consist of transfers in kind provided to households by government units or NPISHs that are similar in nature to social security benefits in kind but are not provided in the context of a social insurance scheme. Are included, if not covered by a social insurance scheme, social housing, dwelling allowance, day nurseries, professional training, reductions on transport prices (provided that there is a social purpose), and similar goods and services in the context of social risks or needs. Any payments made by the householders themselves should be deducted.

### Transfers of individual non-market goods or services (D.632)

### 4.106. Definition:

Transfers of individual non-market goods or services (D.632) consist of goods or services provided to individual households free or at prices which are not economically significant, by non-market producers of government units or NPISHs. They correspond to individual consumption expenditure of NPISHs and government (see paragraph 3.85.), less social benefits in kind (D.631) granted to households under social security or social assistance arrangements.

### 4.107. Time of recording of social benefits:

- a) in cash, they are recorded when the claims on the benefits are established:
- b) in kind, they are recorded at the time the services are provided, or at the time the changes of ownership of goods provided directly to households by non-market producers take place.
- 4.108. In the system of accounts, social benefits other than social transfers in kind (D.62) are recorded:
  - a) among uses in the secondary distribution of income account of the sectors granting the benefits;
  - among uses in the external account of primary incomes and current transfers (in the case of benefits granted by the rest of the world);
  - among resources in the secondary distribution of income account of households;

 d) among resources in the external account of primary incomes and current transfers (in the case of benefits granted to non-resident households).

Social transfers in kind (D.63) are recorded:

- a) among uses in the redistribution of income in kind account of the sectors granting the benefits;
- b) among resources in the redistribution of income in kind account of households.

The consumption of the goods and services transferred is recorded in the use of adjusted disposable income account.

By convention there are no social transfers in kind with the rest of the world (they are registered in D.62 social benefits other than social transfers in kind).

### **OTHER CURRENT TRANSFERS (D.7)**

### Net non-life insurance premiums (D.71)

#### 4.109. Definition:

Net non-life insurance premiums (D.71) are premiums payable under policies taken out by institutional units. The policies taken out by individual households are those taken out on their own initiative and for their own benefit, independently of their employers or government and outside any social insurance scheme<sup>7</sup>. Net non-life insurance premiums comprise both the actual premiums payable by policy holders to obtain insurance cover during the accounting period (premiums earned) and the premium supplements payable out of the property income attributed to insurance policy holders, after deducting the service charges of insurance enterprises arranging the insurance.

Net non-life insurance premiums are the amounts available to provide cover against various events or accidents resulting in damage to goods or property, or harm to persons as a result of natural or human causes (fires, floods, crashes, collisions, sinkings, theft, violence, accidents, sickness, etc.) or against financial losses resulting from events such as sickness, unemployment, accidents, etc.

4.110. Time of recording: Net non-life insurance premiums are recorded when they are earned.

<sup>7</sup> Life insurance premiums do not appear as such in the system of accounts. They are divided into: a) premiums constituting a form of social contribution (they are paid to social insurance schemes) b) individual life insurance premiums.

The former are included under the heading actual social contributions and the latter are not treated as distributive transactions. Both categories of life insurance premiums increase the insurance technical reserves which appear in the financial account and in the balance sheet.



The insurance premiums from which the service charges are deducted are those parts of the total premiums paid in the current period, or previous periods, that cover risks outstanding in the current period.

Premiums earned in the current period must be distinguished from the premiums due for payment during the current period, which are likely to cover risks in future periods as well as the current period.

- 4.111. In the system of accounts net non-life insurance premiums are recorded:
  - a) among uses in the secondary distribution of income account of resident policy holders;
  - among uses in the external account of primary incomes and current transfers (in the case of non-resident policy holders);
  - among resources in the secondary distribution of income account of resident insurance enterprises;
  - d) among resources in the external account of primary incomes and current transfers (in the case of non-resident insurance enterprises).

### Non-life insurance claims (D.72)

### 4.112. Definition:

Non-life insurance claims (D.72) represent the claims due under contracts in respect of non-life insurance<sup>8</sup>; that is, the amounts which insurance enterprises are obliged to pay in settlement of injuries or damage suffered by persons or goods (including fixed capital goods).

- 4.113. Non-life insurance claims do not include payments which constitute social benefits.
- 4.114. As the service charges on non-life insurance are calculated by subtracting claims due from the combined value of the premiums earned and premium supplements, it follows that the total claims due must equal the net non-life premiums receivable by an insurance enterprise during the same accounting period. This underlines the fact that the essential function of non-life insurance is to redistribute resources.

The settlement of a non-life insurance claim is treated as a transfer to the claimant. Such payments are always treated as current transfers, even when large sums may be involved as a result of the accidental destruction of a fixed asset or serious personal injury to an individual. The amounts received by claimants are usually not committed for any particular purpose and goods or assets which have been damaged or destroyed need not necessarily be repaired or replaced.

Some claims arise because of damage or injuries that the policy holders cause to the property or persons of third parties. In these cases, valid claims are recorded as being payable directly by the insurance enterprise to the injured parties and not indirectly via the policy holder.

- 4.115. Time of recording: Non-life insurance claims are recorded at the time the accident or other event insured against occurs.
- 4.116. In the system of accounts, they are recorded:
  - a) among uses in the secondary distribution of income account of resident insurance enterprises;
  - among uses in the external account of primary incomes and current transfers (in the case of non-resident insurance enterprises);
  - among resources in the secondary distribution of income account of the beneficiary sectors;
  - d) among resources in the external account of primary incomes and current transfers (in the case of non-resident beneficiaries).

### Current transfers within general government (D.73)

#### 4.117. Definition:

Current transfers within general government (D.73) include transfers between the different sub-sectors of general government (central government, state government, local government, social security funds) with the exception of taxes, subsidies, investment grants and other capital transfers.

4.118. Current transfers within general government do not include transactions on behalf of another unit; these are recorded only once in the accounts, in the resources of the beneficiary unit on whose behalf the transaction is made. This situation arises particularly when a government agency (e.g. a central government department) collects taxes which are automatically transferred, in total or in part, to another

<sup>8</sup> Life insurance claims do not appear as such in the system of accounts. They are divided into: a) claims constituting a form of social benefits

b) individual life insurance claims.

The former are included under the heading social benefits other than social transfers in kind and the latter are not treated as distributive transactions. Both categories of life insurance claims reduce the insurance technical reserves which appear in the financial account, and in the balance sheet.



government agency (e.g. a local authority). In this case, the tax receipts destined for the other government agency are shown as if they were collected directly by that agency and not as a current transfer within general government. This solution applies a fortiori in the case of taxes destined for another government agency which take the form of additional rates superimposed on taxes levied by central government. Delays in remitting the taxes from the first to the second government unit give rise to entries under 'other accounts receivable/payable' in the Financial Account.

On the other hand, transfers of tax receipts which form part of a block transfer from central government to another government agency are included in current transfers within general government. These transfers do not correspond to any specific category of taxes and they are not made automatically but mainly through certain funds (county and local authority funds) in accordance with scales of apportionment laid down by central government.

- 4.119. Time of recording: Current transfers within general government are recorded at the time the regulations in force stipulate they are to be made.
- 4.120. In the system of accounts, current transfers within general government are recorded among uses and resources in the secondary distribution of income account of the sub-sectors of general government<sup>9</sup>.

### Current international cooperation (D.74)

### 4.121. Definition:

Current international co-operation (D.74) includes all transfers in cash or in kind between general government and governments or international organisations<sup>10</sup> in the rest of the world, except investment grants and other capital transfers.

### 4.122. Heading D.74 covers:

- a) the non-tax contributions of the government to the Institutions of the European Union, except the 'GNP' based fourth own resource<sup>11</sup>;
- b) the contributions of the government to international organisations (excluding taxes

- payable by member governments to supranational organisations);
- c) any current transfers which general government may receive from the institutions or organisations referred to under a) and b)<sup>12</sup>;
- d) current transfers between governments, either in cash (e.g. payments intended to finance the budget deficits of foreign countries or overseas territories) or in kind (e.g. counterpart of gifts of food, military equipment, emergency aid after natural disasters in the form of food, clothing, medicines, etc.);
- e) wages and salaries paid by a government, an Institution of the European Union or an international organisation, to advisers or technical assistance experts made available to developing countries.

Current international cooperation includes transfers between general government and international organisations located in the country, as international organisations are not treated as resident institutional units of the countries in which they are located.

- 4.123. Time of recording: The time the regulations in force stipulate the transfers are to be made (obligatory transfers), or the time the transfers are made (voluntary transfers).
- 4.124. In the system of accounts, current international cooperation is recorded:
  - a) among uses and resources in the secondary distribution of income account of the general government sector;
  - b) among uses and resources in the external account of primary incomes and current transfers.

### Miscellaneous current transfers (D.75)

### Current transfers to NPISHs

### 4.125. Definition:

Current transfers to NPISHs include all voluntary contributions (other than legacies), membership subscriptions and financial assistance which NPISHs receive from households (in-

<sup>9</sup> Current transfers within general government are flows internal to the general government sector, and do not appear in a consolidated account for the sector as a whole.

<sup>10</sup> International organisations, in the sense used in the system, derive their authority either directly from the national States which are their members or indirectly from them through other international organisations whose members are national States.

<sup>11</sup> The levies paid by resident producer units to the Institutions of the European Union are recorded in the accounts as taxes on production paid to the rest of the world; GNP based fourth own resource created by the Council Decision of 24 June 1988 on the system of the Communities' own resources is classified in D.75 Miscellaneous current transfers.

<sup>12</sup> The current transfers which the Institutions of the European Union make directly to resident market producer units are shown as subsidies paid by the rest of the world.



cluding non-resident households) and, to a lesser extent, from other units.

### 4.126. The following are included:

- a) regular subscriptions paid by households to trade unions and political, sporting, cultural, religious and similar organisations classified in the sector NPISHs;
- b) voluntary contributions (other than legacies) from households, corporate enterprises and the rest of the world to NPISHs, including transfers in kind in the form of gifts of food, clothing, blankets, medicines, etc. to charities for distribution to resident or non resident households;
- assistance and grants from general government, other than transfers made for the specific purpose of financing capital expenditure, which are shown under investment grants.

Excluded are payments of membership dues or subscriptions to market NPIs serving businesses, such as chambers of commerce or trade associations, which are treated as payments for services rendered.

- 4.127. Time of recording: Current transfers to NPISHs are recorded at the time they are made.
- 4.128. In the system of accounts, current transfers to NPISHs are recorded:
  - a) among uses in the secondary distribution of income account of the contributing sectors;
  - among uses in the external account of primary incomes and current transfers;
  - among resources in the secondary distribution of income account of the NPISHs sector.

### Current transfers between households

#### 4.129. Definition:

Current transfer between households consist of all current transfers in cash or in kind made, or received, by resident households to, or from, other resident or non-resident households. In particular, these comprise remittances by emigrants or workers permanently settled abroad (or working abroad for a period of a year or longer) to members of their family living in their country of origin, or by parents to children in another location.

- 4.130. Time of recording: The time the transfers occur.
- 4.131. In the system of accounts, current transfers between households are recorded:
  - a) among uses and resources in the secondary distribution of income account of households;

b) among uses and resources in the external account of primary incomes and current transfers.

### Fines and penalties

### 4.132. Definition:

Fines and penalties imposed on institutional units by courts of law or quasi-judicial bodies are treated as compulsory current transfers.

### 4.133. Not included under this heading are:

- a) fines and penalties imposed by tax authorities for the evasion or late payment of taxes, which cannot usually be distinguished from the taxes themselves;
- b) payments of fees to obtain licences, such payments being either taxes or payments for services rendered by government units (see D.29 and D.59).
- 4.134. Time of recording: Fines and penalties are recorded at the time the liabilities arise.

### Lotteries and gambling

4.135. The amounts paid for lottery tickets or placed in bets consist of two elements: the payment of a service charge to the unit organising the lottery or gambling and a residual current transfer that is paid out to the winners. The service charge may be quite substantial and may have to cover taxes on the production of gambling services. The transfers are regarded in the system as taking place directly between those participating in the lottery or gambling, that is, between households. When non-resident households take part there may be significant net transfers between the household sector and the rest of the world. The current transfers are recorded at the time they are made.

### Payments of compensation

### 4.136. Definition:

Payments of compensation consist of current transfers paid by institutional units to other institutional units in compensation for injury to persons or damage to property caused by the former, excluding payments of non-life insurance claims. Payments of compensation could be either compulsory payments awarded by a court of law, or ex gratia payments agreed out of court. This heading covers ex gratia payments made by government units or NPISHs in compensation for injuries or damage caused by natural disasters other than those classified as capital transfers.



4.137. Time of recording: Payments of compensation are recorded when they are made (ex gratia payments) or when they are to be made (compulsory payments).

### GNP based fourth own resource

4.138. The 'GNP based fourth own resource' created by the Council Decision of 24 June 1988 on the system of Communities' own resources is a current transfer paid by the general government of each Member State to the Institutions of the European Union.

It is a residual contribution to the budget of those Institutions, which is assessed on the levels of GNP of each of the countries.

Time of recording: GNP based fourth own resource is recorded when it is to be paid.

In the system of accounts, GNP based fourth own resource appears:

- a) among uses in the secondary distribution of income account of general government;
- b) among resources in the external account of primary incomes and current transfers.

### Other

- 4.139. a) Current transfers from NPISHs to general government which are not taxes;
  - b) payments by general government to public enterprises classified in the sector non-financial corporate and quasi-corporate enterprises intended to cover abnormal pension charges;
  - c) travelling fellowships and awards paid to resident or non-resident households by general government or NPISHs;
  - d) bonus payments on savings granted at intervals by general government to households in order to reward them for their saving during the period;
  - e) the refunds by households of expenditure incurred on their behalf by social welfare organisations;
  - f) current transfers from NPISHs to the rest of the world;
  - g) sponsoring by corporations if those payments cannot be regarded as purchases of advertising or other services (for instance, transfers for a good cause, or scholarships);
  - h) current transfers from general government to households in their capacity as consumers, if not recorded as social benefits.
- 4.140. Time of recording: These transfers are recorded when they are made, except those

from or to general government, which are recorded when they are to be made.

In the system of accounts, miscellaneous current transfers appear:

- a) among resources and uses in the secondary distribution of income account of all sectors;
- b) among resources and uses in the external account of primary incomes and current transfers.

# ADJUSTMENT FOR THE CHANGE IN THE NET EQUITY OF HOUSEHOLDS IN PENSION FUNDS RESERVES (D.8)

### 4.141. Definition:

The adjustment for the change in the net equity of households in pension funds reserves (D.8) represents the adjustment needed to make appear in the saving of households the change in the actuarial reserves on which households have a definite claim (a claim which re-appears at the financial level as an asset under heading E.61) and which are fed by premiums and contributions recorded in the secondary distribution of income account as social contributions.

4.142. Since households are treated in the financial accounts and balance sheets of the system as owning the reserves of private funded schemes, both autonomous and non-autonomous, an adjustment item is necessary to ensure that any excess of pension contributions over pension receipts (i.e. of 'transfers' payable over 'transfers' receivable) does not affect household saving.

In order to neutralise this effect, an adjustment equal to:

the total value of the actual social contributions in respect of pensions payable into private funded pension schemes

plus the total value of contribution supplements payable out of the property income attributed to insurance policy holders

minus the value of the associated service charges

minus the total value of the pensions paid out as social insurance benefits by private funded pension schemes



is added to the disposable income, or adjusted disposable income, of households in the use of income accounts before arriving at saving.

In this way, the saving of households is the same as what it would be if pension contributions and pension receipts had not been recorded as current transfers in the secondary distribution of income account. This adjustment item is necessary in order to reconcile the saving of households with the change in their net equity in pension funds reserves recorded in the financial account of the system. Opposite adjustments are, of course, needed in the use of income accounts of the insurance enterprises or autonomous pension funds or employers maintaining non autonomous pension funds.

- 4.143. Time of recording: The adjustment is recorded according to the flows which compose it.
- 4.144. In the system of accounts, the adjustment for the change in the net equity of households in pension funds reserves is recorded:
  - a) among uses in the use of income accounts of the insurance enterprises sector and other sectors administering non-autonomous pension funds;
  - among uses in the external account of primary incomes and current transfers (in the case of non-resident institutions);
  - c) among resources in the use of income accounts of the households sector;
  - d) among resources in the external account of primary incomes and current transfers (in the case of non-resident households).

### **CAPITAL TRANSFERS (D.9)**

4.145. Capital transfers are different from current transfers by the fact that they involve the acquisition or disposal of an asset, or assets, by at least one of the parties to the transaction. Whether made in cash or in kind, they should result in a commensurate change in the financial, or non-financial, assets shown in the balance sheets of one or both parties to the transaction.

### 4.146. Definition:

A capital transfer in kind consists of the transfer of ownership of an asset (other than inventories and cash), or the cancellation of a liability by a creditor, without any counterpart being received in return.

A capital transfer in cash consists of the transfer of cash that the first party has raised by disposing of an asset, or assets (other than inventories), or that the second party is expected, or required, to use for the acquisition of an asset, or assets (other than inventories). The second party, the recipient, is often obliged to use the cash to acquire an asset, or assets, as a condition on which the transfer is made.

4.147. Capital transfers cover capital taxes (D.91), investment grants (D.92) and other capital transfers (D.99).

### Capital taxes (D.91)

### 4.148. Definition:

Capital taxes (D.91) consist of taxes levied at irregular and very infrequent intervals on the values of the assets or net worth owned by institutional units or on the values of assets transferred between institutional units as a result of legacies, gifts *inter vivos* or other transfers.

### 4.149. Capital taxes include:

- a) taxes on capital transfers: inheritance taxes, death duties and taxes on gifts inter vivos, which are deemed to be levied on the capital of the beneficiaries (except taxes on sales of assets, as these are not transfers);
- b) capital levies: occasional and exceptional levies on assets or net worth owned by institutional units<sup>13</sup>. These include betterment levies, that is taxes on the increase in the value of agricultural land due to planning permission to develop the land for commercial or residential purposes.
- 4.150. Time of recording: Capital taxes are recorded at the time when the tax liabilities arise.
- 4.151. In the system of accounts, capital taxes are recorded:
  - a) among changes in liabilities and net worth
     (-) in the capital account of the sectors in which the taxpayers are classified;
  - b) among changes in liabilities and net worth (+) in the capital account of general government;
  - c) among changes in liabilities and net worth in the capital account of the rest of the world.

<sup>13</sup> However, capital gains taxes are shown in the accounts under the heading current taxes on income, wealth, etc.



### Investment grants (D.92)

### 4.152. Definition:

Investment grants (D.92) consist of capital transfers in cash or in kind made by governments or by the rest of the world<sup>14</sup> to other resident or non-resident institutional units to finance all or part of the costs of their acquiring fixed assets.

- 4.153. Investment grants can be made in cash or in kind. Investment grants in kind consist of transfers of transport equipment, machinery and other equipment by governments to other resident or non-resident units and also the direct provision of buildings or other structures for resident or non-resident units.
- 4.154. Investment grants do not include transfers of military equipment in the form of weapons or equipment whose sole function is to fire such weapons, as they are not classified as fixed assets.
- 4.155. The value of capital formation carried out by general government for the benefit of other sectors of the economy is also to be shown under investment grants whenever the beneficiary is identifiable and becomes the owner of the capital. In such cases, the capital formation is recorded among changes in assets in the capital account of the beneficiary and is financed by an investment grant which appears among changes in liabilities and net worth in the same account.
- 4.156. Heading D.92 includes not only single non-recurrent payments designed to finance capital formation during the same period, but also instalment payments in respect of capital formation carried out during an earlier period. Thus, those parts of the annual payments by general government which represent the amortisation of debts, contracted by enterprises for the purpose of capital formation projects for whose amortisation the government has assumed total or partial responsibility, are also treated as investment grants.

Grants for interest relief made by general government are, however, excluded, even when the object of the relief is to encourage capital formation. In practice, the assumption by public authorities of part of the interest charges constitutes, like the flow of interest itself, a current distributive transaction. Nevertheless, when a grant serves the dual purpose of financing the amortisation of the debt contracted and

- the payment of the interest on the capital borrowed, and when it is not possible to separate these two elements, the whole of the grant is treated in the accounts as an investment grant.
- 4.157. Investment grants to the sector non-financial corporate and quasi-corporate enterprises include, in addition to grants to private enterprises, capital grants to public enterprises recognised as independent legal entities, provided that the government department which makes the grant does not retain a claim against the public enterprise.
- 4.158. Investment grants to the households sector include equipment and modernisation grants to businesses other than corporate or quasicorporate enterprises and grants to households for the construction, purchase and improvement of dwellings.
- 4.159. Investment grants to general government include all payments (except grants for interest relief) made to sub-sectors of general government for the purpose of financing capital formation. The most important examples are transfers from central government to local authorities for the specific purpose of financing their gross fixed capital formation. It should be emphasised that transfers of a general nature intended for various or indeterminate purposes are shown under current transfers within general government, even if they are partly used to cover expenditure on capital formation.
- 4.160. Investment grants to non-profit institutions from general government and from the rest of the world are distinguished from current transfers to non-profit institutions by using the same criterion.
- 4.161. Investment grants to the rest of the world should also be restricted to transfers with the specific objective of financing capital formation by non-resident units. They include, for example, unrequited transfers for the construction of bridges, roads, factories, hospitals or schools in developing countries, or for constructing buildings for international organisations. They may comprise instalment payments over a period of time as well as single payments. This heading also covers the supply of fixed capital goods free of charge.
- 4.162. Time of recording: Investment grants in cash are recorded when the payment is due to be

<sup>14</sup> Investment grants made by the rest of the world include those paid directly by the Institutions of the European Union (e.g. certain transfers made by the European Agricultural Guidance and Guarantee Fund, EAGGF-Guidance Section).

<sup>15</sup> Investment grants within general government are flows internal to the general government sector and do not appear in a consolidated account for the sector as whole.



- made. Investment grants in kind are recorded when the ownership of the asset is transferred.
- 4.163. In the system of accounts, investment grants are recorded:
  - a) among changes in liabilities and net worth
     (-) in the capital account of general government;
  - b) among changes in liabilities and net worth
     (+) in the capital account of the sectors receiving the grants;
  - among changes in liabilities and net worth in the capital account of the rest of the world.

### Other capital transfers (D.99)

### 4.164. Definition:

Other capital transfers (D.99) cover transfers other than investment grants and capital taxes which do not themselves redistribute income but redistribute saving or wealth among the different sectors or sub-sectors of the economy or the rest of the world.

- 4.165. Other capital transfers include the following transactions:
  - a) payments by general government or by the rest of the world to the owners of capital goods destroyed or damaged by acts of war, other political events or natural disasters (floods etc.);
  - b) transfers from general government to nonfinancial corporate and quasi-corporate enterprises to cover losses accumulated over several financial years or exceptional losses from causes beyond the control of the enterprise;
  - c) transfers between sub-sectors of general government designed to cover unexpected expenditure or accumulated deficits 16;
  - d) non-recurrent bonus payments on savings granted by general government to households to reward them for their savings carried out over a period of several years;
  - e) legacies, large gifts inter vivos and donations between units belonging to different sectors, including legacies or large gifts to NPIs (for example, gifts to universities to cover the costs of building new residential colleges, libraries, laboratories, etc.);
  - f) the counterpart transaction of cancellation of debts by agreement between institutional units belonging to different sectors or sub-

sectors (for example, the cancellation by the government of a debt owed to it by a foreign country; payments in fulfilment of guarantees which free defaulting debtors from their obligations). Such cancellations by mutual agreement are treated as a capital transfer from the creditor to the debtor equal to the value of the outstanding debt at the time of cancellation. Likewise the counterpart transaction of debt assumption is another capital transfer. However, excluded are:

- cancellation of financial claims against and assumption of liabilities from quasicorporations by the owner of the quasicorporation. This case is treated as a transaction in shares and other equity (see paragraph 5.16.);
- (2) Debt cancellation against and debt assumption from a public corporation by government which disappears as an institutional unit in the system. This case is recorded in the other changes in the volume of assets account (see paragraphs 5.16., 6.29. and 6.30.);
- (3) Debt cancellation against and debt assumption from a public corporation by government as a part of an ongoing process of privatisation to be achieved in a short term perspective. This case is treated as a transaction in shares and other equity (see paragraph 5.16.).

The writing-off of debt is not a transaction between institutional units and therefore does not appear in either the capital account or the financial account of the system. If the creditor decides such a write-off, it should be recorded in the other changes in the volume of assets accounts of the creditor and the debtor (see paragraph 6.27. d)). Provisions for bad debt are treated as bookkeeping entries that are internal to the institutional producer unit and do not appear anywhere in the system. The unilateral repudiation of debt by a debtor is also not a transaction and is not recognised in the system.

g) that part of realised capital gains (or losses) which is redistributed to another sector, as, for example, capital gains redistributed by insurance companies to households. However, the counterpart transactions of transfers to general government of the proceeds of privatisation made indirectly (through a

<sup>16</sup> These transfers between sub-sectors of general government are flows within the general government sector and do not appear in a consolidated account for the sector as a whole.



- holding company for example) have to be recorded as financial transactions in shares and other equity (F.5) and have therefore no direct impact on the level of net lending/net borrowing of the general government;
- h) major payments in compensation for extensive damage or serious injuries not covered by insurance policies (except payments by general government or by the rest of the world described in a)). The payments may be awarded by courts of law or settled out of court. They include payments of compensation for damage caused by major explosions, oil spillages, the side-effects of drugs, etc.;
- extraordinary payments into social insurance funds made by employers (including government) of by government (as part of its social function), in so far as these pay-

ments are designed to increase the actuarial reserves of these funds. The accompanying adjustment from social insurance funds to households is also recorded as other capital transfers (D.99) (see Annex III 'Insurance' paragraph 20).

### 4.166. Time of recording:

- a) other capital transfers in cash are recorded when the payment is due to be made;
- other capital transfers in kind are recorded when the ownership of the asset is transferred or the liability cancelled by the creditor
- 4.167. In the system of accounts, other capital transfers are shown among changes in liabilities and net worth in the capital account of sectors and of the rest of the world.

### **CHAPTER 5**

### FINANCIAL TRANSACTIONS

### 5.01. Definition:

Financial transactions are transactions in financial assets and liabilities between institutional units, and between them and the rest of the world.

- 5.02. Considering the definition of a transaction (see paragraph 1.33.), a financial transaction is an interaction between institutional units, or between an institutional unit and the rest of the world, by mutual agreement, involving a simultaneous creation or liquidation of a financial asset and the counterpart liability, or a change in ownership of a financial asset, or an assumption of a liability.
- 5.03. Financial assets are economic assets, comprising means of payment, financial claims and economic assets which are close to financial claims in nature.
- 5.04. Means of payment consist of monetary gold, special drawing rights, currency and transferable deposits.

Financial claims entitle their owners, the creditors, to receive a payment or series of payments without any counter-performance from other institutional units, the debtors, who have incurred the counterpart liabilities.

Examples of economic assets which are close to financial claims in nature are shares and other equity and partly contingent assets. The institutional unit issuing such a financial asset is considered to have incurred a counterpart liability.

- 5.05. Contingent assets are contractual arrangements between institutional units, and between them and the rest of the world, which specify one or more conditions which must be fulfilled before a financial transaction takes place. Examples are guarantees of payment by third parties, letters of credit, lines of credit, underwritten note issuance facilities (NIFs) and many of the derivative instruments. In the system, a contingent asset is a financial asset in cases where the contractual arrangement itself has a market value because it is tradable or can be offset on the market. Otherwise, a contingent asset is not recorded in the system<sup>1</sup>.
- 5.06. Seven categories of financial assets are distinguished: monetary gold and special drawing

- rights (AE.1), currency and deposits (AE.2), securities other than shares (AE.3), loans (AE.4), shares and other equity (AE.5), insurance technical reserves (AE.6) and other accounts receivable/payable (AE.7).
- 5.07. In the system, each financial asset has a counterpart liability, with the exception of those financial assets classified in the category monetary gold and special drawing rights (AF.1). Six categories of liabilities are distinguished corresponding to the categories of the counterpart financial assets.
- 5.08. The classification of financial transactions corresponds to the classification of financial assets and liabilities. Seven categories of financial transactions are distinguished: transactions in monetary gold and special drawing rights (E.1), transactions in currency and deposits (E.2), transactions in securities other than shares (E.3), transactions in loans (E.4), transactions in shares and other equity (E.5), transactions in insurance technical reserves (E.6) and transactions in other accounts receivable/payable (E.7).
- The financial assets held and the liabilities 5.09. outstanding at a particular point in time (of a sector or the rest of the world) are recorded in the balance sheet (see chapter 7.). Financial transactions result in changes in balance sheets. However, the changes between the opening balance sheet and the closing balance sheet may also include other flows (see chapter 6.). They are not due to interactions between institutional units, or between them and the rest of the world, by mutual agreement. The other flows are broken down into revaluations in financial assets and liabilities, and changes in the volume of financial assets and liabilities not due to financial transactions. The former are recorded in the revaluation account and the latter in the other changes in the volume of assets account under the categories catastrophic losses, uncompensated seizures, other volume changes in financial assets and liabilities n.e.c., and changes in classifications and structure.
- Financial transactions between institutional units are recorded in the financial accounts of the sectors involved. Financial transactions be-

Insurance technical reserves (AF.6) are unconditional liabilities of insurance corporations and pension funds. However, the counterpart financial assets of individual policy holders and beneficiaries are contingent assets in most cases.



tween institutional units and the rest of the world are recorded in the financial accounts of the sectors involved and the external financial account, that is the financial account of the rest of the world (see chapter 8.).

The financial account (of a sector or the rest of the world) shows on its left side acquisitions less disposals of financial assets, while its right side shows the incurrence of liabilities less their repayment. The balancing item of the financial account, that is net acquisition of financial assets less net incurrence of liabilities, is net lending (+)/net borrowing (-) (B.9).

- 5.11. The financial account of a sector may be consolidated or non-consolidated. The non-consolidated financial account of a sector shows the changes in financial assets and liabilities due to all financial transactions in which institutional units classified in the sector are involved. The consolidated financial account of a sector shows the changes in financial assets and liabilities due to financial transactions between institutional units classified in the sector under consideration and other institutional units or the rest of the world. Compared to the non-consolidated financial account, the financial transactions between institutional units classified in the sector under consideration are eliminated from the consolidated financial account. The external financial account is consolidated by definition.
- A financial transaction between two institu-5.12. tional units increases net lending/net borrowing of one institutional unit and, by the same amount, decreases net lending/net borrowing of the other institutional unit. Financial transactions between institutional units classified in the same sector do not change net lending/net borrowing of the sector. The consolidated and the non-consolidated financial account of a sector show the same amount of net lending/net borrowing. By the same token, financial transactions between institutional units do not change net lending/net borrowing of the total economy. It is of equal amount but opposite sign to net lending/net borrowing in the external financial account. Therefore, total net lending/net borrowing of all institutional units and the rest of the world is zero.
- 5.13. The financial account by debtor/creditor<sup>2</sup> (of a sector or the rest of the world) is an extension of the financial account, showing in addition a breakdown of the net acquisition of financial assets by debtor sector and a breakdown of the net incurrence of liabilities by creditor sector. Therefore, it provides information on debt-

or/creditor relationships and it is consistent with the financial balance sheet by debt-or/creditor (see paragraph 7.69.). In the case of financial transactions on secondary markets, however, it does not provide information on the institutional units to whom financial assets were sold or from whom financial assets were bought, that is to say the financial account by debtor/creditor provides not a complete answer on the question who is financing whom in an accounting period.

- 5.14. The financial account is the final account, in the full sequence of accounts that records transactions (see chapter 8.). Therefore, the financial account does not have a balancing item that is carried forward to another account. In the system, the balancing item of the financial account is identical with the balancing item of the capital account. In practice, a discrepancy will usually be found between them because they are calculated on the basis of different statistical data.
- 5.15. Financial transactions always have counterpart transactions in the system. Those counterparts may be other financial transactions or non-financial transactions.

The simultaneous rise or reduction of both financial assets and liabilities, or the exchange of one financial asset for another are recorded wholly within the financial account (of a sector or the rest of the world). In cases where a transaction and its counterpart are both financial transactions, they change the portfolio of financial assets and liabilities and they may change the totals of both financial assets and liabilities of the institutional units involved or the rest of the world, but they do not change net lending/net borrowing or net worth.

The counterparts of financial transactions may also be transactions in products (see chapter 3.), distributive transactions (see chapter 4.) or transactions in non-financial non-produced assets (see paragraph 6.06.). In cases where the counterpart transaction of a financial transaction is not a financial transaction, net lending/net borrowing of the institutional units involved or the rest of the world will change.

5.16. The counterpart transaction of a financial transaction may be a (current or a capital) transfer (see chapter 4.). In this case, the financial transaction involves a change in ownership of a financial asset, or an assumption of a liability as debtor (debt assumption), or the simultaneous liquidation of a financial asset and the counterpart liability (debt cancellation

<sup>2</sup> The 1993 SNA (11.103 – 11.111) uses the term detailed flow of funds account.



or debt forgiveness). The counterpart transaction of debt assumption and debt cancellation is classified in the category capital transfers (D.9) and is recorded in the capital account.

If the owner of a quasi-corporation assumes liabilities from or cancels financial claims against the quasi-corporation, the counterpart transaction of debt assumption or debt cancellation is a transaction in shares and other equity (F.5).

If government cancels or assumes debt from a public corporation which disappears as an institutional unit in the system, no transaction is recorded in the capital account or the financial account. In this case a flow is recorded in the other changes in the volume of assets account (chapter 6., 'Other flows').

If government cancels or assumes debt from a public corporation as part of an ongoing process of privatisation to be achieved in a short term perspective, the counterpart transaction is a transaction in shares and other equity. Privatisation means the giving up of control over that public corporation (see paragraph 2.26.) by the disposal of shares and other equity. Such a cancellation or assumption leads to an increase of the own funds (see paragraph 7.05.), regardless as to whether or not this increase of the own funds is due to an issue of shares and other equity.

The writing-off or writing-down of bad debts by creditors and the unilateral cancellation of a liability by a debtor (debt repudiation) are not classified as financial transactions because they do not involve interactions between institutional units, or between institutional units and the rest of the world, by mutual agreement. The writing-off or writing-down of bad debts by creditors is recorded in the other changes in the volume of assets account (see paragraph 6.27. d). Debt repudiation is not recognised in the system.

The counterpart transaction of a financial 5.17. transaction may be interest (D.41). Interest is receivable by the creditors and payable by the debtors of certain kinds of financial claims classified in the categories currency and deposits (AF.2), securities other than shares (AF.3), loans (AF.4) and other accounts receivable/payable (AF.7). In the system, interest is recorded on an accrual basis, that is to say interest is recorded as accruing continuously over time to the creditor on the amount of principal outstanding (see paragraph 4.50.). The counterpart transaction of an entry in interest (D.41) is always a financial transaction creating an additional financial claim of the creditor against the debtor. The effect of this financial transaction is that interest is reinvested. The actual payment of interest is not recorded in interest (D.41), but it involves a transaction relating to the change in ownership of the means of payment. The counterpart transaction is a financial transaction reducing the net financial claim of the creditor against the debtor. When accrued interest is not paid when due, this gives rise to interest arrears. As accrued interest is already recorded in the system, interest arrears do not change the total of financial assets or liabilities but possibly their classification (see paragraph 5.131.).

The counterpart transaction of a financial 5.18. transaction may be property income allocated but not distributed. Examples are interest (D.41) and dividends (D.421) received by mutual funds from the investments they have made and which are allocated but not disshareholders tributed to (see paragraphs 4.49. b and 4.54. b), reinvested earnings on direct foreign investment (D.43) and property income attributed to insurance policy holders (D.44) in case of individual life insurance policies not taken out under social insurance schemes. The effect of the counterpart financial transaction is that the (positive or negative) property income is reinvested.

# CLASSIFICATION OF FINANCIAL TRANSACTIONS

- 5.19. The financial transactions are classified in categories subdivided into sub-categories and some of which are further subdivided into sub-positions. The classification of the transactions in financial assets and liabilities corresponds to the classification of financial assets and liabilities (see paragraphs 5.06. – 5.08.). Therefore, the definitions of the categories, sub-categories and sub-positions and the supplementary explanations are provided only once in the ESA – in this section of the financial transactions chapter. The balance sheets chapter does not repeat the definitions and their explanations in its main text but it provides in its Annex 7.1 a summary of all assets and liabilities defined in the system.
- 5.20. The classification of financial transactions and of financial assets and liabilities is based primarily on the liquidity and the legal characteristics of the financial assets. The classification does not contain functional categories with the exception of a memorandum item related to direct foreign investment. The definitions of the categories, sub-categories and subpositions are in general independent of the classification of institutional units. As the need



Table 5.1 Classification of financial transactions

Classification of financial transactions			
Monetary gold and special drawing rights (SDRs)  Monetary gold  Special drawing rights (SD_Rs)	F.1	F.11 F.12	
Currency and deposits Currency Transferable deposits Other deposits	F.2	F.21 F.22 F.29	
Securities other than shares Securities other than shares, excluding financial derivatives Short-term Long-term Financial derivatives	F.3	E33	E331 E332
Loans Short-term Long-term	F.4	E41 E42	
Shares and other equity Shares and other equity, excluding mutual funds shares Quoted shares Unquoted shares Other equity Mutual funds shares	F.5	F.51	E.511 E.512 E.513
Insurance technical reserves  Net equity of households in life insurance reserves and in pension funds reserves  Net equity of households in life insurance reserves  Net equity of households in pension funds reserves		F.61	F.611 F.612
Prepayments of insurance premiums and reserves for outstanding claims  Other accounts receivable/payable  Trade credits and advances  Other		E.62 E.71 E.79	
Memorandum item: Direct foreign investment	F.m		

arises, however, the classification of financial assets and liabilities can be further detailed by a cross classification with the classification of institutional units. The class deposits between monetary financial institutions would be an example. The detail in which the classification of financial assets and liabilities may be employed depends on the institutional sector to be analysed.

5.21. Analyses of the monetary policy transmission channels may require to identify measures of money in the balance sheets and also in the financial accounts of the sectors and the rest of the world. However, the definitions of the measures of money applied vary among countries and in time. In addition, they are composed of components which in most of the cases do not correspond with the categories, sub-categories or sub-positions of financial

assets and liabilities as defined in the system. Moreover, the money-creating, money-holding and money-neutral sectors depend on the definition of the monetary aggregate under consideration. Therefore, measures of money are not defined in the system. Nevertheless, a method is provided in the Annex 5.1 to this chapter which allows to show any measure of money in the balance sheets and the financial accounts.

5.22. Innovations in financial markets have diminished the usefulness of a short-term/long-term distinction for financial assets and liabilities. However, when maturity analysis is important, such as for analysis of interest rates and asset yields, a breakdown of a range of maturities may be required. Therefore, maturity distinction is recognised as a secondary classification criterion when relevant.



### Definition:

Short-term financial assets (liabilities) are financial assets (liabilities) whose original maturity is normally one year or less, and in exceptional cases two years at the maximum<sup>3</sup>.

Long-term financial assets (liabilities) are financial assets (liabilities) whose original maturity is normally more than one year, and in exceptional cases more than two years at the minimum.

5.23. Many of the categories, sub-categories and sub-positions of the financial assets and liabilities may be broken down by the units in which they are denominated.

### Definition:

Financial assets (liabilities) in national currency are financial assets (liabilities) which are denominated in the currency unit(s) of the country's legal tender.

Financial assets (liabilities) in foreign currency are financial assets (liabilities) which are not denominated in the currency unit(s) of the country's legal tender.

Financial assets in foreign currency include financial assets denominated in a currency basket, for example ECU or SDR, and financial assets denominated in gold. A distinction between national and foreign currency is particularly useful for the category currency and deposits (AE2).

# Monetary Gold and special drawing rights (SDRs) (F.1)

- 5.24. Category F.1 consists of two sub-categories of financial transactions:
  - a) monetary gold (F.11);
  - b) special drawing rights (SDRs) (F.12).
- 5.25. The financial assets classified in the category monetary gold and SDRs (AE1) are the only financial assets for which there are no counterpart liabilities in the system. Therefore, transactions in monetary gold and SDRs (E1) always involve changes in ownership of financial assets (see paragraph 5.02.).

### Monetary gold (F.11)

5.26. Definition:

The sub-category monetary gold (E.11) consists of all transactions in monetary gold (AE.11) that is gold held as a component of foreign reserves by monetary authorities or by others who are subject to the effective control of the authorities.

5.27. The monetary authorities sector, which is based on a functional concept, consists of the sub-sector the central bank (S.121) and central government institutions, which carry out operations usually attributed to the central bank. Such operations include the issue of currency, maintenance and management of international reserves and the operation of exchange stabilisation funds.

Therefore, gold can normally be a financial asset only for the central bank or central government. However, in some circumstances, other financial corporations may hold title to gold that can only be sold with the specific consent of the monetary authorities. In such restricted circumstances, the concept of effective control can be applied to the gold holdings of financial corporations other than the central bank.

- 5.28. Monetary gold normally takes the form of bars with a purity of at least 995/1000.
- 5.29. Transactions in monetary gold consist predominantly of sales and purchases of monetary gold among monetary authorities. Purchases of monetary gold are recorded in the financial accounts of the domestic monetary authorities as increases in financial assets. The counterpart entries are decreases in financial assets of the rest of the world.
- 5.30. Transactions in non-monetary gold, that is in gold other than monetary gold, are treated as acquisitions less disposals of valuables (if the sole purpose is to provide a store of wealth) and otherwise as final or intermediate consumption and/or change in inventories. Transactions in non-monetary gold include transactions by the monetary authorities in gold that is not a component of their foreign reserves.
- 5.31. If monetary authorities add non-monetary gold to their holdings of monetary gold or release monetary gold from their holdings for non-monetary purposes, they are deemed to have monetised or demonetised gold, respectively. Monetisation or demonetisation of gold does not give rise to entries in the financial accounts; instead, the change in balance sheet positions is accounted for by entries in the other changes

<sup>3</sup> In certain cases, securities other than shares issued by the general government sector with a maturity up to five years may be classified as short-term.



in the volume of assets account as a reclassification, i.e. the reclassification of gold as valuables (AN.13) to monetary gold (AF.11) (see paragraph 6.32.). Demonetisation of gold is recorded symmetrically.

5.32. Deposits, securities and loans denominated in gold are treated as financial assets other than monetary gold and are classified along with similar financial assets in foreign currency in the appropriate category.

Non-monetary gold swaps, that is arrangements involving the temporary exchange of non-monetary gold for deposits, are treated as collateralized loans (see paragraph 5.81. e).

### Special drawing rights (SDRs) (F.12)

#### 5.33. Definition:

The sub-category special drawing rights (SDRs) (F.12) consists of all transactions in SDRs (AF.12) that is international reserve assets created by the International Monetary Fund (IMF) and allocated to its members to supplement existing reserve assets.

- 5.34. SDRs are not considered liabilities of the IMF, and IMF members to whom SDRs are allocated do not have an actual (unconditional) liability to repay their SDRs allocations. SDRs are held exclusively by official holders, which are normally central banks, and are transferable among participants in the IMF's Special Drawing Rights Department and other holders designated by the IMF (other central banks and certain international agencies). SDRs represent each holder's assured and unconditional right to obtain other reserve assets, especially foreign exchange.
- 5.35. Changes in SDRs hold by a monetary authority can arise through transactions in SDRs involving SDR payments to or receipts from the IMF, other participants in the IMF's Special Drawing Rights Department, or other holders. They are recorded in the financial accounts of the monetary authorities and the rest of the world, respectively. Changes in SDRs can also arise from changes in the value of SDRs to be recorded in the revaluation account, or from allocations and cancellations of SDRs to be recorded in the other changes in the volume of assets account (see paragraph 6.27. a).

### Currency and deposits (F.2)

#### 5.36. Definition:

The category currency and deposits (E.2) consists of all transactions in currency and deposits (AE.2) that is currency in circulation and all types of deposits in national and in foreign currency.

- 5.37. Category F.2 is divided into three sub-categories of financial transactions:
  - a) currency (F.21);
  - b) transferable deposits (F.22);
  - c) other deposits (F.29).

The distinction between transferable and non-transferable deposits may be difficult and not very useful analytically in some countries (for the distinction between deposits and loans see paragraphs 5.74. – 5.76.).

### Currency (F.21)

### 5.38. Definition:

The sub-category currency (F.21) consists of all transactions in currency (AF.21) that is notes and coins in circulation that are commonly used to make payments.

- 5.39. Sub-category AF.21 includes:
  - a) notes and coins in circulation issued by resident monetary authorities;
  - b) notes and coins in circulation issued by non-resident monetary authorities and held by residents.
- 5.40. Sub-category AF.21 does not include:
  - a) notes and coins that are not in circulation, for example, a central bank's stock of own notes or emergency stockpiles of notes;
  - b) commemorative coins that are not commonly used to make payment.
- 5.41. All sectors and the rest of the world may hold currency. It is issued by the central bank, central government, the rest of the world, and in exceptional cases other monetary financial institutions. Currency is deemed to be a liability of the issuing institutional unit.



### Transferable deposits (F.22)

### 5.42. Definition:

The sub-category transferable deposits (E.22) consists of all transactions in transferable deposits (AE.22) that is deposits (in national or in foreign currency) which are immediately convertible into currency or which are transferable by cheque, banker's order, debit entry or the like, both without any kind of significant restriction or penalty.

- 5.43. Sub-category AF.22 includes transferable deposits with resident and non-resident monetary financial institutions. They cover transferable deposits between monetary financial institutions, such as deposits which other monetary financial institutions hold with the central bank to satisfy compulsory reserve requirements, insofar as such deposits remain transferable, or working balances and foreign exchange deposits under swap arrangements or between other monetary financial institutions.
- 5.44. All sectors and the rest of the world may hold transferable deposits. They are liabilities predominantly of monetary financial institutions and the rest of the world, and sometimes of general government.

### Other deposits (F.29)

### 5.45. Definition:

The sub-category other deposits (E29) consists of all transactions in other deposits (AE29) that is deposits (in national or in foreign currency) other than transferable deposits. Other deposits cannot be used to make payments at any time and they are not convertible into currency or transferable deposits without any kind of significant restriction or penalty.

### 5.46. Sub-category AF.29 includes:

- a) time deposits. These deposits are not immediately disposable because they are subject to a fixed term or a period of prior notice before withdrawal. They include, for example, deposits with the central bank as a form of compulsory reserves to the extent that the depositors cannot realise them without notice or restriction;
- savings deposits, savings books, savings certificates or certificates of deposit all of which are not negotiable, or whose negotiability, while theoretically possible, is very restricted;

- c) deposits resulting from a savings scheme or contract. These deposits often involve an obligation on the part of the depositor to make regular payments over a given period, and the capital paid and interest accrued do not become available until a fixed term has elapsed. These deposits are sometimes combined with the issue, at the end of the savings period, of loans which are proportionate to the accumulated savings, for the purpose of buying or building a dwelling;
- d) evidence of deposit issued by savings and loan associations, building societies, credit unions, and the like, sometimes called shares, which are legally, or in practice, redeemable on demand or at relatively short notice;
- e) repayable margin payments related to financial derivatives which are liabilities of monetary financial institutions (see paragraph 5.81. c);
- f) short-term repurchase agreements (repos) which are liabilities of monetary financial institutions (see paragraph 5.81. d)<sup>4</sup>.
- 5.47. Sub-category AF.29 does not include negotiable certificates of deposit and negotiable savings certificates. They are classified in category securities other than shares, excluding financial derivatives (AF.33).

### 5.48. Sub-category AF.29 includes further:

- a) official ECUs held by the central bank. These financial assets consist of the ECUs issued by the EMI against monetary reserves from the central banks of the Member States for the purpose of implementing the EMS Agreement. These ECUs may be used by the EMI and the central banks of the Member States as a means of settlement and for transactions between them and the EMI. The EMI may grant to the monetary authorities of third countries and to international monetary institutions the status of Other Holders of ECUs<sup>5</sup>;
- b) financial claims or liabilities of the central bank arising from the very short-term financing mechanism and the short-term monetary support mechanism. They are administered by the EMI<sup>6</sup>;
- financial claims on the IMF that are components of international reserves and that are not evidenced by loans. They consist of an

<sup>4</sup> The 1993 SNA (11.32, 11.72 and 11.83) classifies repurchase agreements under loans unless they involve bank liabilities and are classified in national measures of broad money; in the latter case, repurchase agreements are classified under other deposits.

Articles 6.2 and 6.3 of the Protocol on the Statute of the European Monetary Institute annexed to the Treaty establishing the European Community.

<sup>6</sup> Article 6.1 second indent of the Protocol on the Statute of the European Monetary Institute annexed to the Treaty establishing the European Community.



IMF member's reserve tranche position which arises from the payment of part of a member's subscription in reserve assets and the Fund's net use of the member's currency;

- d) liabilities to the IMF that are not evidenced by loans. They consist of use of Fund credit within the IMF's General Resources Account; it measures the amount of a member's currency with the IMF that the member is obligated to repurchase.
- 5.49. All sectors and the rest of the world may hold other deposits. They are liabilities predominantly of monetary financial institutions and the rest of the world, but also of other sectors, for example, general government (see paragraphs 5.74. 5.76.).

### Securities other than shares (F.3)

### 5.50. Definition:

The category securities other than shares (E3) consists of all transactions in securities other than shares (AE3) that is financial assets which are bearer instruments, are usually negotiable and traded on secondary markets or can be offset on the market, and do not grant the holder any ownership rights in the institutional unit issuing them.

- 5.51. Category AF.3 covers financial assets which are typically represented by documents intended to circulate, and whose nominal value is determined on issue. It includes bills, bonds, certificates of deposit, commercial paper, debentures, financial derivatives, and similar instruments normally traded in the financial markets (for the distinction between securities other than shares and loans see paragraphs 5.77. 5.80.).
- 5.52. All sectors and the rest of the world may hold securities other than shares as financial assets. They are liabilities predominantly of financial and non-financial corporations, central, state and local government, and the rest of the world.
- 5.53. Category F.3 is divided into two sub-categories of financial transactions<sup>7</sup>:
  - a) securities other than shares, excluding financial derivatives (F.33);
  - b) financial derivatives (F.34).

### Securities other than shares, excluding financial derivatives (F.33)

#### 5.54. Definition:

The sub-category securities other than shares excluding financial derivatives (E33) consists of all transactions in securities other than shares excluding financial derivatives (AE33), that is securities other than shares which give the holder the unconditional right to a fixed or contractually determined variable money income in the form of coupon payments (interest) and/or a stated fixed sum on a specified date or dates or starting from a date fixed at the time of issue.

- 5.55. Sub-category F.33 may be divided, when relevant, into two sub-positions of financial transactions:
  - a) short-term securities other than shares, excluding financial derivatives (F.331);
  - b) long-term securities other than shares, excluding financial derivatives (F.332).

### Short-term securities other than shares, excluding financial derivatives (F.331)

### 5.56. Definition:

The sub-position short-term securities other than shares excluding financial derivatives (E331) consists of all transactions in short-term securities other than shares excluding financial derivatives (AE331) that is securities other than shares with a short-term original maturity (see paragraph 5.22.) except financial derivatives.

- 5.57. Short-term securities other than financial derivatives are generally issued at a discount.
- 5.58. Sub-position AF.331 includes:
  - a) treasury bills and other short-term paper issued by general government, including those which are taken up by other monetary financial institutions to satisfy their compulsory reserve requirements;
  - b) negotiable short-term paper issued by financial and by non-financial corporations. A variety of terms are used for such paper including: commercial paper, commercial bills, promissory notes, bills of trade, bills of exchange and certificates of deposit;
  - c) short-term securities issued under longterm underwritten note issuance facilities (NIFs);

The 1993 SNA (11.79, 11.80 and 11.81) recommends an optional subclassification of transactions in securities other than shares by maturity into short-term (F.31) and long-term (F.32). However, the 1993 SNA (11.82) provides for an additional optional subclassification of transactions in securities other than shares showing transactions in financial derivatives separately where they are important from the point of view of analysis and policy. This second option is adopted in the ESA. It also facilitates the linkage to the sub-category debt securities as defined in the 1993 Balance of Payments Manual, which divides debt securities into bonds, notes, money market instruments and financial derivatives. The codes F.31 and F.32 are not used in the ESA to avoid confusion with the 1993 SNA codes.



- d) bankers' acceptances (BAs). A BA involves the acceptance by financial corporations of drafts, commercial bills or bills of exchange issued by non-financial corporations and the unconditional promise to pay a specific amount at a specified date. The BA represents an unconditional financial claim on the part of the holder and an unconditional liability on the part of the accepting financial corporation. The financial corporation's counterpart transaction is a transaction in a short-term loan made by the financial corporation to its customer. For this reason it is recommended that BAs be treated as an actual liability of the accepting financial corporation and as a financial asset of the holder, even though no funds may have been exchanged. Flexibility in the application of this recommendation will be required to take national practices and variations in the nature of these instruments into account.
- 5.59. Sub-position AF.331 does not include securities whose negotiability, while theoretically possible, is very restricted in practice and which are therefore classified in the sub-categories other deposits (AF.29) or short-term loans (AF.41) as appropriate (see paragraphs 5.74. 5.76.).

### Long-term securities other than shares, excluding financial derivatives (F.332)

### 5.60. Definition:

The sub-position long-term securities other than shares excluding financial derivatives (E332) consists of all transactions in long-term securities other than shares excluding financial derivatives (AE332) that is securities other than shares with a long-term original maturity (see paragraph 5.22.) except financial derivatives.

- 5.61. Long-term securities are generally issued with coupons.
- 5.62. Sub-position AF.332 includes:
  - a) bearer bonds:
  - b) subordinated bonds, often referred to as subordinated debt;
  - bonds with optional maturity dates, the latest of which is more than one year away;
  - d) undated or perpetual bonds;
  - e) floating rate notes (FRNs);
  - f) index-linked securities, where the value of the principal is linked to a price index, the price of a commodity, or to an exchange rate index;
  - g) deep-discount bonds and zero-coupon bonds;

- h) eurobonds. A bond issue that is placed simultaneously on the market of at least two countries and is denominated in a currency which need not be that of either, usually through international syndicates of financial corporations of several countries;
- i) privately issued bonds, that is bonds restricted by bilateral agreement to certain investors, if they are at least potentially transferable; if not, they are treated as longterm loans;
- j) loans that have become negotiable de facto. This should be interpreted to mean only if they are traded on an organised secondary market (see paragraph 5.79.);
- k) securities resulting from the conversion of loans. A conversion involves two financial transactions: the liquidation of the loan and the creation of the new securities;
- l) debentures and loan stock convertible into shares, whether shares of the issuing corporation or shares of another corporation, so long as they have not yet been converted. A conversion involves two financial transactions: the liquidation of the debenture or loan stock and the share issue. Where separable from the underlying bond, the conversion option should be regarded as a separate financial asset classified in the subcategory financial derivatives (AE.34) (see paragraphs 5.67. a and 5.67. b);
- m) shares or stocks that pay a fixed income but do not provide for participation in the distribution of the residual value of a corporation on dissolution, including non participating preference shares.
- 5.63. Sub-position AF.332 includes further financial assets issued as part of the securitization of loans, mortgages, credit card debt, accounts receivable and other assets. Sometimes the new security is issued as replacement for the original asset, which is effectively liquidated. Alternatively, the original asset is transferred to another institutional unit and the new securities replace the original asset on the original institutional unit's balance sheet. In this case the original asset should be recorded on the balance sheet of the new institutional unit that holds it.



- 5.64. Sub-position F.332 does not include:
  - a) transactions in securities as part of repurchase agreements. Repurchase agreements are classified in the sub-category other deposits (see paragraph 5.46. f) or in the category loans (see paragraph 5.81. d) depending on the institutional units involved. The stock lent or subject to repurchase does not change balance sheet and remains classified in AF.332;
  - b) transactions in non-negotiable securities.
     They are classified in sub-category long-term loans;
  - c) transactions in non-negotiable loans, including those which have been sold to a third party, but for which no organised secondary market exist (see paragraph 5.79.).

### Financial derivatives (F.34)

### 5.65. Definition:

The sub-category financial derivatives (F.34) consists of all transactions in financial derivatives (AF.34) that is financial assets based on or derived from a different underlying instrument. The underlying instrument is usually another financial asset, but may also be a commodity or an index.

- 5.66. Financial derivatives are also referred to as secondary instruments and since risk avoidance is frequently a motivation for their creation, they are also referred to as hedging instruments. Only those secondary instruments, which have a market value because they are tradable or can be offset on the market, are financial assets in the system and are classified in the sub-category AF.34 (see paragraph 5.05.).
- 5.67. Sub-category AF.34 includes:
  - a) options, tradable and over-the-counter (OTC). Options are contingent assets which give their holders the right, but not the obligation, to purchase from (in the case of a call option) or to sell to (in the case of a put option) the issuer of the option (the option writer) financial or non-financial assets (the underlying instrument) at a predetermined price (the strike price) within a given time span (American option) or on a given date (European option). The purchaser of the option pays a premium (the option price) for the commitment of the option writer to sell or to purchase the specified amount of the underlying asset or to provide, on demand of the purchaser, appropriate remuneration. By convention, that commitment is treated as a liability of the option writer because the option price

- represents the current cost to the option writer of buying out his contingent liability;
- b) warrants. They are a form of tradable options, which give their holders the right to purchase from the issuer of the warrant (usually a corporation) a certain number of shares or bonds under specified conditions for a designated period of time. There are also currency warrants, the value of which is based on the amount of one currency required to purchase another currency at or before the expiration date of the warrant and cross-currency warrants tied to third currencies. By convention, the issuer of the warrant is considered to have incurred a liability representing the current cost of buying out the issuer's contingent liability;
- c) futures, but only if they have a market value because they are tradable or can be offset. Futures are commitments to deliver, or to take delivery of, a specified quantity of a standard grade of a commodity, foreign exchange, or a security at a fixed price and for a specified delivery date or period. Futures may also be based on an index rather than a specific financial or non-financial asset;
- d) swaps, but only if they have a market value because they are tradable or can be offset. Swaps are contractual arrangements between two parties who agree to exchange, over time and according to predetermined rules, streams of payment on the same amount of indebtedness. The two most prevalent varieties are interest rate swaps and currency swaps. Interest rate swaps involve an exchange of interest payments of different character, such as fixed rate for floating rate, two different floating rates, fixed rate in one currency and floating rate in another, etc. (see paragraph 4.47.). Currency swaps involve an exchange of specified amounts of two different currencies with subsequent repayments, which include both interest and repayment flows, over time according to predetermined rules;
- e) forward rate agreements (FRAs), but only if they have a market value because they are tradable or can be offset. FRAs are contractual arrangements in which two parties, in order to protect themselves against interest rate changes, agree on an interest rate to be paid, at a specified settlement date, on a notional amount of principal that is never exchanged. The payments are related to the difference between the agreed forward rate agreement rate and the prevailing market rate at the time of settlement. They are



recorded as property income in the system (see paragraph 4.47.).

- 5.68. Sub-category AF.34 does not include:
  - a) the underlying instrument upon which the financial derivative is based;
  - b) repayable margin payments related to financial derivatives. They are classified in other deposits (AE29) (see paragraph 5.46. e) or loans (AE4) (see paragraph 5.81. c) depending on the institutional units involved;
  - secondary instruments, which are not tradable and cannot be offset on the market.

### Loans (F.4)

### 5.69. Definition:

The category loans (E.4) consists of all transactions in loans (AE.4) that is financial assets created when creditors lend funds to debtors, either directly or through brokers, which are either evidenced by non-negotiable documents or not evidenced by documents.

- 5.70. Generally loans are characterised by the following features:
  - a) the conditions governing a loan are either fixed by the financial corporation granting the loan or negotiated by the lender and the borrower directly or through a broker;
  - b) the initiative concerning a loan normally lies with the borrower;
  - a loan is an unconditional debt to the creditor which has to be repaid at maturity and which is interest-bearing.
- 5.71. Category F.4 may be divided, when relevant, into two sub-categories of financial transactions:
  - a) short-term loans (F.41);
  - b) long-term loans (F.42).

### Short-term loans (F.41)

### 5.72. Definition:

The sub-category short-term loans (E41) consists of all transactions in short-term loans (AE41) that is loans with a short-term original maturity (see paragraph 5.22.) and loans repayable on demand.

### Long-term loans (F.42)

### 5.73. Definition:

The sub-category long-term loans (E42) consists of all transactions in long-term loans (AE42) that is loans with a long-term original maturity (see paragraph 5.22.).

- 5.74. The distinction between transactions in loans (F.4) and transactions in deposits (F.22, F.29) may often be based on the criterion who is taking the initiative for the transaction. In cases where the initiative is taken by a borrower, the transaction is to classify in the category loans. In cases where the initiative is taken by a lender, the transaction is to classify in one of the deposit sub-categories. However, the criterion of who is taking the initiative is often a matter of judgement.
- 5.75. By convention, short-term loans granted to monetary financial institutions, resident or non-resident, are normally classified in one of the deposit sub-categories (AF.22, AF.29), and short-term deposits accepted by institutional units other than monetary financial institutions, resident or non-resident, are normally classified in sub-category short-term loans (AF.41). Therefore, deposits are liabilities predominantly of resident and non-resident monetary financial institutions (see paragraphs 5.44. and 5.49.), while monetary financial institutions normally have no short-term loan liabilities in the system.
- 5.76. It might be useful analytically to allow for exceptions to the above conventions. Examples are savings deposits with general government and non-monetary gold swaps between monetary financial institutions (see paragraph 5.81. e)<sup>8</sup>.
- 5.77. The distinction between transactions in loans (F.4) and transactions in securities other than shares (F.3) can be based on the degree of marketability of the financial assets and its implications.
- 5.78. Security issues consist of a large number of identical documents, each evidencing a round sum, which together form the total amount borrowed. Compared with this, loans are evidenced in most cases by a single document and transactions in loans are carried out between one creditor and one debtor. In the case of syndicated loans, however, the loan is granted by several creditors.
- 5.79. Secondary trade in loans exists. However, individual loans are only traded incidentally. In cases where a loan becomes negotiable on an organised market, it is to classify in the category

Foreign exchange swaps between the central bank and other monetary financial institutions, that is a central bank acquires foreign exchange from an other monetary financial institutions in return for a deposit at the central bank and there is a commitment to reverse the transaction at a later date, are not classified in the category loans. This is a deviation from the 1993 SNA (11.33).



- securities other than shares. An explicit conversion of the original loan is normally involved (see paragraphs 5.62. j and 5.62. k).
- Standard loans are offered in most cases by 5.80. financial corporations and they are often granted to households. The financial corporations determine the conditions and the households have only the choice either to accept or not to accept. Compared with this, the conditions of non-standard loans are usually the result of negotiations between the creditor and the debtor. This is an important criterion which facilitates a distinction between non-standard loans and securities other than shares. In the case of public security issues, the issue conditions are determined by the borrower, possibly after consulting the bank/lead-manager. In the case of private security issues, however, the creditor and the debtor negotiate the issue conditions (see paragraph 5.62. i).

### 5.81. Category AF.4 includes:

- a) balances on current accounts, for example, intra-group balances between non-financial corporations and their non-resident subsidiaries, but excluding balances which are liabilities of monetary financial institutions classified in the deposit sub-categories;
- b) balances of employees because of participation in the corporation's profits;
- c) repayable margin payments related to financial derivatives which are liabilities of institutional units other than monetary financial institutions (see paragraph 5.46. e);
- d) short-term repurchase agreements (repos) which are liabilities of institutional units other than monetary financial institutions (see paragraph 5.46. f) and long-term repurchase agreements;
- e) loans arising from non-monetary gold swaps. These are arrangements involving the temporary exchange of non-monetary gold for deposits. Their economic nature is similar to that of a collateralized loan in that the purchaser of the gold is providing to the seller advances backed by the gold for the period of the arrangement and is receiving a return from the fixed price when the gold is repurchased;

- f) loans which are counterparts of bankers' acceptances (see paragraph 5.58. d);
- g) financial leasing and hire-purchase agreements<sup>9</sup>;
- h) loans to finance trade credits;
- i) mortgage loans;
- j) consumer credit;
- k) revolving credits;
- instalment loans;
- m) loans paid as a guarantee for fulfilling certain obligations.

### 5.82. Category AF.4 includes further:

- a) financial claims or liabilities arising from the medium-term financial assistance for Member States' balances of payments. The loans are administered by the EMI<sup>10</sup>;
- b) financial claims on the IMF evidenced by loans under the General Arrangements to Borrow or under special borrowing arrangements with members;
- c) liabilities to the IMF evidenced by loans under the Structural Adjustment Facility, the Enhanced Structural Adjustment Facility, and the Trust Fund.

### 5.83. Category AF.4 does not include:

- a) other accounts receivable/payable (AE7), including trade credits and advances (AE71);
- b) financial assets or liabilities arising from the ownership of immovable assets, such as land and structures, by non-residents. They are classified in sub-position other equity (AE513) (see paragraph 5.95. f).
- 5.84. Loans may be financial assets or liabilities of all sectors and the rest of the world. However, monetary financial institutions have normally no short-term loan liabilities in the system.
- 5.85. The sub-categories short-term loans and long-term loans are not divided into sub-positions in the system. Nevertheless, it may be useful analytically to divide, in particular, long-term loans into consumer credit<sup>11</sup>, mortgage loans<sup>12</sup> and other loans.

<sup>9</sup> See Annex II 'Leasing and hire purchase of durable goods'.

Article 6.1 third indent of the Protocol on the Statute of the European Monetary Institute annexed to the Treaty establishing the European Community.

<sup>11</sup> Consumer credit are loans granted to households, which in the case of these transactions are acting for purposes outside their business and profession. Mortgage loans for financing house building or buying (amongst others bridging loans) are excluded. It is the intention that consumer credit relates exclusively to credits used for buying goods and/or services which are consumed by the households individually. National practices might necessitate a somewhat different definition.

<sup>12</sup> Mortgage loans are long-term loans secured by a mortgage on a dwelling used by the borrower for its own accommodation. National practices might necessitate a somewhat different definition.



### Shares and other equity (F.5)

### 5.86. Definition:

The category shares and other equity (E.5) consists of all transactions in shares and other equity (AE.5) that is financial assets which represent property rights on corporations or quasicorporations. These financial assets generally entitle the holders to a share in the profits of the corporations or quasi-corporations and to a share in their net assets in the event of liquidation<sup>1,3</sup>.

Shares offered for sale but not taken up on issue are not recorded in the system. Shares and other equity are redeemed when purchased by the issuing corporation or when exchanged for the net assets of a corporation in the event of its liquidation.

- 5.87. Category F.5 is divided into two sub-categories of financial transactions:
  - a) shares and other equity, excluding mutual funds shares (F.51);
  - b) mutual funds shares (F.52).

### Shares and other equity, excluding mutual funds shares (F.51)

### 5.88. Definition:

The sub-category shares and other equity excluding mutual funds shares (F.51) consists of all transactions in shares and other equity excluding mutual funds shares (AF.51) that is financial assets except mutual fund shares which represent property rights on corporations or quasi-corporations. These financial assets generally entitle the holders to a share in the profits of the corporations or quasi-corporations and to a share in their net assets in the event of liquidation.

- 5.89. Sub-category F.51 may be divided, when relevant, into three sub-positions of financial transactions:
  - a) quoted shares, excluding mutual funds shares (E.511);
  - b) unquoted shares, excluding mutual funds shares (F.512);
  - c) other equity (F.513).

# Quoted shares, excluding mutual funds shares (F.511), and unquoted shares, excluding mutual funds shares (F.512)

### 5.90. Definition:

The sub-position quoted shares excluding mutual funds shares (F.511) consists of all transac-

tions in quoted shares excluding mutual funds shares (AE.511) and the sub-position unquoted shares excluding mutual funds shares (E.512) consists of all transactions in unquoted shares excluding mutual funds shares (AE.512). Shares cover beneficial interest in the capital of corporations in the form of securities which in principle are negotiable. Sub-position AE.511 covers those shares with prices quoted on a recognised stock exchange or other form of secondary market, and sub-position AE.512 covers those shares that are not quoted.

### 5.91. Sub-positions AF.511 and AF.512 include:

- a) capital shares issued by limited liability companies: these are securities which give the holders the status of joint owners and entitle them both to a share in the total distributed profits and to a share in the net assets in the event of liquidation;
- b) redeemed shares in limited liability companies: these are shares whose capital has been repaid but which are retained by the holders who continue to be joint owners and to be entitled to a share in the profits left after dividends have been paid on the remaining registered capital and also to a share in any surplus which may be left on liquidation, i.e. the net assets less the remaining registered capital;
- c) dividend shares issued by limited liability companies: these are securities:
  - (1) which, according to country and the circumstances in which they are created, have a variety of names such as founders' shares, profits shares, dividend shares, etc. and which are not part of the registered capital;
  - (2) which do not give the holders the status of joint owners strictly speaking (the right to a share in the repayment of the registered capital, the right to a return on this capital, the right to vote at shareholders' meetings, etc.);
  - (3) which entitle the holders to a proportion of any profits remaining after dividends have been paid on the registered capital and to a fraction of any surplus remaining on liquidation.
- d) preferred (preference) stocks or shares which provide for participation in the distribution of the residual value on dissolution of a corporation. These may be quoted or unquoted on a recognised exchange.

<sup>13</sup> Net assets in the event of liquidation are defined as the amount of assets of an enterprise less all liabilities other than liabilities to the owners themselves in respect of their invested capital.



- 5.92. Sub-positions AE.511 and AE.512 do not include:
  - a) shares offered for sale but not taken up on issue. They are not recorded in the system;
  - b) debentures and loan stock convertible into shares. They are shown in the accounts under sub-category AF.33 up to the time when they are converted (see paragraph 5.62. l);
  - the equity of partners with unlimited liability (unlimited partners) in incorporated partnerships. They are classified in sub-position AE.513;
  - d) government investments in the capital of international organizations which are legally constituted as corporations with share capital. They are classified in sub-position AF.513 (see paragraph 5.95. c).
- 5.93. Sub-positions E511 and E512 do not include issues of bonus shares that is the remittance of new shares to shareholders in proportion to their holdings. Such an issue, which changes neither the liability of the corporation vis-à-vis the shareholders nor the proportion of the assets that each shareholder holds in the corporation, does not constitute a financial transaction and is not recorded in the system (see paragraph 6.56.). The same applies for share split issues.

### Other equity (F.513)

### 5.94. Definition:

The sub-position other equity (E.513) consists of all transactions in other equity (AE.513) that is all forms of equity other than those classified in sub-positions AE.511 and AE.512, and in sub-category AE.52.

### 5.95. Sub-position AF.513 includes:

- a) all forms of equity in corporations which are not shares:
  - the equity in incorporated partnerships subscribed by unlimited partners;
  - (2) the equity in limited liability companies whose owners are partners and not shareholders;
  - (3) the capital invested in ordinary or limited partnerships recognised as independent legal entities;
  - (4) the capital invested in co-operative societies recognised as independent legal entities.

- b) investments by general government in the capital of public enterprises, whose capital is not divided into shares, which by virtue of special legislation are recognised as independent legal entities (see paragraph 2.16. c);
- c) government investments in the capital of international and supranational organisations, with the sole exception of the IMF, even if these are legally constituted as companies with share capital (e.g. the European Investment Bank);
- d) the financial resources of the EMI provided out of contributions by the national central banks<sup>14</sup>;
- e) capital invested in financial and non-financial quasi-corporations (see paragraph 2.13. f). The amount of such investments corresponds to new investments (in cash or kind) less any capital withdrawals (see paragraph 4.61.);
- f) the financial assets that non-resident units have against notional resident units (see paragraph 2.15.) and vice versa.

### Mutual funds shares (F.52)

### 5.96. Definition:

The sub-category mutual funds shares (E.52) consists of all transactions in mutual funds shares (AE.52) that is shares issued by a specific type of financial corporation, whose exclusive purpose is to invest the funds collected on the money market, the capital market and/or in real estate.

5.97. Sub-category AF.52 includes the shares issued by financial corporations called, according to country, mutual funds, unit trusts, investment trusts and other collective investment schemes, e.g. (UCITS), whether they are open-ended, semi-open or closed-end funds. These shares may be quoted or unquoted. When they are unquoted, they are usually repayable on request, at a value corresponding to their share in the own funds of the financial corporation. These own funds are revalued regularly on the basis of the market prices of their various components.

### Insurance technical reserves (F.6)<sup>15</sup>

### 5.98. Definition:

The category insurance technical reserves (E6) consists of all transactions in insurance technical reserves (AE6) that is the technical provi-

<sup>14</sup> Article 16.2 of the Protocol on the Statute of the European Monetary Institute annexed to the Treaty establishing the European Community.

<sup>15</sup> See Annex III on insurance for a description of the treatment of social insurance and other insurance in the system.



sions of insurance corporations and (autonomous and non-autonomous) pension funds against policy holders or beneficiaries as laid down in Council Directive 91/674/EEC of 19 December 1991 on the annual accounts and consolidated accounts of insurance undertakings<sup>16</sup>.

### 5.99. Category AF.6 covers:

- a) net equity of households in life insurance reserves;
- b) net equity of households in pension funds reserves;
- c) prepayments of insurance premiums;
- d) reserves for outstanding claims.
- 5.100. Insurance technical reserves are financial assets:
  - a) for policy holders in respect of net equity of households in life insurance reserves and in pension funds reserves, and prepayments of insurance premiums;
  - b) for beneficiaries in respect of reserves for outstanding claims.
- 5.101. Insurance technical reserves are liabilities:
  - a) of life or non-life insurance corporations and autonomous pension funds included in the sub-sector insurance corporations and pension funds (S.125);
  - b) of non-autonomous pension funds included in the sectors of the institutional units that set them up.

Provisions or similar funds constituted by employers to provide employees with pensions (non-autonomous pension funds) are only included in category AF.6 if they are calculated according to actuarial criteria similar to those used by insurance corporations and autonomous pension funds. Otherwise, these provisions are covered by the shares or other equity issued by the institutional unit that sets up the provisions.

- 5.102. Category AF.6 does not include provisions established by institutional units classified in the sub-sector social security funds (S.1314). In the system, these provisions are no liabilities of the social security funds sub-sector.
- 5.103. Category F.6 is divided into two sub-categories of financial transactions:
  - a) net equity of households in life insurance reserves and in pension funds reserves (E61);

b) prepayments of insurance premiums and reserves for outstanding claims (F.62).

### Net equity of households in life insurance reserves and in pension funds reserves (F.61)

### 5.104. Definition:

The sub-category net equity of households in life insurance reserves and in pension funds reserves (E.61) consists of all transactions in net equity of households in life insurance reserves and in pension funds reserves (AE.61) that is technical provisions set aside in the corporations and quasi-corporations concerned for the purpose of satisfying, once the established conditions are met, the claims and benefits foreseen.

- 5.105. Sub-category F.61 is divided into two sub-positions of financial transactions:
  - a) net equity of households in life insurance reserves (F.611);
  - b) net equity of households in pension funds reserves (F.612).

### Net equity of households in life insurance reserves (F.611)

### 5.106. Definition:

The sub-position net equity of households in life insurance reserves (E611) consists of all transactions in net equity of households in life insurance reserves (AE611) that is technical provisions against outstanding risks and technical provisions for with-profit insurance that add to the value on maturity of with-profit endowments or similar policies.

- 5.107. Sub-position AE.611 includes life assurance provisions, provisions for bonuses and rebates and technical provisions for life-assurance policies where the investment risk is borne by the policyholders as defined in articles 27, 29 and 31 of Council Directive 91/674/EEC of 19 December 1991 on the annual accounts and consolidated accounts of insurance undertakings.
- 5.108. Transactions in net equity of households in life insurance reserves consist of additions less reductions, which are to be distinguished from nominal holding gains or losses on the funds invested by insurance corporations (see paragraph 6.57.).

### Additions consist of:

 a) actual premiums earned during the current accounting period;

<sup>16</sup> Official Journal of the European Communities N° L 374 of 31 December 1991, p. 7 – 31.



- b) plus premium supplements corresponding to the income from the investment of the provisions, which is attributed to policy holding households;
- c) less service charges for life insurance.

#### Reductions consist of:

- a) amounts due to holders of endowment and similar insurance policies when they mature and amounts due to beneficiaries from deaths of insured persons;
- b) *plus* payments due on policies that are surrendered before maturity.
- 5.109. Life insurance reserves are financial assets of resident or non-resident households and liabilities of resident or non-resident insurance corporations.

In the case of a group insurance taken out, for example, by a corporation on behalf of its employees, the employees, but not the employer, are deemed to be the creditors, since they are considered as the real policy holders.

### Net equity of households in pension funds reserves (F.612)

### 5.110. Definition:

The sub-position net equity of households in pension funds reserves (E.612) consists of all transactions in net equity of households in pension funds reserves (AE.612) that is technical provisions held by autonomous and non-autonomous pension funds established by employers and/or employees or groups of self-employed to provide pensions for employees or self-employed.

5.111. Transaction in net equity of households in pension funds reserves consist of additions less reductions, which are to be distinguished from nominal holding gains or losses on the funds invested by pension funds (see paragraph 6.57.).

### Additions consist of:

- a) actual contributions into pension funds payable by employees, employers, self-employed or other institutional units on behalf of individuals or households with claims on the funds and earned during the current accounting period;
- b) plus contribution supplements corresponding to the income earned from the investment of the provisions of the pension funds, which are attributed to participating households;
- c) less service charges during the period for managing the funds.

### Reductions consist of:

- a) social benefits equal to the amounts payable to retired persons or their dependants in the form of regular payments or other benefits;
- b) *plus* social benefits which consist of any lump sums payable to persons when they retire.
- 5.112. Transactions in net equity of households in pension funds reserves do not include funds transferred from non-autonomous pension funds to autonomous pension funds, classified in the sub-sector insurance corporations and pension funds (S.125), as a result of the conversion of one fund into another This event is to be recorded in the category changes in sector classification and structure (K.12.1) of the other changes in the volume of assets account (see paragraph 6.30.).
- 5.113. Pension funds reserves are financial assets of resident or non-resident households but not financial assets of the institutional units that manage them.

### Prepayments of insurance premiums and reserves for outstanding claims (E.62)

### 5.114. Definition:

The sub-category prepayments of insurance premiums and reserves for outstanding claims (E62) consists of all transactions in prepayments of insurance premiums and reserves for outstanding claims (AE62) that is technical provisions established by insurance corporations and (autonomous and non-autonomous) pension funds for:

- a) the amount representing that part of gross premiums written which is to be allocated to the following accounting period (prepayments of insurance premiums);
- b) the total estimated ultimate cost of settling all claims arising from events which have occurred up to the end of the accounting period, whether reported or not, less amounts already paid in respect of such claims (provisions for outstanding claims).



5.115. Prepayments of insurance premiums result from the fact that insurance premiums are, in general, due to be paid at the start of the period covered by the insurance, and this period does not normally coincide with the accounting period itself. Therefore, at the end of the accounting period when the balance sheet is drawn up, parts of the insurance premiums payable during the accounting period are intended to cover risks in the subsequent period. The prepayments of insurance premiums are determined on the basis of the proportion of the risks involved in relation to time for the period remaining to run until the contract expires.

In the financial account, the prepayments of insurance premiums recorded between policy holders and insurance corporations consist of those parts of the premiums that are payable in the current accounting period and that are intended to cover risks outstanding during the following period.

- 5.116. The prepayments of insurance premiums are financial assets of the policy holders. If these prepayments relate to life insurance, the policy holders are resident or non-resident households. If they relate to non-life insurance, the policy holders may belong to any sector of the economy or to the rest of the world. The insurance premiums or social contributions paid by the policy holders may be taken as the criterion to distribute the prepayments of insurance premiums among the sectors of the economy and the rest of the world.
- 5.117. Reserves for outstanding claims are hold by insurance corporations in order to cover the amounts they expect to pay out in respect of claims that are not yet settled, for example, because they are disputed. Valid claims accepted by insurance corporations are considered due for payment when the event that gives rise to the claim occurs, however long it takes to settle disputed claims.
- 5.118. Reserves for outstanding claims are financial assets of the beneficiaries that may belong to any sector of the economy or to the rest of the world.
- 5.119. Sub-category AF.62 includes provisions for unearned premiums, other technical provisions, claims outstanding and equalisation provisions as defined in articles 25, 26, 28 and 30 of Council Directive 91/674/EEC of 19 December 1991 on the annual accounts and consolidated accounts of insurance undertakings.

### Other accounts receivable/payable (F.7)

#### 5.120. Definition:

The category other accounts receivable/payable (E.7) consists of all transactions in other accounts receivable/payable (A.E.7) that is financial claims which are created as a counterpart of a financial or a non-financial transaction in cases where there is a timing difference between this transaction and the corresponding payment.

5.121. Category F.7 includes transactions in financial claims which stem from the early or late payment for transactions in goods or services, distributive transactions or secondary trade in financial assets. They consist of the counterpart transactions in case payment is due and not yet paid. Debts arising from income accruing over time and arrears are also classified under this category.

### 5.122. Category F.7 does not include:

- a) statistical discrepancies other than timing differences between transactions in goods and services, distributive transactions or financial transactions and the corresponding payments;
- items about which there is not enough information for them to be classified. The classification should be based on whatever information is available;
- c) items about whose nature nothing whatsoever is known;
- d) the miscellaneous item of the balance of payments described as net errors and omissions;
- e) early or late payment (inclusive of arrears) in case of the creation of financial assets or the redemption of liabilities other than classified in category F.7. They remain classified in their category.
- 5.123. Category F.7 is divided into two sub-categories of financial transactions:
  - a) trade credits and advances (F.71);
  - b) other accounts receivable/payable, excluding trade credits and advances (F.79).



### Trade credits and advances (F.71)

### 5.124. Definition:

The sub-category trade credits and advances (E71) consists of all transactions in trade credits and advances (AE71) that is financial claims arising from the direct extension of credit by suppliers and buyers for goods and services transactions and advance payments for work that is in progress or to be undertaken and associated with such transactions.

### 5.125. Sub-category AF.71 includes:

- a) financial claims relating to the delivery of goods or services where payment has not taken place;
- b) trade credit accepted by factoring corporations except when regarded as a loan;
- c) rent of buildings accruing over time;
- d) arrears concerning the payment of goods and services, when not evidenced by a loan.
- 5.126. Sub-category AF.71 does not include loans to finance trade credits. They are classified in category AF.4 (see paragraph 5.81. h).
- 5.127. Trade credits and advances may be financial assets or liabilities of all sectors and the rest of the world.

### Other accounts receivable/payable, excluding trade credits and advances (F.79)

### 5.128. Definition:

The sub-category other accounts receivable/payable excluding trade credits and advances (E.79) consists of all transactions in other accounts receivable/payable excluding trade credits and advances (AE.79) that is financial claims which arise from timing differences between distributive transactions or financial transactions on the secondary market and the corresponding payment. It includes also financial claims due to income accruing over time.

- 5.129. Sub-category AE.79 includes financial claims created as a result of the timing difference between accrued transactions and payments made in respect of, for example:
  - a) taxes;
  - b) social contributions;
  - c) wages and salaries;
  - d) rents on land and subsoil assets;
  - e) dividends;
  - f) interest:

- g) transactions in financial assets on the secondary market.
- 5.130. Preferably, the counterpart financial transaction of interest accruing on financial assets (see paragraph 5.17.) should be recorded as being reinvested in that financial asset. The recording of interest will, however, have to follow national practices. If the interest accrual is not recorded as being reinvested in the financial asset, it should be classified in sub-category F.79.
- 5.131. At the date due for payment of interest, two financial transactions are recorded (see paragraph 5.17.): firstly, in the event of payment, a transaction in the financial asset used for payment, or, in the event of non-payment, an increase of interest arrears to be recorded in sub-category E.79; secondly, the counterpart financial transaction reducing the net financial claim of the creditor against the debtor.

### Memorandum item: direct foreign investment (F.m)

#### 5.132. Definition:

Direct foreign investment (F.m) consists of all transactions in direct foreign investment (AF.m) that is investment involving a long-term relationship reflecting a lasting interest of a resident institutional unit in one economy ('direct investor') in an institutional unit resident in an economy other than that of the investor ('direct investment enterprise'). The direct investor's purpose is to exert a significant degree of influence on the management of the enterprise resident in the other economy. Direct investment involves both the initial transaction between the direct investor and the direct investment enterprise and all subsequent capital transactions between them and among affiliated enterprises, both incorporated and unincorporated17.

5.133. Transactions in financial assets and liabilities that constitute direct foreign investment are to be recorded under the appropriate categories of financial transactions, i.e. loans (E.4), shares and other equity (E.5) and other accounts receivable/payable (E.7). However, the amounts of direct foreign investment included within each of those categories should also be recorded separately as a memorandum item.



# ACCOUNTING RULES FOR FINANCIAL TRANSACTIONS

### Valuation

- 5.134. Financial transactions are recorded at the transaction values, that is, the values in national currency at which the financial assets and/or liabilities involved are created, liquidated, exchanged or assumed between institutional units, or between them and the rest of the world, on the basis of commercial considerations only.
- 5.135. Financial transactions and their financial or non-financial counterpart transactions are recorded at the same transaction value. Three possibilities can be envisaged:
  - a) the financial transaction is a transaction in means of payment in national currency (see paragraphs 5.04. and 5.23.): the transaction value is equal to the amount of the means of payment exchanged;
  - b) the financial transaction is a transaction in means of payment in foreign currency (see paragraphs 5.04. and 5.23.) and the counterpart transaction is not a transaction in means of payment in national currency: the transaction value is equal to the amount of the means of payment exchanged converted into national currency applying the market rate prevailing when the payment takes place;
  - c) neither the financial transaction nor its counterpart transaction is a transaction in means of payment (see paragraph 5.04.): the transaction value is identified with the current market value of the financial assets and/or liabilities involved.
- 5.136. The transaction value refers to a specific financial transaction and its counterpart transaction. In concept, the transaction value is to be clearly distinguished from a value based on a price quoted in the market, a fair market price, or any price that is intended to express the generality of prices for a class of similar or even identical financial assets and/or liabilities. However, in cases where the counterpart transaction of a financial transaction is, for example, a transfer and therefore the financial transaction is undertaken other than for purely commercial considerations, the transaction value is identified with the current market value of the financial assets and/or liabilities involved.
- 5.137. The transaction value does not include service charges, fees, commissions, and similar payments for services provided in carrying out the transactions; these are to be recorded as pay-

ments for services. Taxes on financial transactions are also excluded and treated as taxes on services within taxes on products. When a financial transaction involves a new issue of liabilities, the transaction value is equal to the amount of the liability incurred exclusive of any prepaid interest. Similarly, when a liability is extinguished, the transaction value for both creditor and debtor must correspond to the reduction of the liability.

Special valuation criteria for some sub-categories of financial transactions.

- 5.138. Securities other than shares, excluding financial derivatives (F.33):
  - a) when securities are marketed by issuers through underwriters or other intermediaries and then sold at higher prices to final investors, the financial assets and liabilities are to be recorded at the values paid by the investors. The differences between the amounts paid by the investors and those received by the issuers should be treated as service payments paid by the issuers to the underwriters;
  - b) security issues are recorded at the issue value. When securities are issued at a discount or at a premium, the proceeds to the issuer at the time of sale, and not the face value, is recorded in the accounts as the actual issue value. The difference between the issue value and the redemption value is treated as interest that is accrued over the life of the security;
  - c) deep-discount or zero-coupon bonds should be treated as securities issued at a discount. The interest is accrued over the life of the bonds and treated as being reinvested in such bonds (see paragraph 4.46.);
  - d) when long-term securities are issued at a discount, which is not significant, the difference between the issue value and the redemption value can be imputed at the date of issue;
  - e) in case of securities where the value of the principal is linked to a price index, the price of a commodity or an exchange rate index, the issue price of the security is recorded as the principal and the index payment paid periodically and/or at maturity is treated as interest that is accrued over the life of the security, and the counterpart is recorded as reinvestment in securities other than shares in the financial account;
  - f) investment in securities in circulation on the secondary market is recorded at the stock exchange quotation or market price;



- g) securities which have reached maturity are recorded at redemption value, which includes redemption premiums but excludes payments by lottery and savings premiums, which are recorded as interest;
- h) the conversion of bonds into shares should be treated as a sale of bonds and a purchase of shares (see paragraph 5.62. l). The transaction value is to be derived from the market value of the bonds disposed of, possibly implying a holding gain or loss on shares to be recorded in the revaluation account (see paragraph 6.54.).

### 5.139. Financial derivatives (F.34):

- a) secondary trade in options and closing out options prior to delivery involve financial transactions. If an option proceeds to delivery, it may be exercised or not exercised. In cases where the option is exercised, there may be a payment from the option writer to the option holder equal to the difference between the prevailing market price of the underlying asset and the strike price, or, alternatively, there may be the acquisition or sale of the underlying financial or nonfinancial asset recorded at the prevailing market price and a counterpart payment between the option holder and the option writer equal to the strike price. The difference between the prevailing market price of the underlying asset and the strike price is in both cases equal to the liquidation value of the option, that is the option price at delivery. In cases where the option is not exercised, no transaction takes place. However, the option writer makes a holding gain and the option holder makes a holding loss to be recorded in the revaluation account:
- b) financial derivatives other than options typically involve contracts where two parties agree to exchange specified assets, either real or financial, at some future point or points in time. The transactions which are to be recorded against such financial derivatives include any trading in the contracts as well as the net value of settlements made. There may also be the need to record transactions associated with the establishment of derivative contracts. However, in many cases, the two parties will enter into a derivative contract without any payment by one party to the other; in these cases the value of the transaction establishing the contract is nil and no entry is actually required in the financial account;
- any explicit commissions paid to or received from brokers or other intermediaries

- for arranging options, futures, swaps, and other derivatives contracts are treated as payments for services in the appropriate accounts. Streams of interest payments resulting from swap arrangements are to be recorded as property income and repayments of principal are to be recorded as transactions in the appropriate underlying instrument within the financial account. The parties to a swap are not considered to be providing a service to each other, but any payment to a third party for arranging the swap should be treated as payment for a service (see paragraph 4.47.). While the premium paid to the seller of an option can conceptually be considered to include a service charge, in practice, it is usually not possible to distinguish the service element. Therefore, the full price is to be recorded as acquisition of a financial asset by the buyer and as incurrence of a liability by the seller;
- d) where swap contracts involve an exchange of principal amounts, for example as occurs with currency swaps, the initial exchange is to be recorded as a transaction in the underlying instrument exchanged and not a transaction in financial derivatives (E.34). Implicitly, a financial derivative with zero initial value is created at that point. Subsequently, the value of the derivative will include at least the following components:
  - the current market value of the difference between the expected future market values of the principal amounts to be re-exchanged and the principal amounts specified in the contract; and
  - (2) the current market value of the future stream of any interest and other cash flows specified in the contract.

Changes in the value of the derivative over time should be recorded in the revaluation account.

Subsequent re-exchanges of principal will be governed by the terms and conditions of the swap contract and may imply financial assets being exchanged at a price different from the prevailing market price of such assets. The counterpart payment between the parties to the swap contract will be that specified within the contract. The difference between the market price and the contract price is then equal to the liquidation value of the asset/liability as it applies on the due date and should be recorded as a transaction in financial derivatives (F.34). This final derivative transaction and any final net interest flow must match the total revaluation gain or loss throughout the duration of the swap contract. This treatment is



- analogous to that set out with respect to options which proceed to delivery (see a) above).
- 5.140. Shares and other equity, excluding mutual funds shares (F.51):
  - a) new shares are recorded at issue value, which normally corresponds to nominal value plus the issue premium;
  - b) transactions in shares in circulation are to be recorded at their transaction value. When it is not known, it may be approximated by the stock exchange quotation or market price for quoted shares and by the book value for unquoted shares;
  - scrip dividend shares are valued at the price implied by the issuer's dividend proposal;
  - d) issues of bonus shares are not recorded in the system (see paragraph 5.93.). However, in cases where the issue of bonus shares involves changes in the total market value of the shares of a corporation, the changes are to be recorded in the revaluation account (see paragraph 6.56.);
  - e) the transaction value of other equity (E513) is the amount of funds transferred by the owners to their corporations or quasi-corporations. In some cases, funds can be transferred by assuming liabilities of the corporation or quasi-corporation.

### 5.141. Mutual funds shares (F.52):

- a) transactions in mutual funds shares include the value of net contributions to a fund;
- b) property income received by mutual funds, net of a part of management costs, and assigned to shareholders, even though it is not distributed, have a counterpart entry in the financial account under mutual funds shares. The effect is that property income is reinvested.

### Time of recording

- 5.142. Financial transactions and their counterpart transactions are to be recorded at the same point in time.
- 5.143. When the counterpart of a financial transaction is a non-financial transaction, both are recorded at the time the non-financial transaction takes place. For example, when sales of goods or services give rise to a trade credit, this financial transaction is to be recorded when the entries are made in the relevant non-financial account.
- 5.144. When the counterpart of a financial transaction is also a financial transaction, three possibilities can be envisaged:
  - a) both financial transactions are transactions in means of payment (see paragraph 5.04.): they are recorded at the time the first payment is made;
  - b) only one of the two financial transactions is a transaction in means of payment (see paragraph 5.04.): they are recorded at the time payment is made;
  - c) neither of the two financial transactions is a transaction in means of payment (see paragraph 5.04.): they are recorded at the time the first financial transaction takes place.

# Compiling financial transactions from changes in balance sheets

5.145. In cases where basic statistics on financial transactions are not available, financial transactions may be compiled based on changes in financial balance sheets, that is changes in the amount of financial assets held and liabilities outstanding between the closing balance sheet and the opening balance sheet. The difference between the amount of financial transactions and the changes in financial balance sheets consists of entries in the revaluation account and the other changes in the volume of assets account.



### ANNEX 5.1

### LINK WITH MEASURES OF MONEY

- 5.146. This Annex explains a method which allows to show measures of money in the balance sheets and the financial accounts.
- 5.147. The definitions of the measures of money applied vary among countries and in time. In addition, these definitions are not necessarily based on the classification of financial assets and the classification of sectors as defined in the system. Therefore, measures of money are not defined in the system.
- 5.148. The following problems appear by integrating measures of money in the balance sheets and the financial accounts. Firstly, the measures of money may be composed of components which do not correspond with the classes, that is to say the categories, sub-categories and sub-positions, of financial assets and liabilities as defined in the system. For example, a measure of money may include only a subclass of the category currency and deposits (AF.2). The sub-class may be defined by a reference to maturity and/or by a reference to the institutional units holding or issuing currency and deposits. Secondly, the measures of money may imply money-creating, moneyholding and money-neutral sectors which cannot be composed of the sectors and sub-sectors as defined in the system. Thirdly, the data sources used for compiling monetary aggregates may in practice differ from the data sources used for compiling the balance sheets and the financial accounts of the sectors and the rest of the world.
- 5.149. In order to identify a measure of money MX in the balance sheets or the financial accounts, it may be necessary to subdivide any class i of financial assets and liabilities defined in the system into two sub-classes:
  - a) MX<sub>i</sub>: sub-class of financial assets (liabilities) classified in class i and included in the measure of money MX;
  - b) MX<sub>-i</sub>: sub-class of financial assets (liabilities) classified in class i but not included in the measure of money MX.

In practice, some classes of financial assets (liabilities) do not contribute even to broad measures of money, for example, monetary gold and SDRs (AE1) or insurance technical reserves (AE6). Therefore, MX<sub>1</sub> and MX<sub>6</sub> would be zero, that is to say a breakdown of AE1 in MX<sub>1</sub> and MX<sub>-1</sub> or of AE6 in MX<sub>6</sub> and MX<sub>-6</sub> is not necessary.

- 5.150. The measure of money MX is equal to the sum of all sub-classes of financial assets MX<sub>i</sub> of the money-holding sectors and MX is equal to the sum of all sub-classes of liabilities MX<sub>i</sub> of the money-creating sectors.
- 5.151. A main advantage of this method is its flexibility. In cases where the definition of a measure of money is changed, only the breakdowns of some classes of financial assets and liabilities into MX<sub>i</sub> and MX<sub>-i</sub> have to be adapted.



### MEASURES OF MONEY IN THE BALANCE SHEETS OR THE FINANCIAL ACCOUNTS

FINAINC	CIAL ASSETS OF MONEY-HOLD	DING SECTORS	LIABILITIES OF MONEY-CREA	TING SECT
Total	Breakdown by sectors		Breakdown by sectors	Total
		AF.1		
		AF.2		
		of which $MX_2$		
		MX -2		
		AF.3		
		of which $MX$		
		of which $MX_{33}$ $MX_{-33}$		
		AF.34		
		of which $MX_{34}$ $MX_{-34}$		
		AF.4		
		AF.41		
		of which $MX_{41}$ $MX_{-41}$		
		AF.42		
		of which $MX_{42} \ MX_{-42}$		
		AF.5		
		AF.51		
		of which $MX_{51}$		
		MX -51		
		AF.52 of which $MX_{52}$		
		MX -52		
		AF.6		
		AF.7		
		AF.71		
		of which $MX_{71}$		
		<i>MX</i> <sub>-71</sub> AF.79		
		Total of financial		
		assets and liabilities		

# CHAPTER 6 OTHER FLOWS

6.01. Other flows cover consumption of fixed capital (K.1), acquisitions and disposals of non-financial non-produced assets (K.2) and other changes in assets (K.3 – K.12).

The other changes in assets consist of different kinds of changes in assets, liabilities and net worth which are not the result of transactions being recorded in the capital and financial accounts. They cover other changes in volume (K.3 – K.10 and K.12) and also holding gains and losses (K.11).

# CONSUMPTION OF FIXED CAPITAL (K.1)

6.02. Definition:

Consumption of fixed capital (K.1) represents the amount of fixed assets used up, during the period under consideration, as a result of normal wear and tear and foreseeable obsolescence, including a provision for losses of fixed assets as a result of accidental damage which can be insured against.

- 6.03. Consumption of fixed capital must be calculated for all fixed assets (except animals), including both tangible fixed assets and intangible fixed assets such as mineral exploration costs and software, major improvements to non-produced assets and costs of ownership transfers associated with non-produced assets.
- 6.04. Consumption of fixed capital (which should be distinguished from the depreciation allowed for tax purposes or the depreciation shown in business accounts) should be estimated on the basis of the stock of fixed assets and the probable average economic life of the different categories of those goods. For the calculation of the stock of fixed assets, the perpetual inventory method (PIM) is recommended whenever direct information on the stock of fixed assets should be valued at the purchasers' prices of the current period.

Losses of fixed assets occurring as a result of accidental damage which can be insured against are taken into account in calculating the average service life of the goods in question. For the economy as a whole the actual normal

accidental damage within a given accounting period may be expected to be equal, or close, to the average. However, for individual units and groupings of units actual normal and average accidental damage may differ. In this case, for sectors, any difference is recorded as other changes in volume of fixed assets.

Consumption of fixed capital is calculated according to the 'straight line' method, by which the value of a fixed asset is written off at a constant rate over the whole lifetime of the good.

However, depending on the pattern of decline in the efficiency of a fixed asset the calculation of consumption of fixed capital according to the geometric depreciation method may be required.

6.05. In the system of accounts consumption of fixed capital is recorded below each balancing item, which is shown gross and net. Recording 'gross' means without deducting consumption of fixed capital, while recording 'net' means after deducting consumption of fixed capital.

## ACQUISITIONS LESS DISPOSALS OF NON-FINANCIAL NON-PRODUCED ASSETS (K.2)

6.06. Definition:

Non-financial non-produced assets<sup>1</sup> consist of land and other tangible non-produced assets that may be used in the production of goods and services, and intangible non-produced assets.

- 6.07. Land is defined as the ground itself, including soil covering and associated surface water<sup>1</sup>. The associated surface water includes any inland waters (reservoirs, lakes, rivers, etc.) over which ownership rights can be exercised.
- 6.08. The following items are not included in land:
  - a) buildings or other structures on the land or through it (roads, tunnels, etc.);
  - b) vineyards, or chards, or other plantations of trees and any growing crops, etc.;
  - c) subsoil assets;

<sup>1</sup> For the definition of assets, see Annex 7.1 to chapter 7.



- d) non-cultivated biological resources;
- e) water resources below the ground.

Items a) et b) are produced fixed assets, items c), d) and e) belong to tangible non-produced assets.

- 6.09. Acquisitions and disposals of land are valued at current market prices prevailing at the time the acquisitions/disposals occur. Transactions with land are recorded at the same value both in the accounts of the purchaser and in those of the seller. This value excludes the costs involved in the transfer of ownership of land, which are treated as gross fixed capital formation.
- 6.10. Acquisitions and disposals of other tangible non-produced assets cover subsoil assets, non-cultivated biological resources and water resources. Subsoil assets include coal, oil and natural gas reserves, metallic mineral reserves and non-metallic mineral reserves<sup>2</sup>.
- 6.11. Acquisitions and disposals of other tangible non-produced assets are valued at current market prices prevailing at the time the acquisitions/disposals occur. Acquisitions and disposals exclude the associated costs of ownership transfer. The latter are recorded as gross fixed capital formation.
- 6.12. Intangible non-financial non-produced assets consist of patented entities, leases or other transferable contracts, purchased goodwill and other intangible non-produced assets. Such leases are on land, subsoil assets and residential buildings<sup>2</sup>. and non-residential examples include transferable contracts with athletes and authors. The value of the acquisitions or disposals of leases or other transferable contracts consists of payments made to the original or subsequent tenants or lessees when the leases or concessions are sold or transferred to other institutional units. The value of acquisitions and disposals of intangible non-produced assets excludes the associated costs of ownership transfer. The costs of ownership transfer are a component of gross fixed capital formation.
- 6.13. Acquisitions less disposals of non-financial non-produced assets are recorded in the capital account of the sectors, the total economy and the rest of the world.

# OTHER CHANGES IN ASSETS (K.3 – K.12)

#### 6.14. Definition:

Other changes in assets are flows which are not the result of transactions recorded in the capital and financial accounts. Two kinds of other changes are distinguished. The first kind consists of changes in the volume of assets. The second consists of changes in the value of assets, liabilities and net worth due to changes in the level and structure of prices leading to holding gains or losses.

# OTHER CHANGES IN VOLUME (K.3 – K.10 AND K.12)

- 6.15. Other changes in volume are flows with different functions. One important function is to allow certain assets to enter and leave the system in the normal course of events e.g. entrances and exits of naturally occurring assets. This is important for recording the discovery, depletion and degradation of natural assets. A second function is to record the effect of exceptional, unanticipated events that affect the economic benefits derivable from assets.
- 6.16. The other changes in volume cover nine categories:
  - a) economic appearance of non-produced assets (K.3);
  - b) economic appearance of produced assets (K.4);
  - c) natural growth of non-cultivated biological resources (K.5);
  - d) economic disappearance of non-produced assets (K.6);
  - e) catastrophic losses (K.7);
  - f) uncompensated seizures (K.8);
  - g) other volume changes in non-financial assets n.e.c. (K.9);
  - h) other volume changes in financial assets and liabilities n.e.c. (K.10);
  - i) changes in classifications and structure (K.12).

<sup>2</sup> For the definition of assets, see Annex 7.1 to chapter 7.



# ECONOMIC APPEARANCE OF NON-PRODUCED ASSETS (K.3)

6.17. Economic appearance of non-financial non-produced assets (K.3) represents the increase in the volume of this kind of assets that is not the result of production.

#### Included are:

- a) gross increases in the level of exploitable subsoil resources: proven reserves of coal, oil, natural gas, metallic minerals or nonmetallic minerals that are economically exploitable. This also covers the increase in reserves for which exploitation becomes economic as a result of technological progress or relative price changes;
- b) transfers of other natural assets to economic activity: naturally occurring entities that change status to qualify as economic assets, economic assets being entities over which ownership rights are enforced by institutional units and from which economic benefits may be derived by their owners (e.g. exploitation of virgin forests, transfer of land from a wild or waste state to land that can be put to economic use, land reclamation);
- c) quality changes in non-produced assets due to changes in economic uses. Changes in quality are treated as changes in volume. The quality changes recorded here occur as the counterpart of the changes in economic use that are shown as changes in classification (see paragraph 6.32.) e.g. from cultivated land to land underlying buildings;
- d) appearance of intangible non-produced assets. Intangible non-financial non-produced assets arise when entities are patented or transferable contracts are written. Also when enterprises are sold at prices that exceed their own funds (see paragraph 7.05.), the excess of purchase price over own funds is the asset 'purchased goodwill'. Goodwill not evidenced by a sale/purchase is not considered as an economic asset.

# ECONOMIC APPEARANCE OF PRODUCED ASSETS (K.4)

6.18. Economic appearance of produced assets (K.4) occurs in the case of goods that are not already recorded in the Balance Sheets. It is the recognition of a significant or special value that is considered an economic appearance to be recorded under other changes in volume.

Economic appearance of produced assets includes:

- a) valuables, such as precious stones and art objects, when the high value or artistic significance of an object not already recorded in the Balance Sheets is first recognised;
- b) historic monuments, when the special archaeological, historical or cultural significance of a structure or site not already recorded in the Balance Sheets is first recognised.

## NATURAL GROWTH OF NON-CULTIVATED BIOLOGICAL RESOURCES (K.5)

- 6.19. Natural growth of non-cultivated biological resources (K.5) is not under the direct control, responsibility and management of an institutional unit and thus is not production. The increment in these economic assets such as standing natural timber, or fish in the estuaries, must then be regarded as an economic appearance
- 6.20. Natural growth should be recorded as an addition (K.5); the depletion of these resources should be recorded as an economic disappearance (K.61). In practice, however, natural growth can only be recorded net because the physical measurements that are likely to be the only basis available for the recording are, in effect, net measurements.

# ECONOMIC DISAPPEARANCE OF NON-PRODUCED ASSETS (K.6)

- 6.21. Economic disappearance of non-financial non-produced assets (K.6) includes:
  - a) depletion of natural economic assets (K.61), which covers the reduction of deposits of subsoil assets and the depletion of non-cultivated biological resources included in the asset boundary (see paragraph 6.19.);
  - b) other economic disappearance of non-produced assets (K.62):
    - (1) other reductions in the level of exploitable subsoil resources (reassessments of exploitability due to changes in technology or relative prices);
    - (2) quality change in non-produced assets due to changes in economic uses;
    - (3) degradation of non-produced assets due to economic activity. Covered is



- degradation of land, water resources and in principle of other natural assets;
- (4) write-off of purchased goodwill, cancellation of transferable contracts and exhaustion of patent protection.

### CATASTROPHIC LOSSES (K.7)

- 6.22. Catastrophic losses (K.7) recorded as other changes in the volume of assets are the result of large-scale, discrete and recognisable events that may destroy items within any of the categories of economic (non-financial or financial) assets.
- 6.23. Such events include major earthquakes, volcanic eruptions, tidal waves, exceptionally severe hurricanes, drought and other natural disasters; acts of war, riots and other political events; and technological accidents such as major toxic spills or release of radioactive particles into the air.

Included here are in particular:

- a) deterioration in the quality of land caused by abnormal flooding or wind damage;
- destruction of cultivated assets by drought or outbreak of disease;
- c) destruction of buildings, equipment or valuables in forest fires or earthquakes;
- d) accidental destruction of currency or bearer securities as a result of natural catastrophes or political events.

### **UNCOMPENSATED SEIZURES (K.8)**

6.24. Uncompensated seizures (K.8) occur when governments or other institutional units take possession of the assets of other institutional units, including non-resident units, without full compensation, for reasons other than the payment of taxes, fines or similar levies. The uncompensated part of such unilateral seizures is not a capital transfer recorded in the capital account.

# OTHER VOLUME CHANGES IN NON-FINANCIAL ASSETS N.E.C. (K.9)

6.25. Under other volume changes in non-financial assets (K.9) are recorded the effects of unexpected events on the economic benefits derivable from assets.

#### Included are:

- a) unforeseen obsolescence. Consumption of fixed capital does not cover unforeseen obsolescence in fixed assets, and the amount included for their normally expected obsolescence may fall short of the actual obsolescence. Entries must, therefore, be made for the decline in the value of the fixed assets resulting from the introduction of improved technology;
- b) differences between allowances included in consumption of fixed capital for normal damage and actual losses. Consumption of fixed capital does not cover unforeseen damage, and the amount included for their normally expected damage may fall short (or exceed) the actual damage. Adjustments must therefore be made for the unforeseen decline (or increase) in the value of the fixed assets due to these events;
- c) degradation of fixed assets not accounted for in consumption of fixed capital: decline in the value of fixed assets from, for example, the unforeseen effects of acidity in air and rain on building surfaces or vehicle bodies;
- d) abandonment of production facilities before completion or being brought into economic use;
- e) exceptional losses in inventories (e.g. from fire damage, from robberies, from insect infestation of grain stores);
- f) statistical discrepancies concerning non-financial assets between the closing balance sheet and the corresponding opening balance sheet.

# OTHER VOLUME CHANGES IN FINANCIAL ASSETS AND LIABILITIES N.E.C. (K.10)

- 6.26. Any changes in financial assets and liabilities that are not due to financial transactions recorded in the financial account, that are not attributed to holding gains and losses recorded in the revaluation account, that are not changes in classifications and structure and that are not due to catastrophic losses and uncompensated seizures are to be recorded here.
- 6.27. Category K.10 includes:
  - a) allocations and cancellations of SDRs (AE.12) (see paragraphs 5.33. 5.35.): For SDRs not even a notional liability exists. Therefore, the mechanism by which SDRs



- are created (referred to as allocations of SDRs) and extinguished (cancellations of SDRs) is not treated as one that gives rise to transactions but rather to entries in the other changes in the volume of assets account. Allocations of SDRs increase the financial assets of the monetary authorities, cancellations of SDRs decrease their financial assets;
- b) other volume changes related to defined benefit pension funds: Defined benefit pension schemes are those in which the level of pension benefits promised to participating employees is guaranteed. Benefits are related by some formula to participants' length of service and salary and are not totally dependent on the assets in the fund. For defined benefit schemes, an entry in the other changes in the volume of assets account captures changes in the actuarially determined liability that result from changes in benefits structure, which are to be distinguished from changes in the age and service composition of the beneficiary pool. Examples of changes in benefit structure include changes in the formula, reductions in the pensionable age, or funding for an annual increase (usually defined as constant x per cent year) in future pensions or in all pensions in the course of payment;
- exceptional losses of currency or bearer securities because of, e.g., fire damage or theft:
- d) writing-off or writing-down of bad debts by creditors: Unilateral recognition by a creditor that a financial asset can no longer be collected, due to bankruptcy or other factors, and the consequent removal by the creditor of that financial asset from his balance sheet should be accounted for here, along with the removal of the counterpart liability of the debtor. However, in cases where the debtor institutional unit is controlled by the creditor, the writing-off or writing-down of debt by the creditor, not due to bankruptcy, is recorded in the accumulation accounts;
- e) statistical discrepancies concerning financial assets and liabilities between the closing balance sheet and the corresponding opening balance sheet.

#### 6.28. Category K.10 does not include:

 a) cancellation of debt by mutual agreement between debtor and creditor (debt cancellation or debt forgiveness): it is treated as a transaction between the creditor and the

- debtor (see paragraph 4.165. f and 5.16.) and not as another change of volume;
- debt repudiation: the unilateral cancellation of a liability by a debtor is not recognised in the system.

# CHANGES IN CLASSIFICATIONS AND STRUCTURE (K.12)

6.29. Changes in classifications and structure (K.12) comprise changes in sector classification and structure of institutional units (K.12.1) and changes in classification of assets and liabilities (K.12.2).

# Changes in sector classification and structure (K.12.1)

6.30. Reclassifying an institutional unit from one sector to another transfers its entire balance sheet, e.g. an institutional unit classified in the household sector becomes a quasi-corporation to be reclassified in the corporations sector.

Changes in structure of institutional units cover appearance and disappearance of certain financial assets and liabilities arising from corporate restructuring. When a corporation disappears as an independent legal entity because it is absorbed by one or more corporations, all financial assets/liabilities including shares and other equity that existed between that corporation and those that absorbed it, disappear from the system. However, the purchase of shares and other equity of a corporation as part of a merger is to be recorded as a financial transaction between the purchasing corporation and the previous owner. Replacement of existing shares by shares in the take-over or new corporation are to be recorded as redemptions of shares accompanied by the issue of new shares. Financial assets/liabilities that existed between the absorbed corporation and third parties remain unchanged and pass to the absorbing corporation(s).

Symmetrically, when a corporation is legally split up into two or more institutional units, new financial assets and liabilities (appearance of financial assets) are recorded in this category (K.12.1).

# Changes in classification of assets and liabilities (K12.2)

6.31. Category K.12.2 distinguishes monetisation/demonetisation of gold (K.12.21) and changes in classification of assets or liabilities



- other than monetisation/demonetisation of gold (K.12.22).
- 6.32. Monetisation/demonetisation of gold (K.12.21) is recorded in the other changes in the volume of assets account of the monetary authorities, that is to say in the sub-sector the central bank (S.121) or central government (S.1311).

Monetisation of gold occurs when the monetary authorities reclassify gold from stocks of valuables to reserve assets held by the monetary authorities. The other changes in the volume of assets account records then a decrease in their holding of valuables and an increase in their holding of monetary gold.

Purchases of monetary gold directly from other monetary authorities are classified as transactions in monetary gold (F.11). All other purchases, including those from financial intermediaries or via an organised gold market must be recorded as purchases of valuables followed by a classification change.

Demonetisation of gold occurs when the monetary authorities transfer gold from reserve assets to valuables. Holdings of monetary gold by monetary authorities then decrease and valuables show an increase. Sales of monetary gold directly to other monetary authorities are classified as transactions in monetary gold (E.11). All other sales, including those to financial intermediaries or via an organised gold market must be recorded as sales of valuables preceded by a classification change.

6.33. Changes in classification of assets or liabilities other than monetisation/demonetisation of gold (K.12.22): examples are changes in land use or conversions of dwellings to commercial use or vice versa. In the case of land both entries (a negative entry for the old category, a positive one for the new category) have to be made with the same value in the category K.12.22. The change in land value resulting from this change in use is recorded in economic appearance (see paragraph 6.17. c) or disappearance of non-produced assets (see paragraph 6.21. b) considered as volume changes.

K.12.22 does not include the conversion of bonds into shares. This conversion is recorded as two financial transactions (see paragraph 5.62. l).

6.34. Entries for other changes in volume (K.3-K.10 and K.12) are recorded in the other changes in the volume of assets accounts of the sectors, the total economy and the rest of the world.

# NOMINAL HOLDING GAINS/LOSSES (K.11)

6.35. Nominal holding gains<sup>3</sup> are that category of other changes in the value of assets, liabilities and therefore net worth which reflects the changes in the level and structure of their prices. Nominal holding gains are broken down into neutral holding gains and real holding gains.

#### 6.36. Definition:

The nominal holding gain (K.11) on a given quantity of an asset is defined as the change in value for the owner of that asset as a result of a change in its price. The nominal holding gain on a liability is defined as the change in value of that liability as a result of a change in its price, but with the sign reversed.

- 6.37. A positive holding gain is due to an increase in the value of a given asset or to a reduction in the value of a given liability. A negative holding gain, i.e. a holding loss, is due to a reduction in the value of a given asset or an increase in the value of a given liability.
- The nominal holding gains recorded in the 6.38. revaluation account are those accruing on assets or liabilities, whether realised or not. A holding gain is said to be realised when the asset in question is sold, redeemed, used or otherwise disposed of, or the liability repaid. An unrealised gain is therefore one accruing on an asset that is still owned or a liability that is still outstanding at the end of the accounting period. A realised gain is usually understood as the gain realised over the entire period over which the asset is owned or liability outstanding whether this period coincides with the accounting period or not. However, as holding gains are recorded on an accruals basis in the system, the distinction between realised and unrealised gains, although useful for some purposes, does not appear in the classifications and accounts.
- 6.39. Holding gains include gains on all kinds of assets: non-financial produced and non-produced assets, and financial assets. Thus, holding gains on inventories of all kinds of goods held by producers, including work in progress, are also covered.
- 6.40. Nominal holding gains may accrue on assets held for any length of time during the accounting period and not merely on assets that appear in the opening and/or closing balance sheets. The nominal holding gain accruing to the

<sup>3</sup> The term 'holding gain' is used to cover both holding gains and losses on the clear understanding that holding gains may be negative as well as positive. Similarly, the term 'asset' may be used collectively to cover both 'assets' and liabilities.



owner of a particular asset, or given quantity of a specific type of asset, between two points of time is defined as:

the current value of that asset at the later point of time,

minus

the current value of that asset at the earlier point of time,

assuming that the asset itself does not change, qualitatively or quantitatively, in the meanwhile. The nominal holding gain (G) accruing on a given quantity q of some asset between times o and t can be expressed as follows:

$$G=(p_t - p_o) X q$$

where  $p_0$  and  $p_t$  are the prices of the asset at times o and t respectively. For financial assets and liabilities with fixed current values for which both  $p_0$  and  $p_t$  are unity by definition, nominal holding gains are always zero.

6.41. For purposes of calculating nominal holding gains, acquisitions and disposals of assets must be valued in the same way as in the capital and financial accounts and stocks of assets must be valued in the same way as in the balance sheets. In the case of fixed assets the value of an acquisition is the amount paid by the purchaser to the producer, or seller, plus the associated costs of ownership transfer incurred by the purchaser. The value of a disposal of an existing fixed asset is the amount received by the seller from the purchaser minus the costs of ownership transfer incurred by the seller.

Four different situations giving rise to nominal holding gains may be distinguished:

- (1) an asset held throughout the accounting period: the nominal holding gain accruing during the accounting period is equal to the closing balance sheet value minus the opening balance sheet value. These values are the estimated values of the assets if they were to be acquired at the times the balance sheets are drawn up. The nominal gain is unrealised;
- (2) an asset held at the beginning of the period that is sold during the period: the nominal holding gain accruing is equal to the actual or estimated disposal value minus the opening balance sheet value. The nominal gain is realised;
- (3) an asset acquired during the period and still held at the end of the period: the nominal holding gain accruing is equal to the closing balance sheet value minus the actual, or

- estimated, acquisition value of the asset. The nominal gain is unrealised;
- (4) an asset acquired and disposed of during the accounting period: the nominal holding gain accruing is equal to the actual, or estimated, disposal value minus the actual, or estimated, acquisition value. The nominal gain is realised.
- 6.42. The nominal holding gains included are those accruing on assets and liabilities, whether realised or not. They are recorded in the revaluation account of the sectors, the total economy and the rest of the world.

### Neutral holding gains/losses (K.11.1)

6.43. Definition:

The neutral holding gain (K.11.1) on an asset is defined as the value of the holding gain that would accrue if the price of the asset changed over time in the same proportion as the general price level.

Neutral holding gains are identified to facilitate the derivation of real holding gains which redistribute real purchasing power between sectors.

6.44. Let the general price index be denoted by r. The neutral holding gain (NG) on a given quantity q of an asset between times o and t is then given by the following expression:

$$NG = p_0 X q (r_t / r_0 - 1)$$

where  $p_0 \chi q$  is the current value of the asset at time o and  $r_t/r_o$  the factor of the change in the general price index between times o and t. The same term  $r_t/r_o$  is applied to all assets and liabilities.

- 6.45. There is no ideal general price index appropriate to calculate neutral holding gains. By convention, the general price index to be applied for the calculation of neutral holding gains is the price index for final national uses excluding changes in inventories.
- 6.46. Neutral holding gains are recorded in the neutral holding gains/losses account, which is a sub-account of the revaluation account of the sectors, the total economy and the rest of the world.

#### Real holding gains/losses (K.11.2)

6.47. Definition:

The real holding gain (K.11.2) on an asset is defined as the difference between the nominal and the neutral holding gain on that asset.



The real holding gain (RG) on a given quantity q of an asset between times o and t is given by:

RG=G - NG or  
RG=
$$(p_t / p_o - r_t / r_o) \times p_o \times q$$

The values of the real holding gains on assets thus depend on the movements of their prices over the period in question, relative to movements of other prices, on average, as measured by the general price index.

6.48. Real holding gains are recorded in the real holding gains/losses account, which is a sub-account of the revaluation account of the sectors, the total economy and the rest of the world.

### Holding gains by type of financial asset

#### Currency and deposits (AF.2)

- 6.49. The current values of currency and deposits denominated in national currency remain constant over time. The 'price' of such an asset is always unity while the quantity is given by the number of units of the currency in which they are denominated. The nominal holding gains on such assets are always zero. For this reason, the difference between the values of the opening and closing stocks of such assets is, with the exception of the other changes in the volume of assets, entirely accounted for by the values of the transactions in the assets. This being one case in which it is normally possible to deduce the latter from the balance sheet figures.
- In order to calculate the neutral and real hold-6.50. ing gains on assets of fixed current value, however, data on the times and values of transactions are needed as well as the opening and closing balance sheet values. Suppose, for example, a loan is made and repaid within the accounting period while the general price level is rising. The neutral gain on the loan is positive and the real gain negative from the creditor's point of view, the amount depending upon the length of time the loan is outstanding and the rate of inflation. It is impossible to record such real losses without data on the value of the loans made and repaid during the accounting period and the times at which they are made and repaid. In general, it may be inferred that if the total absolute value of the positive and negative transactions is large in relation to the opening and closing balance sheet levels, approximate estimates of the neutral and real holding gains on financial assets and liabilities with fixed current values derived from balance

sheet data alone may not be very satisfactory. Even recording the values of financial transactions on a gross basis, i.e. recording loans made and repaid separately as distinct from the total value of loans minus repayments, may not be sufficient without information on the timing of the loans.

# Loans (AF.4) and other accounts receivable/payable (AF.7)

6.51. The same as for currency and deposits applies for loans and other accounts receivable/payable, which are not traded. However, when an existing loan or trade credit is sold to another institutional unit the difference between the redemption price and the transaction price should be recorded under the revaluation account of the seller and the purchaser at the time of transaction.

#### Securities other than shares (AF.3)

When bonds are issued at a premium or discount, including deep discounted and zero coupon bonds, the difference between its issue price and its face or redemption value when it matures measures interest that the issuer is obliged to pay over the life of the bond. Such interest is recorded as property income payable by the issuer of the bond and receivable by the holder of the bond in addition to any coupon interest actually paid by the issuer at specified intervals over the life of the bond. The interest accruing is recorded in the financial account as being simultaneously reinvested in the bond by the holder of the bond (see paragraph 5.17.). It is, therefore, recorded in the financial account as the acquisition of an asset which is added to the existing asset<sup>4</sup>. Thus the gradual increase in the market value of a bond that is attributable to the accumulation of accrued, reinvested interest reflects a growth in the principal outstanding – that is, in the size of the asset. It is essentially a quantum or volume increase and not a price increase. It does not generate any holding gain for the holder of the bond or holding loss for the issuer of the bond. The situation is analogous to that of a good, such as wine, that matures while it is being stored. Any increase in the price of the wine that is attributable to an improvement in its quality reflects an increase in volume and not price. Bonds change qualitatively over time as they approach maturity and it is essential to recognise that increases in their values due to the accumulation of accrued interest are not

<sup>4</sup> The system recommends this treatment, but allows for recording of such interest under other accounts receivable/payable (AF.7) where required to conform to national practices (see paragraph 5.130.).



- price changes and do not generate holding gains.
- The prices of fixed-interest bonds also change, 6.53. however, when the market rates of interest change, the prices varying inversely with the interest rate movements. The impact of a given interest rate change on the price of an individual bond is less, the closer the bond is to maturity. Changes in bond prices that are attributable to changes in market rates of interest constitute price and not quantum changes. They therefore generate nominal holding gains or losses for both the issuers and the holders of the bonds. An increase in interest rates generates a nominal holding gain for the issuer of the bond and an equal nominal holding loss for the holder of the bond, and vice versa in the case of fall in interest rates.

Nominal holding gains or losses may accrue on bills in the same way as for bonds. However, as bills are short-term securities with much shorter times to maturity, the holding gains generated by interest rate changes are generally much smaller than on bonds with the same face values.

- 6.54. The conversion of bonds into shares is recorded as two financial transactions (see paragraph 5.62. l). It will usually take place at a price below the market price of the shares and the resulting holding gains are to be recorded as a price change under the revaluation account.
- 6.55. The value of financial derivatives (AF. 34) may change as a result of changes in the value of the underlying instrument, changes in the volatility of the price of the underlying instrument, or approaching the date of execution or maturity. All such changes in value should be regarded as price changes and recorded under K.11.

#### Shares and other equity (AF.5)

6.56. Bonus shares (see paragraph 5.93.) increase the number of shares and the nominal value of the shares issued but do not in theory alter the market value of the totality of shares. By convention, they do not enter the accounts at all.

However, these issues are designed to improve the liquidity of the shares on the market and hence the total market value of shares issued may rise as a result any such change should be recorded as a revaluation effect.

#### Insurance technical reserves (AF.6)

6.57. Changes in the net equity of households in life insurance reserves and in pension funds reserves (AE.61) that occur between the beginning and the end of the accounting period and that result from nominal holding gains or losses on the reserves invested by insurance corporations and pension funds are recorded in the revaluation account, as well as changes in prepayments of insurance premiums and reserves for outstanding claims (AE.62) resulting from holding gains or losses.

#### Financial assets in foreign currency

The value of financial assets in foreign currency 6.58. is measured by their current market value in foreign currency converted into national currency at the current exchange rate. Nominal holding gains may therefore occur not only because the price of the asset in local currency changes but also because the exchange rate changes. The total value of the nominal holding gains accruing over the accounting period may be calculated in the usual way by subtracting the value of transactions from the difference between the opening and closing balance sheet values. For this purpose, transactions in the financial assets in foreign currency must be converted into the national currency using the exchange rates at the time the transactions occur, while the opening and closing balance sheet values must be converted using the exchange rates prevailing at the dates to which the balance sheets relate. This implies that the total value of the transactions – acquisitions less disposals – expressed in foreign currency is, in effect, converted by a weighted average exchange rate in which the weights are given the values of transactions conducted on different dates.

### **CHAPTER 7**

### **BALANCE SHEETS**

#### 7.01. Definition:

A balance sheet is a statement, drawn up at a particular point in time, of the values of assets owned and of liabilities outstanding. The balancing item is called net worth (B.90). The stock of the assets and liabilities recorded in the balance sheet is valued at the market prices prevailing on the date to which the balance sheet relates.

7.02. A balance sheet is drawn up for sectors, the total economy and the rest of the world.

For a sector the balance sheet shows the value of all assets – produced, non-produced and financial – and liabilities and the sector's net worth.

For the total economy the balance sheet provides as balancing item what is often referred to as national wealth – the sum of non-financial assets and net financial assets with respect to the rest of the world.

The balance sheet for the rest of the world, called the external assets and liabilities account, consists entirely of financial assets and liabilities.

- 7.03. Corporations are seen to have a net worth in addition to the value of the shares and other equity issued. In the case of quasi-corporations, net worth is zero, because the value of the owners' equity is assumed to be equal to its assets less its liabilities. Therefore, the net worth of resident direct investment enterprises, which are branches of non-resident enterprises and are therefore treated as quasi-corporations, is zero.
- 7.04. The difference between total financial assets and total liabilities is called net financial assets (see paragraph 7.67.).
- 7.05. For the non-financial and the financial corporations sectors the calculation of own funds provides an analytically meaningful indicator.

Own funds are the sum of net worth (B.90) and shares and other equity (AE.5) issued.

- 7.06. The balance sheet completes the sequence of accounts, showing the ultimate result of the entries in the production, distribution and use of income, and accumulation accounts (see chapter 8.: Sequence of accounts and balancing items).
- 7.07. A balance sheet relates to the value of assets and liabilities at a particular moment of time. Balance sheets are to be compiled at the beginning of the accounting period (the same as the end of the preceding period) and at its end.

7.08. A basic accounting identity links the opening balance sheet and the closing balance sheet:

the value of the stock of a specific type of asset in the opening balance sheet;

plus transactions: the total value of the assets acquired, less the total value of those disposed of, in transactions that take place within the accounting period: transactions in non-financial assets are recorded in the capital account and transactions in financial assets in the financial account;

minus consumption of fixed capital;

plus other volume changes: the value of other positive or negative changes in the volume of the assets held (for example, as a result of the discovery of a subsoil asset or the destruction of an asset as a result of war or a natural disaster): these changes are recorded in the other changes in volume of assets account;

plus revaluations: the value of the positive or negative nominal holding gains accruing during the period resulting from a change in the price of the asset: these changes are recorded in the revaluation account;

is identical with the value of the stock of the asset in the closing balance sheet.

The accounting links between the opening and closing balance sheets via transactions and other changes in assets (other changes in volume and holding gains) are shown schematically in Annex 7.2.

#### **TYPES OF ASSETS**

 The assets recorded in the balance sheets are economic assets.

#### 7.10. Definition:

Economic assets are entities functioning as a store of value over which ownership rights are enforced by institutional units, individually or collectively, and from which economic benefits may be derived by their owners by holding them or using them over a period of time.



- 7.11. The economic benefits consist of primary incomes (operating surplus by using, property income by letting others use) derived from the use of the asset and the value, including possible holding gains/losses, that could be realised by disposing of the asset or terminating it.
- 7.12. An overview of the classification and coverage of economic assets is given in the Table 7.1. The detailed definition of each asset category is set out in the Annex 7.1 to this chapter.

Excluded from the asset boundary are:

- a) human capital;
- b) natural assets that are not economic assets (e.g. air, river water);
- c) contingent assets, which are not financial assets (see paragraph 7.22.).
- 7.13. Three categories of assets are distinguished:
  - a) non-financial produced assets;
  - b) non-financial non-produced assets;
  - c) financial assets.

### Non-financial produced assets (AN.1)

7.14. Definition:

Produced assets (AN.1) are non-financial assets that have come into existence as outputs from production processes.

7.15. The classification of produced assets is designed to distinguish among assets on the basis of their role in production. It consists of: fixed assets<sup>1</sup> which are used repeatedly or continuously in production for more than one year; inventories which are used up in production as intermediate consumption, sold or otherwise disposed of; and valuables. The latter are not used primarily for production or consumption, but are instead acquired and held primarily as stores of value.

### Non-financial non-produced assets (AN.2)

7.16. Definition:

Non-produced assets (AN.2) are economic assets that come into existence other than through processes of production. They consist of tangible assets and intangible assets as defined below.

7.17. The classification is designed to distinguish assets on the basis of the way they come into existence. Some of these assets occur in nature,

- others, which may be referred to as constructs devised by society, come into existence by legal or accounting actions.
- 7.18. All tangible non-produced assets are natural assets. Which natural assets are included is determined, in compliance with the general definition of an economic asset, by whether the assets are subject to effective ownership and are capable of bringing economic benefits to their owners, given the existing technology, knowledge, economic opportunities, available resources, and set of relative prices. Moreover, natural assets over which ownership rights have not, or cannot, be established, such as open seas or air, are excluded.
- 7.19. Intangible non-produced assets include patented entities, transferable contracts, purchased goodwill, etc. Entities not evidenced by legal or accounting actions that is, such actions as the granting of a patent or the conveyance of some economic benefit to a third party are excluded.

#### Financial assets and liabilities (AF.)

7.20. Definition:

Financial assets (AE) are economic assets, comprising means of payment, financial claims and economic assets which are close to financial claims in nature.

7.21. Means of payment consist of monetary gold, special drawing rights, currency and transferable deposits.

Financial claims entitle their owners, the creditors, to receive a payment or series of payments without any counter-performance from other institutional units, the debtors, who have incurred the counterpart liabilities.

Examples of economic assets which are close to financial claims in nature are shares and other equity and partly contingent assets. The institutional unit issuing such a financial asset is considered to have incurred a counterpart liability.

7.22. Contingent assets are contractual arrangements between institutional units, and between them and the rest of the world, which specify one or more conditions which must be fulfilled before a financial transaction takes place. Examples are guarantees of payment by third parties, letters of credit, lines of credit, underwritten note issuance facilities (NIFs) and many of the derivative instruments. In the sys-

<sup>1</sup> Two kinds of durable goods used by producers are excluded from gross fixed capital formation: small tools and certain kinds of military equipment. Therefore there are no corresponding assets.

In addition, transport equipment and other machinery and equipment acquired by households for final consumption are not considered fixed assets. They are included in the memorandum item 'consumer durables' in the balance sheet (see paragraph 7.63.).

AN.1.

AN.13

AN.131 AN.132

AN.139



tem, a contingent asset is a financial asset in cases where the contractual arrangement itself has a market value because it is tradable or can be offset on the market. Otherwise, a contingent asset is not recorded in the system.<sup>2</sup>

- 7.23. In the system, each financial asset has a counterpart liability, with the exception of those financial assets classified in the category monetary gold and special drawing rights (A.F.1).
- 7.24. The classification of financial assets and liabilities corresponds to the classification of financial transactions. Therefore, the definitions of the categories, sub-categories and sub-positions of financial assets and liabilities and the supplementary explanations are provided only once in the ESA in the financial transactions

chapter. The balance sheets chapter does not repeat the definitions and their explanations in its main text but it provides in its Annex 1 a summary of all assets and liabilities defined in the system.

# VALUATION OF ENTRIES IN THE BALANCE SHEETS

#### General valuation principles

7.25. A particular item in the balance sheet should be valued as if it were being acquired on the date to which the balance sheet relates, including any associated costs of ownership transfer

#### Table 7.1 CLASSIFICATION OF ASSETS

Produced assets

#### AN. NON-FINANCIAL ASSETS (AN.1. + AN.2.)

AN.11	Fixed assets*
AN.111	Tangible fixed assets
AN.1111	Dwellings
AN.1112	Other buildings and structures
AN.11121	Non-residential buildings
AN.11122	Other structures
AN.1113	Machinery and equipment
AN.11131	Transport equipment
AN.11132	Other machinery and equipment
AN.1114	Cultivated assets
AN.11141	Livestock for breeding, dairy, draught, etc.
AN.11142	Vineyards, orchards and other plantations of trees yielding repeat products
AN.112	Intangible fixed assets
AN.1121	Mineral exploration
AN.1122	Computer software
AN.1123	Entertainment, literary or artistic originals
AN.1129	Other intangible fixed assets
AN.12	Inventories
AN.121	Materials and supplies
AN.122	Work in progress
AN.1221	Work in progress on cultivated assets
AN.1222	Other work in progress
AN.123	Finished goods
AN.124	Goods for resale

Memorandum item AN.m.: consumer durables

Other valuables

Valuables

Precious metals and stones

Antiques and other art objects

Insurance technical reserves (AF.6) are unconditional liabilities of insurance corporations and pension funds. However, the counterpart financial assets of individual policy holders and beneficiaries are contingent assets in most cases.



AN.2.	Non-produced assets
AN.21	Tangible non-produced assets
AN.211	Land
AN.2111	Land underlying buildings and structures
AN.2112	, 6
AN.2113	
AN.2119	
AN.212	Subsoil assets
AN.2121	Coal, oil and natural gas reserves
AN.2122	
AN.2123	
AN.2123	Non-cultivated biological resources
AN.214	Water resources
AIN.214	valer resources
AN.22	Intangible non-produced assets
AN.221	Patented entities
AN.222	Leases and other transferable contracts
AN.223	Purchased goodwill
AN.229	Other intangible non-produced assets
AF.	FINANCIAL ASSETS*
Ar.	(AE.1 + AE.2 + AE.3 + AE.4 + AE.5 + AE.6 + AE.7)
AE1	Monetary gold and special drawing rights (SDRs)
AE11	Monetary gold
AF.12	Special drawing rights (SDRs)
AF.2	Currency and deposits
AF.21	Currency
AF.22	Transferable deposits
AF.29	Other deposits
AF.3	Securities other than shares
AE33	Securities other than shares, excluding financial derivatives
AF.331	Short-term Short-term
AE332	Long-term
AF.34	Financial derivatives
A.E.4	
AF.4	Loans
AF.41	Short-term
AF.42	Long-term
AF.5	Shares and other equity
AF.51	Shares and other equity, excluding mutual funds shares
AE511	Quoted shares
AF.512	Unquoted shares
AE513	Other equity
AF.52	Mutual funds shares
AF.6	Insurance technical reserves
AE.61	Net equity of households in life insurance reserves and in pension funds reserves
AE.611	Net equity of households in life insurance reserves
AE.612	Net equity of households in pension funds reserves
711.012	Prepayments of insurance premiums and reserves for outstanding claims
AF.62	1
AF.62	
AE7	Other accounts receivable/payable
	Other accounts receivable/payable Trade credits and advances Other

Memorandum item AF.m.: direct foreign investment



in the case of non-financial assets. This implies that assets and liabilities are to be valued using current market prices on the date to which the balance sheet relates.

This means that assets should be valued on the basis of

- a) purchasers' prices if they are bought;
- b) basic prices if they are own-account produced and on the basis of basic prices of similar goods or of the sum of its cost if no basic prices are available.
- 7.26. Ideally, these prices should be prices observable on the market. When there are no observable prices as may be the case if no purchases/sales of the items in question have been observed in the recent past an attempt has to be made to estimate what the prices would be if the assets were acquired on the market on the date to which the balance sheet relates.
- 7.27. In addition to prices observed on markets or estimated from observed prices or costs incurred, current prices may be approximated for balance sheet valuation by:
  - a) revaluing and accumulating acquisitions less disposals or
  - b) the present, or discounted, value of future returns.
- 7.28. Market prices are usually available for many of the financial assets, existing real estate (buildings and other structures plus the underlying land), existing transport equipment, crops and livestock as well as for newly produced fixed assets and inventories.
- 7.29. For some assets revalued initial acquisition prices are written off over the asset's expected life. The value of such an asset at a given point in its life is given by its current acquisition price less the accumulated value of these write-offs. Most fixed assets can be recorded in balance sheets at current purchasers' prices written down for the accumulated consumption of fixed capital (written-down replacement cost)<sup>3</sup>.
- 7.30. In the case of assets for which the returns either are delayed (as with timber) or are spread over a lengthy period (as with subsoil assets), a rate of discount must be used to compute the present value of the expected future returns.

The rate of discount should be derived from information based on transactions in the particular type of assets under consideration – forests, mines and quarries – rather than using a general rate of interest.

- 7.31. The value of assets and liabilities denominated in foreign currencies should be converted into the national currency at the market exchange rate prevailing on the date to which the balance sheet relates. This rate should be the midpoint between the buying and the selling spot rates for currency transactions.
- 7.32. Alternatives to current market values might be useful for some analytical purposes and may be shown as memorandum items in the balance sheets. Examples of alternative valuation include nominal value for long-term bonds and revalued paid-in and equivalent value for corporate equity.

### **NON-FINANCIAL ASSETS (AN.)**

Produced assets (AN.1)

Fixed assets (AN.11)

Tangible fixed assets (AN.111)

7.33. Tangible fixed assets have to be recorded at market prices if possible (or basic prices in the case of own-account production of new assets), if not then at current purchasers' prices written down by the accumulated consumption of fixed capital. Purchasers' costs of ownership transfer associated with these assets, appropriately written down, are included in the balance sheet value.

#### Intangible fixed assets (AN.112)

- 7.34. Mineral exploration should be valued either on the basis of the accumulated amounts paid under contracts awarded to other institutional units for the purpose, or on the basis of the costs incurred for exploration undertaken on own account. That part of exploration undertaken in the past that has not yet been fully written off should be revalued at the prices and costs of the current period.
- 7.35. Computer software should be valued on the basis of the purchasers' price paid on the market, on the basis of estimated basic prices when produced in house, or on the basis of costs of production when such prices are not available. Software acquired in previous years and not yet fully written down should be revalued at current prices or costs (which may be less than the original price or cost).
- 7.36. Entertainment, literary or artistic originals and other intangible fixed assets should be valued at the acquisition price when these intangible

The sum of written-down values of all fixed assets still in use is described as net capital stock. Gross capital stock includes the values of the accumulated consumption of fixed capital.



assets are actually traded on markets. In the case of intangible assets that have been produced on own account, it may be necessary to value them on the basis of their costs of production, appropriately revalued at prices of the current period and written down. Otherwise, it may be necessary to use estimates of the present value of the expected future receipts to be received by owners of such assets.

#### Inventories (AN.12)

- 7.37. Inventories should be valued at prices prevailing on the date to which the balance sheet relates, and not at the prices at which the products were valued when they entered inventory.
- Inventories of materials and supplies are va-7.38. lued at purchasers' prices, and inventories of finished goods and work in progress are valued at basic prices. Inventories of goods intended for resale without further processing by wholesalers and retailers are valued at the prices prevailing on the date to which the balance sheet relates, excluding any transportation costs incurred by the wholesalers or retailers. For work-in-progress inventories, the value of the closing balance sheet can be calculated by applying the fraction of the total production cost incurred by the end of the period to the basic price of a similar finished product on the date to which the balance sheet relates. If the basic price of the finished products is not available, it can be estimated by the value of the production cost with a mark-up for expected net operating surplus or (estimated net) mixed income.

Growing single-use crops (except timber) and livestock being raised for slaughter can be valued by reference to the prices of such products on the markets. Standing timber is valued by discounting the future proceeds of selling the timber at current prices after deducting the expenses of bringing the timber to maturity, felling, etc.

#### Valuables (AN.13)

7.39. Valuables (works of art, antiques, jewellery, precious stones, non-monetary gold (see paragraph 5.30.) and other metals) are to be valued at current prices. To the extent that organised markets exist for these assets, they should be valued at the actual or estimated prices that would be paid for them were they purchased on the market, including any agents' fees or commissions, on the date to which the balance sheet relates. Otherwise, they should be valued at acquisition prices revalued to the current price level.

#### Non-produced assets (AN.2)

#### Tangible non-produced assets (AN.21)

#### Land (AN.211)

7.40. In the capital account, expenditures on land improvements and the costs of ownership transfer on land are recorded as gross fixed capital formation, separately from land itself.

> If the value of the land cannot be separated from that of the buildings or other structures situated on it, the assets have to be classified together on the basis of which is likely the larger value.

> In the balance sheet land is valued at its current market price.

This price does not necessarily equal the sum of all components constituting the costs of acquiring the land at the time of acquisition. Particularly the current market price may not cover the costs of ownership transfer or expenditures on land improvements not already written off to zero. So it may be necessary to enter these amounts, either completely or in part, as holding losses in the revaluation account.

#### Subsoil assets (AN.212)

7.41. Proven reserves of mineral deposits located on or below the earth's surface that are economically exploitable given current technology and relative prices are valued by the present value of expected net returns resulting from the commercial exploitation of those assets.

#### Other natural assets (AN.213 and AN.214)

7.42. As observed prices for these assets are not likely to be available, they have to be valued by the present value of future returns expected from them.

#### Intangible non-produced assets (AN.22)

7.43. Intangible non-produced assets (patented entities, leases or other transferable contracts, and purchased goodwill) should be valued at current prices when they are actually traded on markets. Otherwise, estimates of the present value of the expected future returns to be received by the owners of such assets will have to be made.

#### Financial assets and liabilities (AF.)

7.44. Financial assets and liabilities should in principle be valued at current prices. They should be assigned the same value whether they appear as financial assets or liabilities. The prices should exclude service charges, fees, commissions and similar payments which are recorded as services provided in carrying out the transactions.



#### Monetary gold and SDRs (AF.1)

7.45. Monetary gold (AF.11) is to be valued at the price established in organised gold markets.

The value of SDRs (AF.12) is determined daily by the IMF and the rates against domestic currencies are obtainable from foreign exchange markets.

#### Currency and deposits (AF.2)

7.46. For currency (AF.21), the valuation is the nominal or face value of the currency.

For deposits (AF.22, AF.29), the values to be recorded in the balance sheets are the amounts of principal that the debtors are contractually obliged to repay the creditors under the terms of the deposits when the deposits would be liquidated on the date the balance sheet is set up. The values may include accrued interest (see paragraph 5.130.).

#### Securities other than shares (AF.3)

The valuation adopted must be consistent with the treatment of accrued interest and its classification to specific asset headings (see paragraphs 5.128., 5.130., 5.138.). If accrued interest has been treated in the financial account as being reinvested in the corresponding securities, then, in the balance sheet, Securities other than shares, excluding financial derivatives, (AF.33) should be valued at current market prices in such a way that they include the value of the accrued interest. The global current market value of these securities has two distinct volume components, one representing the principal and the other the accrued interest. The global total volume thus includes the accrued interest (i.e., it is the number of units of securities in issue plus the supplementary volume resulting from accrued interest, see paragraph 6.52.); and the price to be applied to each of those units of volume excludes accrued interest.

If, in the financial account, the value of accrued interest has been included under E.79 Other accounts receivable/payable rather than E.33 Securities other than shares, excluding financial derivatives, then the value of accrued interest should also be included under AE.79 in the balance sheet.

7.48. Short-term securities other than shares excluding financial derivatives (AE331) are to be valued at their current market values.

If current market values are not available:

 a) short-term securities issued at par should be valued at face value plus accrued interest not due for payment or not paid; b) discounted securities should be valued at the issue price plus accrued interest.

These approximations should be restricted to securities whose original maturity does not exceed three months.

- 7.49. Long-term securities other than shares excluding financial derivatives (AF.332) are always to be valued at their current market values, whether they are bonds on which interest is paid regularly or deep-discounted or zero-coupon bonds on which little or no interest is paid.
- 7.50. Financial derivatives (AF.34) should be included in the balance sheets at their current market prices. In the case that no quoted market price exists (e.g. OTC options), a financial derivative should be valued at either the amount required to buy out or to offset the contract or the amount of premium paid.

By convention, the issuer of a financial derivative is considered to have incurred a counterpart liability.

#### Loans (AF.4)

7.51. The values to be recorded in the balance sheets of both creditors and debtors are the amounts of principal that the debtors are contractually obliged to repay the creditors, even in cases where the loan was traded at a discount or premium.

#### Shares and other equity (AF.5)

- 7.52. Shares and other equity are to be valued at their current prices. The same current price is adopted for both the asset side and the liability side, although shares and other equity are not, legally, a liability of the issuer, but an ownership right on the liquidation value of the corporation, whose amount is not known in advance.
- 7.53. Quoted shares (AF.511) are to be valued at a representative mid-market price observed on the stock exchange or other organised financial markets.
- 7.54. The values of unquoted shares (AF.512), which are not regularly traded on organised markets, should be estimated with reference to the values of quoted shares. However, these estimates should take into account differences between the two types of shares, notably their liquidity, and they should consider the reserves accumulated over the life of the corporation and its branch of business.
- 7.55. The estimation method applied depends very much on the basic statistics available. It may take into account, for example, data on merger activities involving unquoted shares. Furthermore, in cases where the reserves of corpora-



tions, which issue unquoted shares, differ on average, and in proportion to their nominal capital, from that of corporations, which issue quoted shares, it would be appropriate to calculate the current price of unquoted shares in proportion to figures including reserves, such as net worth given by the corporation balance sheet, or as own funds compiled according to ESA principles:

A = current price of unquoted shares

B = current price of quoted share

C= own funds (unquoted corporations) own funds (quoted corporations)

#### $A = B \times C$

The ratio of current price to own funds may vary with the branch of business. Therefore, it is preferable to calculate the current price of unquoted shares branch by branch. There may be other differences between quoted and unquoted corporations, which may have an effect on the estimation method.

- 7.56. Other equity (AE.513) is very often a liability of specific institutional units (quasi-corporations, corporations owned by the state, international organisations, notional units, etc.). In general, they have to be valued according to specific methods, such as own funds or nominal value. The own funds method is notably to be used systematically for quasi-corporations, since their net worth is by convention equal to zero.
- 7.57. Mutual funds shares (AF.52) are to be valued at their current stock exchange price, if they are quoted, or at their current redemption value, if they are redeemable by the fund itself.

#### Insurance technical reserves (AF.6)

- 7.58. In the case of net equity of households in life insurance reserves (AF.611), the present value of the individuals' actuarially determined claims to the payment of capital or income can be ascertained. This value includes the liability of life insurance corporations for reserves against outstanding risks and reserves for withprofit insurance that add to the value on maturity of with-profit endowments or similar policies. In the case of with-profit insurance, the reserves include holding gains.
- 7.59. In the case of net equity of households on pension funds reserves (AF.612), the nature of the liability of the funds – and financial asset of the households – depends on the kind of pension scheme.

Defined benefit pension schemes are those in which the level of pension benefits promised to participating employees is guaranteed. The liability of a defined benefit pension scheme is equal to the present value of the promised benefits. As the scheme may be temporarily over or underfunded, a defined benefit pension scheme may have a positive or negative net worth.

Money purchase pension schemes are those for which benefits are directly dependent on the assets of the fund. The liability of a money purchase pension scheme is the current market value of the funds' assets. The funds' net worth is always zero.

7.60. The value of the prepayments of insurance premiums, which are part of AE.62, is determined on the basis of the proportion of the risks involved in relation to time for the time remaining on the contract. The value of the reserves for outstanding claims, which are also part of AE.62, is the present value of the amounts expected to be paid out in settlement of claims, including disputed claims.

#### Other accounts receivable/payable (AF.7)

7.61. Trade credits and advances (AE.71) or other items receivable/payable (AE.79) are to be valued for both creditors and debtors at the amount the debtors are contractually obliged to pay the creditors when the obligation is extinguished.

#### Memorandum items

- 7.62. In order to show items of more specialised analytic interest for particular sectors, two memorandum items are to be included in the balance sheets:
  - a) consumer durables (AN.m);
  - b) direct foreign investment (AF.m).

#### Consumer durables (AN.m)

- 7.63. Consumer durables are durable goods used by households repeatedly over periods of time of more than one year for final consumption. They are included in the balance sheets only as memorandum items. Their inclusion as a component of the balance sheet would be appropriate if the system postulated that the durables were gradually used up in production processes whose outputs consist of services. But consumer durables are not treated in this way.
- 7.64. The stocks of consumer durables held by households transport equipment and other machinery and equipment are to be valued at current prices, both gross and net of accumulated charges equivalent to consumption of fixed capital. The figures shown as memoran-



- dum items in the balance sheet should be net of these accumulated charges.
- 7.65. Durable goods owned by owners of unincorporated enterprises may be used partly by the enterprise for production and partly by members of the household for final consumption. The values shown in the balance sheet for the enterprise should reflect the proportion of the use that is attributable to the enterprise.

#### Direct foreign investment (AF.m)

7.66. Direct investment consists of financial assets, not physical capital, because the direct investment enterprise is a corporation or quasi-corporation resident in another country. Financial assets and liabilities that constitute direct investment are to be recorded according to the nature of the financial assets in the categories shares and other equity, loans, and other accounts receivable/payable. The amounts of direct investment included within each of those categories should be recorded separately as a memorandum item.

#### Financial balance sheets

7.67. The financial balance sheet (of a sector or the rest of the world) shows on its left side financial

- assets and on its right side liabilities. The balancing item of the financial balance sheet is net financial assets (BF.90).
- 7.68. The financial balance sheet of a sector may be consolidated or non-consolidated. The non-consolidated financial balance sheet shows the financial assets and liabilities of the institutional units classified in the sector. Compared to the non-consolidated financial balance sheet, those financial assets and liabilities are eliminated from the consolidated financial balance sheet, the counterparts of which are liabilities respectively financial assets of institutional units classified in the same sector. The external assets and liabilities account, that is the financial balance sheet of the rest of the world (see paragraph 8.77.), is consolidated by definition.
- 7.69. The financial balance sheet by debtor/creditor (of a sector or the rest of the world) is an extension of the financial balance sheet, showing in addition a breakdown of financial assets by debtor sector and a breakdown of liabilities by creditor sector. Therefore, it provides information on debtor/creditor relationships and it is consistent with the financial account by debtor/creditor (see paragraph 5.13.).



# **ANNEX 7.1**

# **DEFINITION OF EACH ASSET CATEGORY**

Classifi	ication of Assets	Definitions
Nonfina	ncial assets (AN.)	Entities, over which ownership rights are enforced by institutional units, individually or collectively, and from which economic benefits may be derived by their owners by holding them, or using them over a period of time, that consist of tangible assets, both produced and nonproduced, and most intangible assets for which no corresponding liabilities are recorded.
	Produced assets (AN.1)	Non-financial assets that have come into existence as outputs from production processes. Produced assets consist of fixed assets, inventories and valuables, as defined below.
	Fixed assets (AN.11)	Produced assets that are used repeatedly or continuously in production processes for more than one year. Fixed assets consist of tangible and intangible fixed assets, as defined below.
	Tangible fixed assets (AN.111)	Fixed assets that consist of dwellings other buildings and structures machinery and equipment and cultivated assets, as defined below.
0000	Dwellings (AN.1111)	Buildings that are used entirely or primarily as residences, including any associated structures, such as garages, and all permanent fixtures customarily installed in residences. Houseboats, barges, mobile homes and caravans used as principal residences of households are also included, as are historic monuments identified primarily as dwellings. Costs of site clearance and preparation are also included.
		Examples include residential buildings, such as one and twodwelling buildings and other residential buildings intended for nontransient occupancy.
		Uncompleted dwellings are included to the extent that the ultimate user is deemed to have taken ownership, either because the construction is on own account or as evidenced by the existence of a contract of sale/purchase. Dwellings acquired for military personnel are included because they are used, as are dwellings acquired by civilian units, for the production of housing services.
	Other buildings and structures (AN.1112)	Nonresidential buildings and other structures, as defined below.
		Uncompleted buildings and structures are included to the extent that the ultimate user is deemed to have taken ownership, either because the construction is for own use or as evidenced by the existence of a contract of sale/purchase. Buildings and structures acquired for military purposes are included to the extent that they resemble civilian buildings acquired for purposes of production and are used in the same way.



Idings other than dwellings, including fixtures, faires and equipment that are integral parts of the actures and costs of site clearance and preparation. toric monuments identified primarily as nonresidenbuildings are also included.  Imples include warehouse and industrial buildings, numercial buildings, buildings for public entertainnt, hotels, restaurants, educational buildings, health ldings, etc.  Inctures other than buildings, including the cost of the lets, sewers and site clearance and preparation other in for residential or non residential buildings. Also luded are historic monuments for which identification as dwellings or nonresidential buildings is not sible and shafts, tunnels and other structures associd with mining subsoil assets. (Major improvements to d, such as dams and dikes for flood control, are luded in the value of land.)
nmercial buildings, buildings for public entertainnt, hotels, restaurants, educational buildings, health ldings, etc.  Inctures other than buildings, including the cost of the eets, sewers and site clearance and preparation other in for residential or non residential buildings. Also luded are historic monuments for which identification as dwellings or nonresidential buildings is not sible and shafts, tunnels and other structures associd with mining subsoil assets. (Major improvements to d, such as dams and dikes for flood control, are luded in the value of land.)
tets, sewers and site clearance and preparation other in for residential or non residential buildings. Also luded are historic monuments for which identification as dwellings or nonresidential buildings is not saible and shafts, tunnels and other structures associd with mining subsoil assets. (Major improvements to d, such as dams and dikes for flood control, are luded in the value of land.)
mples include highways, streets, roads, railways and ield runways bridges, elevated highways, tunnels and ways waterways, harbours, dams and other waterks long-distance pipelines, communication and wer lines local pipelines and cables, ancillary works astructions for mining and manufacture and constructors for sport and recreation.
nsport equipment and other machinery and equipnt, as defined below other than that acquired by useholds for final consumption. Tools that are relatly inexpensive and purchased at a relatively steady e, such as hand tools, may be excluded. Also excluded nachinery and equipment integral to buildings that is luded in dwellings and nonresidential buildings.
completed machinery and equipment is excluded, ess produced for own use, because the ultimate user leemed to take ownership only on delivery of the et. Machinery and equipment acquired for military poses is included to the extent that it resembles goods juired by civilian units for purposes of production and the military uses in the same way.
chinery and equipment acquired by households for al consumption is not treated as an asset. It is instead luded in the memorandum item 'consumer durables' the balance sheet for households. Houseboats, ges, mobile homes and caravans used by households principal residences are included in dwellings.
uipment for moving people and objects. Examples lude products other than parts included in CPA* section DM, transport equipment, such as motor nicles, trailers and semitrailers ships railway and tramy locomotives and rolling stock aircraft and spacecraft I motorcycles, bicycles, etc.
chinery and equipment not elsewhere classified. imples include products other than parts, installation,
ca a a a r II u c b h u c a



		repair and maintenance services included in CPA groups 29.1, machinery for the production and use of mechanical power, except aircraft, vehicle and cycle engines 29.2, other general purpose machinery 29.3, agricultural and forestry machinery 29.4, machine-tools 29.5 other special purpose machinery in CPA divisions 30, office machinery and computers 31, electrical machinery and apparatus n.e.c 32, radio, television and communication equipment and apparatus and 33, medical, precision and optical instruments, watches and clocks. Other examples are products other than parts, installation, repair and maintenance services included in CPA category 23.30.2, fuel elements (cartridges), non-irradiated, for nuclear reactors in CPA groups 36.1, furniture 36.3, musical instruments 36.4, sport goods and 28.3, steam generators, except central heating hot water boilers.
0000	Cultivated assets (AN.1114)	Livestock for breeding, dairy, draught, etc. and vineyards, orchards and other plantations of trees yielding repeat products that are under the direct control, responsibility and management of institutional units, as defined below.
		Immature cultivated assets are excluded unless produced for own use.
00000	Livestock for breeding, dairy, draught, etc. (AN.11141)	Livestock that are kept for the products they provide year after year. They include breeding stocks (including fish and poultry), dairy cattle, draught animals, sheep or other animals used for wool production and animals used for transportation, racing or entertainment.
00000	Vineyards, orchards and other plantations of trees yielding repeat products (AN.11142)	Trees (including vines and shrubs) cultivated for products they yield year after year, including those cultivated for fruits and nuts, for sap and resin and for bark and leaf products.
	Intangible fixed assets (AN.112)	Fixed assets that consist of mineral exploration, computer software, entertainment, literary or artistic originals and other intangible fixed assets, as defined below, intended to be used for more than one year.
0000	Mineral exploration (AN.1121)	The value of expenditures on exploration for petroleum and natural gas and for nonpetroleum deposits. These expenditures include prelicence costs, licence and acquisition costs, appraisal costs and the costs of actual test drilling and boring, as well as the costs of aerial and other surveys, transportation costs, etc., incurred to make it possible to carry out the tests.
	Computer software (AN.1122)	Computer programs, program descriptions and supporting materials for both systems and applications software. Included are purchased software and software developed on own account, if the expenditure is large. Large expenditures on the purchase, development or extension of computer databases that are expected to be used for more than one year, whether marketed or not, are also included.
0000	Entertainment, literary or artistic originals (AN.1123)	Original films, sound recordings, manuscripts, tapes, models, etc., on which drama performances, radio and television programmes, musical performances, sporting events, literary and artistic output, etc., are recorded or



		embodied. Included are works produced on own account. In some cases, such as films, there may be multiple originals.
	Other intangible fixed assets (AN.1129)	New information, specialised knowledge, etc., not elsewhere classified, whose use in production is restricted to the units that have established ownership rights over them or to other units licensed by the latter.
	Inventories (AN.12)	Produced assets that consist of goods and services that came into existence in the current period or in an earlier period held for sale, use in production or other use at a later date. They consist of materials and supplies, work in progress, finished goods and goods for resale, as defined below.
		Included are all inventories held by government, including, but not limited to, inventories of strategic materials, grains and other commodities of special importance to the nation.
	Materials and supplies (AN.121)	Goods that their owners intend to use as intermediate inputs in their own production processes, not to resell.
	Work in progress (AN.122)	Goods and services that are partially completed but that are not usually turned over to other units without further processing or that are not mature and whose production process will be continued in a subsequent period by the same producer. Excluded are partially completed structures for which the ultimate owner is deemed to have taken ownership, either because the production is for own use or as evidenced by the existence of a contract of sale/purchase. They consist of work in progress on cultivated assets and other work in progress, as defined below.
	Work in progress on cultivated assets (AN.1221)	Livestock raised for products yielded only on slaughter, such as fowl and fish raised commercially, trees and other vegetation yielding onceonly products on destruction and immature cultivated assets yielding repeat products.
	Other work in progress (AN.1222)	Goods other than cultivated assets and services that have been partially processed, fabricated or assembled by the producer but that are not usually sold, shipped or turned over to others without further processing.
	Finished goods (AN.123)	Goods that are ready for sale or shipment by the producer.
000	Goods for resale (AN.124)	Goods acquired by enterprises, such as wholesalers and retailers, for the purpose of reselling them without further processing (that is, not transformed other than by presenting them in ways that are attractive to the customer).
	Valuables (AN.13)	Produced assets that are not used primarily for production or consumption, that are expected to appreciate or at least not to decline in real value, that do not deteriorate over time under normal conditions and that are acquired and held primarily as stores of value. Valuables consist of precious metals and stones, antiques and other art objects and other valuables, as defined below.
	Precious metals and stones (AN.131)	Precious metals and stones that are not held by enter- prises for use as inputs into processes of production.



	Antiques and other art objects (AN.132)	Paintings, sculptures, etc., recognised as works of art and antiques.
000	Other valuables (AN.139)	Valuables not elsewhere classified, such as collections and jewellery of significant value fashioned out of precious stones and metals.
	Nonproduced assets (AN.2)	Non-financial assets that come into existence other than through processes of production. Non-produced assets consist of tangible assets and intangible assets, as defined below. Also included are costs of ownership transfer on and major improvements to these assets.
00	Tangible nonproduced assets (AN.21)	Non-produced assets that occur in nature and over which ownership may be enforced and transferred. Environmental assets over which ownership rights have not, or cannot, be enforced, such as open seas or air, are excluded. Tangible non-produced assets consist of land, subsoil assets, non-cultivated biological resources and water resources, as defined below.
	Land (AN.211)	The ground, including the soil covering and any associated surface waters, over which ownership rights are enforced. Also included are major improvements that cannot be physically separated from the land itself. Excluded are any buildings or other structures situated on it or running through it cultivated crops, trees and animals subsoil assets noncultivated biological resources and water resources below the ground. Land consists of land underlying buildings and structures, land under cultivation, recreational land and associated surface water and other land and associated surface water, as defined below.
0000	Land underlying buildings and structures (AN.2111)	Land on which dwellings, nonresidential buildings and structures are constructed or into which their foundations are dug, including yards and gardens deemed an integral part of farm and nonfarm dwellings and access roads to farms.
0000	Land under cultivation (AN.2112)	Land on which agricultural or horticultural production is carried on for commercial or subsistence purposes, including, in principle, land under plantations, orchards and vineyards.
0000	Recreational land and associated surface water (AN.2113)	Land that is used as privately owned amenity land, parklands and pleasure grounds and publicly owned parks and recreational areas, together with associated surface water.
0000	Other land and associated surface water (AN.2119)	Land not elsewhere classified, including private gardens and plots not cultivated for subsistence or commercial purposes, communal grazing land, land surrounding dwellings in excess of those yards and gardens deemed an integral part of farm and nonfarm dwellings and associated surface water.
000	Subsoil assets (AN.212)	Proven reserves of mineral deposits located on or below the earth's surface that are economically exploitable, given current technology and relative prices. Ownership rights to the subsoil assets are usually separable from those to the land itself. Subsoil assets consist of coal, oil and natural gas reserves, metallic mineral reserves and non-metallic mineral reserves, as defined below.



0000	Coal, oil and natural gas reserves (AN.2121)	Anthracite, bituminous and brown coal deposits petro- leum and natural gas reserves and fields.
0000	Metallic mineral reserves (AN.2122)	Ferrous, nonferrous and precious metal ore deposits.
0000	Non-metallic mineral reserves (AN.2123)	Stone quarries and clay and sand pits chemical and fertiliser mineral deposits salt deposits deposits of quartz, gypsum, natural gem stones, asphalt and bitumen, peat and other nonmetallic minerals other than coal and petroleum.
	Noncultivated biological resources (AN.213)	Animals and plants that yield both onceonly and repeat products over which ownership rights are enforced but for which natural growth and/or regeneration is not under the direct control, responsibility and management of institutional units. Examples are virgin forests and fisheries within the territory of the country. Only those resources that are currently, or are likely soon to be, exploitable for economic purposes should be included.
	Water resources (AN.214)	Aquifers and other groundwater resources to the extent that their scarcity leads to the enforcement of ownership and/or use rights, market valuation and some measure of economic control.
	Intangible nonproduced assets (AN.22)	Non-produced assets that are constructs of society. They are evidenced by legal or accounting actions, such as the granting of a patent or the conveyance of some economic benefit to a third party. Some entitle their owners to engage in certain specific activities and to exclude other institutional units from doing so except with the permission of the owner. Intangible non-produced assets consist of patented entities, leases and other transferable contracts, purchased goodwill and other intangible non-produced assets.
000	Patented entities (AN.221)	Inventions in categories of technical novelty that, by law or by judicial decision, can be afforded patent protection. Examples include constitutions of matter, processes, mechanisms, electrical and electronic circuits and devices, pharmaceutical formulations and new varieties of living things produced by artifice.
	Leases and other transferable contracts (AN.222)	Leases or contracts where the lessee has the right to convey the lease to a third party independently of the lessor. Examples include leases of land and buildings and other structures, concessions or exclusive rights to exploit mineral deposits or fishing grounds, transferable contracts with athletes and authors and options to buy tangible assets not yet produced. Leases on the rental of machinery are excluded from nonfinancial intangible assets.
000	Purchased goodwill (AN.223)	The difference between the value paid for an enterprise as a going concern and the sum of its assets less the sum of its liabilities, each item of which has been separately identified and valued. The value of goodwill, therefore, includes anything of long-term benefit to the business that has not been separately identified as an asset, as well as the value of the fact that the group of assets is used jointly and is not simply a collection of separable assets.



	Other intangible nonproduced assets (AN.229)	Intangible nonproduced assets not elsewhere classified.
		Financial assets are economic assets comprising means of payment, financial claims and economic assets which are close to financial claims in nature.
		Means of payment consist of monetary gold, special drawing rights, currency and transferable deposits.
		Financial claims entitle their owners, the creditors, to receive a payment or series of payments without any counter-performance from other institutional units, the debtors, who have incurred the counterpart liabilities.
		Examples of economic assets which are close to financial claims in nature are financial derivatives and shares and other equity.
	Monetary gold and SDRs (AF.1)	The financial assets classified in this category are the only financial assets for which there are no counterpart liabilities in the System.
	Monetary gold (AF.11)	Gold held as a component of foreign reserves by monetary authorities or by others who are subject to the effective control of the authorities.
	Special drawing rights (SDRs) (AF.12)	International reserve assets created by the International Monetary Fund (IMF) and allocated to its members to supplement existing reserve assets.
	Currency and deposits (AF.2)	Currency in circulation and all types of deposits in national and in foreign currency.
	Currency (AF.21)	Notes and coins in circulation that are commonly used to make payments.
00	Transferable deposits (AF.22)	Deposits (in national or in foreign currency) which are immediately convertible into currency or which are transferable by cheque, banker's order, debit entry or the like, both without any kind of significant restriction or penalty.
00	Other deposits (AF.29)	Deposits (in national or in foreign currency) other than transferable deposits. Other deposits cannot be used to make payments at any moment and they are not convertible into currency or transferable deposits without any kind of significant restriction or penalty.
	Securities other than shares (AF.3)	Financial assets which are negotiable and bearer instruments, are usually traded on secondary markets, and do not grant the holder any ownership rights in the institutional unit issuing them.
00	Securities other than shares, excluding financial derivatives (AF.33)	Securities other than shares which give the holder the unconditional right to a fixed or contractually determined variable money income in the form of coupon payments (interest) and/or a stated fixed sum on a specified date or dates or starting from a date fixed at the time of issue.
	Short-term securities other than shares, excluding financial derivatives (AF.331)	Securities other than shares, whose original maturity is normally one year or less and in exceptional cases two years at the maximum, except financial derivatives.
	Long-term securities other than shares, excluding financial derivatives (AF.332)	Securities other than shares, whose original maturity is normally more than one year, and in exceptional cases



		more than two years at the minimum, except financial derivatives.
	Financial derivatives (AF.34)	Financial assets based on or derived from a different underlying instrument. The underlying instrument is usually another financial asset, but may also be a commodity or an index.
	Loans (AF.4)	Financial assets created when creditors lend funds to debtors, either directly or through brokers, which are either evidenced by non-negotiable documents or not evidenced by documents.
	Short-term loans (AF.41)	Loans whose original maturity is normally one year or less, and in exceptional cases two years at the maximum, and loans repayable on demand.
	Long-term loans (AF.42)	Loans whose original maturity is normally more than one year, and in exceptional cases more than two years at the minimum.
	Shares and other equity (AF.5)	Financial assets which represent property rights on corporations or quasi-corporations. These financial assets generally entitle the holders to a share in the profits of the corporations or quasi-corporations and to a share in their heir net assets in the event of liquidation.
	Shares and other equity, excluding mutual funds shares (AF.51)	Financial assets except mutual fund shares which represent property rights on corporations or quasi-corporations. These financial assets generally entitle the holders to a share in the profits of the corporations or quasi-corporations and to a share in their net assets in the event of liquidation.
000	Quoted shares, excluding mutual funds shares (AF.511) Unquoted shares, excluding mutual funds shares (AF.512)	Shares cover beneficial interest in the capital of corporations in the form of securities which in principle are negotiable. Quoted shares cover those shares with prices quoted on a recognised stock exchange or other form of secondary market. Unquoted shares cover those shares that are not quoted.
	Other equity (AF.513)	All forms of equities other than those classified in subpositions AE511 and AE512, and in sub-category AE52.
	Mutual funds shares (AF.52)	Shares issued by a specific type of financial corporations, whose exclusive purpose is to invest the funds collected on the money market, the capital market and/or in real estate.
	Insurance technical reserves (AF.6)	Technical provisions of insurance corporations and (autonomous and non-autonomous) pension funds against policy holders or beneficiaries as laid down in the Council Directive 91/674/EEC of 19 December 1991 on the annual accounts and consolidated accounts of insurance undertakings.
	Net equity of households in life insurance reserves and in pension funds reserves (AF.61)	Provisions set aside in the corporations concerned for the purpose of obtaining, once the established condi- tions are met, the claims and benefits foreseen.
000	Net equity of households in life insurance reserves (AF.611)	Provisions against outstanding risks and provisions for with-profit insurance that add to the value on maturity of with-profit endowments or similar policies.



Net equity of households in pensions funds reserves (AF.612)	Provisions held by autonomous and non-autonomous pension funds established by employers and/or employees or groups of self-employed to provide pensions for employees or self-employed.
Prepayments of insurance premiums and reserves for outstanding claims	Provisions established by insurance corporations and (autonomous and non-autonomous) pension funds for
(AF.62)	<ul> <li>the amount representing that part of gross premiums written which is to be allocated to the following accounting period (prepayments of insurance pre- miums);</li> </ul>
	<ul> <li>the total estimated ultimate cost of settling all claims arising from events which have occurred up to the end of the accounting period, whether reported or not, less amounts already paid in respect of such claims (provisions for outstanding claims).</li> </ul>
Other accounts receivable/payable (AF.7)	Financial assets which are created as a counterpart of a financial or a non-financial transaction in cases where there is a timing difference between this transaction and the corresponding payment.
Trade credits and advances (AF.71)	Financial assets arising from the direct extension of credit by suppliers and buyers for goods and services transac- tions and advance payments for work that is in progress or to be undertaken and associated with such transac- tions.
Other accounts receivable/payable, excluding trade credits and advances (AF.79)	Financial assets which arise from timing differences between distributive transactions or financial transactions on the secondary market and the corresponding payment. It includes also financial claims due to income accruing over time.
Memorandum items	The System calls for several memorandum items to show assets not separately identified in the central framework that are of more specialised analytic interest.
Consumer durables (AN.m)	Durable goods acquired by households for final consumption (i.e. those that are not used by households as stores of value or by unincorporated enterprises owned by households for purposes of production).
Direct foreign investment (AF.m)	Direct foreign investment involves a long-term relationship reflecting a lasting interest of a resident institutional unit in one economy ('direct investor') in an institutional unit resident in an economy other than that of the investor ('direct investment enterprise'). The direct investor's purpose is to exert a significant degree of influence on the management of the enterprise resident in the other economy.



## **ANNEX 7.2**

# A MAP OF ENTRIES FROM OPENING BALANCE SHEET TO CLOSING BALANCE SHEET

	on of Assets, and Net Worth	IV.1 Opening Balance Sheet	III.1 and III.2 Transactions	III.3.1 Other changes in volume	III. Holdir III.3.2.1 Neutral	IV.3 Closing Balance Sheet	
					Holding Gains and Losses	Holding Gains and Losses	
Non-financ	ial assets	AN.	P.5, K.1, K.2	K.3, K.4, K.5, K.6, K.7, K.8, K.9, K.12.1, K.12.22	K.11.1	K.11.2	AN.
	Produced assets	AN.1	P.5, K.1	K.4, K.7, K.8, K.9, K.12.1, K.12.22	K.11.1	K.11.2	AN.1
	Fixed assets*	AN.11	P.51, K.1	K.4, K.7, K.8, K.9, K.12.1, K.12.22	K.11.1	K.11.2	AN.11
	Tangible fixed assets	AN.111	P.511, K.1	K.4, K.7, K.8, K.9, K.12.1, K.12.22	K.11.1	K.11.2	AN.111
	Dwellings	AN.1111	P.511, K.1	K.4, K.7, K.8, K.9, K.12.1, K.12.22	K.11.1	K.11.2	AN.1111
	Other buildings and structures	AN.1112	P.511, K.1	K.4, K.7, K.8, K.9, K.12.1, K.12.22	K.11.1	K.11.2	AN.1112
	Machinery and equipment	AN.1113	P.511, K.1	K.7, K.8, K.9, K.12.1, K.12.22	K.11.1	K.11.2	AN.1113
	Cultivated assets	AN.1114	P.511, K.1	K.7, K.8, K.9, K.12.1, K.12.22	K.11.1	K.11.2	AN.1114
000	Intangible fixed assets	AN.112	P.512, K.1	K.7, K.8, K.9, K.12.1, K.12.22	K.11.1	K.11.2	AN.112
	Inventories	AN.12	P.52	K.7, K.8, K.9, K.12.1, K.12.22	K.11.1	K.11.2	AN.12
	Valuables	AN.13	P.53	K.4, K.7, K.8, K.9, K.12.1, K.12.22	K.11.1	K.11.2	AN.13
	Non-produced assets	AN.2	K.2, P.513, K.1	K.3, K.5, K.61, K.62, K.7, K.8, K.9, K.12.1, K.12.22	K.11.1	K.11.2	AN.2
	Tangible non-produced assets	AN.21	K.21, P.513, K.1	K.3, K.5, K.61, K.62, K.7, K.8, K.9, K.12.1, K.12.22	K.11.1	K.11.2	AN.21

<sup>\*</sup> Memorandum item: AN.m Consumer durables.



Classification	n of Assets	IV.1 Opening	III.1 and III.2 Transactions	III.3.1 Other changes		.3.2 ng gains	IV.3 Closing
	nd Net Worth	Balance Sheet	Hansacuons	in volume	III.3.2.1 Neutral Holding Gains and Losses	III.3.2.2 Real Holding	Balance Sheet
	Land	AN.211	K.21, P.513, K.1	K.3, K.62, K.7, K.8, K.9, K.12.1, K.12.22	K.11.1	K.11.2	AN.211
	Subsoil assets	AN.212 K.21, P.513,		K.3, K.61, K.62, K.7, K.8, K.9, K.12.1, K.12.22	K.11.1	K.11.2	AN.212
	Non-cultivated biological resources	AN.213	K.21, P.513,	K.3, K.5, K.61, K.62, K.7, K.8, K.9, K.12.1, K.12.22	K.11.1	K.11.2	AN.213
	Water resources	AN.214 K.21, P.513,		K.3, K.61, K.62, K.7, K.8, K.9, K.12.1, K.12.22	K.11.1	K.11.2	AN.214
	Intangible non-produced assets	AN.22	K.22, P.513,	K.3, K.62, K.7, K.8, K.9, K.12.1, K.12.22	K.11.1	K.11.2	AN.22
Financial ass	sets/liabilities*	AF.	F.	K.7, K.8, K.10, K.12.1, K.12.21, K.12.22	K.11.1	K.11.2	AF.
	Monetary gold and SDRs (assets only)	AF.1 F.1		K.7, K.8, K.10, K.12.1, K.12.21, K.12.22	K.11.1	K.11.2	AF.1
	Currency and deposits	AF.2 F.2		K.7, K.8, K.10, K.12.1, K.12.22	K.11.1	K.11.2	AF.2
	Securities other than shares	AF.3 F.3		K.7, K.8, K.10, K.12.1, K.12.22	K.11.1	K.11.2	AF.3
	Loans	AF.4	F.4	K.7, K.8, K.10, K.12.1, K.12.22	K.11.1	K.11.2	AF.4
	Shares and other equity	AF.5 F.5		K.7, K.8, K.10, K.12.1, K.12.22	K.11.1	K.11.2	AF.5
	Insurance technical reserves	AF.6 F.6		K.7, K.8, K.10, K.12.1, K.12.22	K.11.1	K.11.2	AF.6
	Other accounts receivable/payable	AF.7	F.7	K.7, K.8, K.10, K.12.1, K.12.22	K.11.1	K.11.2	AF.7
Net worth		B.90	B.10.1	B.10.2	B.10.31	B.10.32	B.90

<sup>\*</sup> Memorandum item: AF.m Direct foreign investment.



AN. ..., AF. ... are from Classification of assets.

D-I	l	
Ba	lancing	items

B.10.1	Changes in net worth due to saving and capital transfers
B.10.2	Changes in net worth due to other changes in volume of assets
B.10.31	Changes in net worth due to neutral holding gains/losses
B.10.32	Changes in net worth due to real holding gains/losses
B.90	Net worth

### Transactions in financial assets and liabilities

E.	Transactions in financial assets and liabilities
F.1	Monetary gold and SDRsF.2 Currency and deposits
F.3	Securities other than shares
F.4	Loans
F.5	Shares and other equity
F.6	Insurance technical reserves
F.7	Other accounts receivable/payable

# Transactions in goods and services

P.5	Gross capital formation
P.51	Gross fixed capital formation
P.511	Acquisitions less disposals of tangible fixed assets
P.512	Acquisitions less disposals of intangible fixed assets
P.513	Additions to the value of non-produced non-financial assets
P.52	Changes in inventories
P.53	Acquisitions less disposals of valuables

### Other accumulation entries

K.1	Consumption of fixed capital
K.2	Acquisitions less disposals of non-financial non-produced assets
K.21	Acquisitions less disposals of land and other tangible non-produced assets
K.22	Acquisitions less disposals of intangible non-produced assets
K.3	Economic appearance of non-produced assets
K.4	Economic appearance of produced assets
K.5	Natural growth of non-cultivated biological resources
K.61	Depletion of natural assets
K.62	Other economic disappearance of non-produced assets
K.7	Catastrophic losses
K.8	Uncompensated seizures
K.9	Other volume changes in non-financial assets n.e.c.
K.10	Other volume changes in financial assets and liabilities n.e.c.
K.11	Nominal holding gains/losses
K.11.1	Neutral holding gains/losses
K.11.2	Real holding gains/losses
K.12	Changes in classifications and structure
K.12.1	Changes in sector classification and structure
K.12.21	Monetization/demonetization of gold
K.12.22	Changes other than monetization/demonetization of gold in classifications of assets or
	liabilities

### CHAPTER 8

# SEQUENCE OF ACCOUNTS AND BALANCING ITEMS

- 8.01. The ESA records flows and stocks in an ordered set of accounts describing the economic cycle from the generation of income, through its distribution and redistribution and finally to its accumulation in the form of assets.
- 8.02. Each of the accounts shows transactions which balance out, either because of the definitions used or because a significant balance is carried forward to the next account.
- 8.03. The structured recording of transactions according to a logical analysis of economic life provides the aggregates required for the study of an industry, an institutional sector or subsector, or the total economy. The breakdown of the accounts was designed to reveal the most significant economic information.
- 8.04. The accounts are grouped in three categories:
  - a) current accounts;
  - b) accumulation accounts;
  - c) balance sheets.

Current accounts concern the generation, distribution and redistribution of income and its use in the form of final consumption. Finally, they permit the calculation of saving, which is an essential factor in accumulation.

Accumulation accounts analyse the various components of changes in the assets and liabilities of the various units and enable changes in net worth (the difference between assets and liabilities) to be recorded.

Balance sheets show the total assets and liabilities of the various units at the beginning and the end of the accounting period, together with their net worth. The flows for each asset and liability item recorded in the accumulation accounts are seen again in the changes in balance sheets account.

- 8.05. The sequence of accounts applies, wholly or partly, to institutional units, institutional sectors and sub-sectors, industries and the total economy.
- 8.06. The balancing items are established both gross and net. They are gross if calculated before deduction of consumption of fixed capital and net if calculated after this deduction. It is more significant to express income balancing items in net terms.
- 8.07. The accounts are presented in various ways:
  - a) in the form of integrated economic accounts, showing the accounts for all the institutional sectors, the total economy and the rest of the world in a single table;
  - b) in the form of a sequence of accounts, giving more detailed information. The tables showing the presentation of each account are given in the section of this chapter entitled 'Sequence of accounts';
  - c) in the form of matrices, in which each account is represented by a row/column pair.
- 8.08. Synoptic presentation of the accounts, balancing items and main aggregates:

Table 8.1 Synoptic presentation of the accounts, balancing items and main aggregates

	Full good	uence of accounts for institu	utional eacter	Accounts						Balancing items	Main aggregates
Current	L.	Production account	I.	Production account					B.1	Value added	Domestic product (GDP/NDP)
ccounts		Troduction (tecount		Troduction decoding					<b>.</b> ,	value added	Domestic product (ODT)/1017
	11.	Distribution and	0.1.	Primary	11.1.1.	Generation of			8.2	Operating surplus	
		use of income		distribution of		income account			B.3	Mixed income	
		accounts		income accounts	11.1.2.	Allocation of	П.1.2.1.	Entrepreneurial	B.4	Entrepreneurial income	
						primary income		income account			
						account	II.1.2.2.	Allocation of	8.5	Balance of primary incomes	National income (GNI,NNI)
								other primary			
			11.2.	Secondary distribution				income account	8.6	Diamenth income	Matter of discountile issues
			11.2.	of income account					0.0	Disposable income	National disposable income
			11.3,	Redistribution of income					B.7	Adjusted disposable income	
			111.51	in kind account					0.7	radiated disposable medite	
			11.4.	Use of income account	11,4,1,	Use of disposable			B.8	Saving	National saving
						income account				B11111.B	Timorini saving
					11.4.2.	Use of adjusted disposable					
						income account					
accumulation	111.	Accumulation	111.1.	Capital account	111.1.1.	Change in net worth due to			B.10.1	Changes in net worth, due	
ccounts		accounts				saving and capital				to saving and capital	
						transfers account				transfers	
					111.1.2.	Acquisition of non financial	assets acco	unt	B.9	Net lending/Net borrowing	
			111.2.	Financial account		out and an area			B.9	Net lending/Net borrowing	
			111.3.	Other changes in assets accounts	111,3,1.	Other changes in volume of assets			B.10.2	Changes in net worth, due to	
				assets accounts		account				other changes in volume of assets	
					111.3.2.	Revaluation			B.10.3	Changes in net worth, due to	
					******	Nevindinion			0.10.5	Changes in her worth, due to	
						accounts				nominal holding gains/losses	
						accounts	III.3.2.1.	Neutral holding	B.10.31	nominal holding gains/losses Changes in net worth, due to	
						accounts	III.3.2.1.	Neutral holding	B.10.31	Changes in net worth, due to	
						accounts	III.3.2.1. III.3.2.2.		B.10.31 B.10.32	0.0	
						accounts		gains/losses	B.10.32	Changes in net worth, due to neutral holding gains/losses Changes in net worth, due to real holding gains/losses	
	IV.	Balance sheets	IV.1.	Opening balance sheet		accounts		gains/losses Real holding gains/	B.10.32 B.90	Changes in net worth, due to neutral holding gains/losses Changes in net worth, due to real holding gains/losses Net worth	National worth
	IV.	Balance sheets	IV.2.	Changes in balance sheet		accounts		gains/losses Real holding gains/	B.10.32 B.90 B.10	Changes in net worth, due to neutral holding gains/losses Changes in net worth, due to real holding gains/losses Net worth Changes in net worth, total	Changes in national worth
						accounts		gains/losses Real holding gains/	B.10.32 B.90	Changes in net worth, due to neutral holding gains/losses Changes in net worth, due to real holding gains/losses Net worth	
neets	Transact	ion accounts	IV.2.	Changes in balance sheet	1	accounts		gains/losses Real holding gains/	B.10.32 B.90 B.10	Changes in net worth, due to neutral holding gains/losses Changes in net worth, due to real holding gains/losses Net worth Changes in net worth, total	Changes in national worth
Goods and		ion accounts Goods and services	IV.2.	Changes in balance sheet		accounts		gains/losses Real holding gains/	B.10.32 B.90 B.10	Changes in net worth, due to neutral holding gains/losses Changes in net worth, due to real holding gains/losses Net worth Changes in net worth, total	Changes in national worth
Goods and	Transact 0.	ion accounts	IV.2. IV.3.	Changes in balance sheet Closing balance sheet		accounts		gains/losses Real holding gains/	B.10.32 B.90 B.10	Changes in net worth, due to neutral holding gains/losses Changes in net worth, due to real holding gains/losses Net worth Changes in net worth, total	Changes in national worth
Goods and ervices account	Transact 0.	ion accounts  Goods and services account	IV.2. IV.3.	Changes in balance sheet Closing balance sheet		accounts		gains/losses Real holding gains/	B.10.32 B.90 B.10	Changes in net worth, due to neutral holding gains/losses Changes in net worth, due to real holding gains/losses Net worth Changes in net worth, total	Changes in national worth
. Goods and ervices account	Transact 0.  Rest of the	ion accounts  Goods and services account he world account (external	IV.2. IV.3. transactions as V.J.	Changes in balance sheet Closing balance sheet		accounts		gains/losses Real holding gains/	B.10.32 B.90 B.10 B.90	Changes in net worth, due to neutral holding gains/losses Changes in net worth, due to real holding gains/losses Net worth Changes in net worth, total Net worth	Changes in national worth National worth
heets  D. Goods and ervices account	Transact 0.  Rest of the	ion accounts  Goods and services account he world account (external Rest of the world	IV.2. IV.3. transactions a	Changes in balance sheet Closing balance sheet  ccount) External account of goods and services External account of		accounts		gains/losses Real holding gains/	B.10.32 B.90 B.10 B.90	Changes in net worth, due to neutral holding gains/losses Changes in net worth, due to real holding gains/losses Net worth Changes in net worth, total Net worth  External balance of goods	Changes in national worth National worth  External balance of goods
. Goods and ervices account	Transact 0.	ion accounts  Goods and services account he world account (external Rest of the world	IV.2. IV.3. transactions as V.J.	Changes in balance sheet Closing balance sheet  ccount) External account of goods and services External account of primary income and		accounts		gains/losses Real holding gains/	B.10.32 B.90 B.10 B.90	Changes in net worth, due to neutral holding gains/losses Changes in net worth, due to real holding gains/losses Net worth Changes in net worth, total Net worth  External balance of goods and services	Changes in national worth National worth  External balance of goods and services
D. Goods and ervices account Current eccounts	Transact 0.	ion accounts  Goods and services account he world account (external Rest of the world	IV.2, IV.3.  transactions at V.I. V.II.	Changes in balance sheet Closing balance sheet  External account of goods and services External account of primary income and current transfers			III.3.2.2.	gains/losses Real holding gains/ losses	B.10.32 B.90 B.10 B.90 B.11 B.11	Changes in net worth, due to neutral holding gains/losses Changes in net worth, due to real holding gains/losses Net worth Changes in net worth, total Net worth  External balance of goods and services Current external balance	Changes in national worth National worth  External balance of goods and services
heets  D. Goods and ervices account  Current eccounts	Transact 0.	ion accounts  Goods and services account he world account (external Rest of the world	IV.2. IV.3. transactions as V.J.	Changes in balance sheet  Closing balance sheet  External account of goods and services External account of primary income and current transfers External	V.III.1.	accounts  Capital account		gains/losses Real holding gains/ losses  Changes in net worth due	B.10.32 B.90 B.10 B.90	Changes in net worth, due to neutral holding gains/losses Changes in net worth, due to real holding gains/losses Net worth Changes in net worth, total Net worth  External balance of goods and services Current external balance Changes in net worth due	Changes in national worth National worth  External balance of goods and services
D. Goods and ervices account Current ecounts	Transact 0.	ion accounts  Goods and services account he world account (external Rest of the world	IV.2, IV.3.  transactions at V.I. V.II.	Changes in balance sheet Closing balance sheet  External account of goods and services External account of primary income and current transfers			III.3.2.2.	gains/losses Real holding gains/ losses  Changes in net worth due to saving and capital	B.10.32 B.90 B.10 B.90 B.11 B.11	Changes in net worth, due to neutral holding gains/losses Changes in net worth, due to real holding gains/losses Net worth Changes in net worth, total Net worth  External balance of goods and services Current external balance Changes in net worth due to current external balance	Changes in national worth National worth  External balance of goods and services
. Goods and ervices account urrent ecounts	Transact 0.	ion accounts  Goods and services account he world account (external Rest of the world	IV.2, IV.3.  transactions at V.I. V.II.	Changes in balance sheet  Closing balance sheet  External account of goods and services External account of primary income and current transfers External			III.3.2.2. V.III.1.1.	gains/losses Real holding gains/ losses  Changes in net worth due to saving and capital transfers account	B.10.32 B.90 B.10 B.90 B.11 B.11 B.12	Changes in net worth, due to neutral holding gains/losses Changes in net worth, due to real holding gains/losses Net worth Changes in net worth, total Net worth  External balance of goods and services Current external balance Changes in net worth due to current external balance and capital tranfers	Changes in national worth National worth  External balance of goods and services
Goods and ervices account urrent ecounts	Transact 0.	ion accounts  Goods and services account he world account (external Rest of the world	IV.2, IV.3.  transactions at V.I. V.II.	Changes in balance sheet  Closing balance sheet  External account of goods and services External account of primary income and current transfers External			III.3.2.2.	gains/losses Real holding gains/ losses  Changes in net worth due to saving and capital transfers account Acquisition of non finan-	B.10.32 B.90 B.10 B.90 B.11 B.11	Changes in net worth, due to neutral holding gains/losses Changes in net worth, due to real holding gains/losses Net worth Changes in net worth, total Net worth  External balance of goods and services Current external balance Changes in net worth due to current external balance	Changes in national worth National worth  External balance of goods and services
Goods and ervices account urrent ecounts	Transact 0.	ion accounts  Goods and services account he world account (external Rest of the world	IV.2, IV.3.  transactions at V.I. V.II.	Changes in balance sheet Closing balance sheet  External account of goods and services External account of primary income and current transfers External accountulation	V,III.1.	Capital account	III.3.2.2. V.III.1.1.	gains/losses Real holding gains/ losses  Changes in net worth due to saving and capital transfers account	B.10.32  B.90 B.10 B.90  B.11 B.12  B.10.1	Changes in net worth, due to neutral holding gains/losses Changes in net worth, due to real holding gains/losses Net worth Changes in net worth, total Net worth  External balance of goods and services Current external balance Changes in net worth due to current external balance and capital tranfers Net lending/Net borrowing	Changes in national worth National worth  External balance of goods and services Current external balance
. Goods and ervices account current eccounts	Transact 0.	ion accounts  Goods and services account he world account (external Rest of the world	IV.2, IV.3.  transactions at V.I. V.II.	Changes in balance sheet  Closing balance sheet  External account of goods and services External account of primary income and current transfers External	V.III.1.	Capital account	V.III.1.1. V.III.1.2.	gains/losses Real holding gains/ losses  Changes in net worth due to saving and capital transfers account Acquisition of non finan- cial assets account	B.10.32  B.90 B.10 B.90  B.11 B.12  B.10.1  B.99	Changes in net worth, due to neutral holding gains/losses Changes in net worth, due to real holding gains/losses Net worth Changes in net worth, total Net worth Langes in net worth, total Net worth External balance of goods and services Current external balance Changes in net worth due to current external balance and capital transfers Net lending/Net borrowing Net lending/Net borrowing	Changes in national worth National worth  External balance of goods and services
Goods and ervices account urrent ecounts	Transact 0.	ion accounts  Goods and services account he world account (external Rest of the world	IV.2, IV.3.  transactions at V.I. V.II.	Changes in balance sheet Closing balance sheet  External account of goods and services External account of primary income and current transfers External accountulation	V,III.1.	Capital account Financial account Other changes in	III.3.2.2. V.III.1.1.	gains/losses Real holding gains/ losses  Changes in net worth due to saving and capital transfers account Acquisition of non finan- cial assets account. Other changes in	B.10.32  B.90 B.10 B.90  B.11 B.12  B.10.1	Changes in net worth, due to neutral holding gains/losses Changes in net worth, due to real holding gains/losses Net worth Changes in net worth, total Net worth Changes in net worth, total Net worth  External balance of goods and services Current external balance Changes in net worth due to current external balance and capital tranfers Net lending/Net borrowing Net lending/Net borrowing Changes in net worth, due	Changes in national worth National worth  External balance of goods and services Current external balance
. Goods and ervices account urrent ecounts	Transact 0.	ion accounts  Goods and services account he world account (external Rest of the world	IV.2, IV.3.  transactions at V.I. V.II.	Changes in balance sheet Closing balance sheet  External account of goods and services External account of primary income and current transfers External accountulation	V.III.1.	Capital account	V.III.1.1. V.III.1.2.	gains/losses Real holding gains/ losses  Changes in net worth due to saving and capital transfers account Acquisition of non finan- cial assets account	B.10.32  B.90 B.10 B.90  B.11 B.12  B.10.1  B.99	Changes in net worth, due to neutral holding gains/losses Changes in net worth, due to real holding gains/losses Net worth Changes in net worth, total Net worth  External balance of goods and services Current external balance Changes in net worth due to current external balance and capital tranfers Net lending/Net borrowing Net lending/Net borrowing Changes in net worth, due to other changes in volume	Changes in national worth National worth  External balance of goods and services Current external balance
Goods and ervices account urrent eccumulation	Transact 0.	ion accounts  Goods and services account he world account (external Rest of the world	IV.2, IV.3.  transactions at V.I. V.II.	Changes in balance sheet Closing balance sheet  External account of goods and services External account of primary income and current transfers External accountulation	V.III.1.	Capital account Financial account Other changes in	V.III.1.1. V.III.1.2.	gains/losses Real holding gains/ losses  Changes in net worth due to saving and capital transfers account Acquisition of non finan- cial assets account. Other changes in	B.10.32  B.90 B.10 B.90  B.11 B.12  B.10.1  B.90  B.10.1	Changes in net worth, due to neutral holding gains/losses Changes in net worth, due to real holding gains/losses Net worth Changes in net worth, total Net worth Changes in net worth, total Net worth  External balance of goods and services Current external balance Changes in net worth due to current external balance and capital tranfers Net lending/Net borrowing Net lending/Net borrowing Changes in net worth, due to other changes in volume of assets	Changes in national worth National worth  External balance of goods and services Current external balance
Goods and ervices account urrent eccumulation	Transact 0.	ion accounts  Goods and services account he world account (external Rest of the world	IV.2, IV.3.  transactions at V.I. V.II.	Changes in balance sheet Closing balance sheet  External account of goods and services External account of primary income and current transfers External accountulation	V.III.1.	Capital account Financial account Other changes in	V.III.1.1. V.III.1.2.	gains/losses Real holding gains/ losses  Changes in net worth due to saving and capital transfers account Acquisition of non finan- cial assets account Other changes in volume of assets	B.10.32  B.90 B.10 B.90  B.11 B.12  B.10.1  B.99	Changes in net worth, due to neutral holding gains/losses Changes in net worth, due to real holding gains/losses Net worth Changes in net worth, total Net worth  External balance of goods and services Current external balance Changes in net worth due to current external balance and capital tranfers Net lending/Net borrowing Net lending/Net borrowing Changes in net worth, due to other changes in volume	Changes in national worth National worth  External balance of goods and services Current external balance
Coods and envices account furrent ecounts	Transact 0.	ion accounts  Goods and services account he world account (external Rest of the world	IV.2, IV.3.  transactions at V.I. V.II.	Changes in balance sheet Closing balance sheet  External account of goods and services External account of primary income and current transfers External accountulation	V.III.1.	Capital account Financial account Other changes in	V.III.1.1. V.III.1.2.	gains/losses Real holding gains/ losses  Changes in net worth due to saving and capital transfers account Acquisition of non finan- cial assets account Other changes in volume of assets Revaluation	B.10.32  B.90 B.10 B.90  B.11 B.12  B.10.1  B.90  B.10.1	Changes in net worth, due to neutral holding gains/losses Changes in net worth, due to real holding gains/losses Net worth Changes in net worth, total Net worth Changes in net worth, total Net worth  External balance of goods and services Current external balance Changes in net worth due to current external balance and capital tranfers Net lending/Net borrowing Net lending/Net borrowing Changes in net worth, due to other changes in volume of assets Changes in net worth, due	Changes in national worth National worth  External balance of goods and services Current external balance  Net lending/Net borrowing
Balance sheets  D. Goods and services account Current secounts Accumulation secounts	Transact 0.	ion accounts  Goods and services account he world account (external Rest of the world	transactions at V.J. V.II.	Changes in balance sheet Closing balance sheet  External account of goods and services External account of primary income and current transfers External accountlation	V.III.1. V.III.2. V.III.3.	Capital account Financial account Other changes in assets account	V.III.1.1. V.III.1.2.	gains/losses Real holding gains/ losses  Changes in net worth due to saving and capital transfers account Acquisition of non finan- cial assets account Other changes in volume of assets Revaluation	B.10.32 B.90 B.10 B.90 B.11 B.12 B.10.1 B.99 B.10.2 B.10.3	Changes in net worth, due to neutral holding gains/losses Changes in net worth, due to real holding gains/losses Net worth Changes in net worth, total Net worth Changes in net worth, total Net worth  External balance of goods and services Current external balance Changes in net worth due to current external balance and capital tranfers Net lending/Net borrowing Net lending/Net borrowing Changes in net worth, due to other changes in volume of assets Changes in net worth, due to nominal holding gains/losses	Changes in national worth National worth  External balance of goods and services Current external balance



### **SEQUENCE OF ACCOUNTS**

- 8.09. The sequence of accounts is composed of three main categories of accounts:
  - a) Current accounts:
    - (1) production account (I);
    - (2) distribution and use of income accounts (II).
  - b) accumulation accounts (III);
  - c) balance sheets (IV).

#### Current accounts

#### Production account (I)1

- 8.10. The production account (I) shows the transactions relating to the production process proper. It is drawn up for institutional sectors and for industries. Its resources include output and its uses include intermediate consumption.
- 8.11. The production account can be used to obtain one of the most important balancing items in the system value added, or the value generated by any unit engaged in a production activity and a vital aggregate: gross domestic product. Value added is economically significant for both the institutional sectors and the industries.

- 8.12. As with the balancing items of the following accounts, value added (the balancing item of the account) may be calculated before or after consumption of fixed capital, i.e. gross or net. Given that output is valued at basic prices and intermediate consumption at purchaser's prices, value added does not include taxes less subsidies on products.
- 8.13. The production account at the level of the total economy includes in resources, in addition to the output of goods and services, taxes less subsidies on products. It thus enables gross domestic product (at market prices) to be obtained as a balancing item.
- 8.14. As financial intermediation services indirectly measured (FISIM) are not allocated to user sectors, the whole of the value of the output of FISIM is treated as the intermediate consumption of a nominal sector with zero output and negative value added equal in size but opposite in sign to intermediate consumption. In this way, the value added of all sectors and industries together is reduced in total by this amount. To lighten the presentation of accounts, it is possible not to insert a supplementary column for the nominal sector, but instead to take into account the corresponding figure in the column total economy.

See chapter 3., 'Transactions in products'.

Table 8.2 Account I: Production account

			Us	es											Resoure	ces			
		S.1	5	5.15	S.14	S.13	S.12	S.11			S.11	S.12	S.13	5.14	S.15	5.1			
	Corresponding entries of the							Non-			Non-							sponding es of the	
	Goods Rest						Finan-	finan-			finan-	Finan-					Rest	Goods	
	and of the	e Tota	l			General	cial	cial			cial	cial	General			Total	of the	and	
	services work	eco-			House-	govern-	corpo-	corpo-			corpo-	corpo-	govern-	House-		eco-	world	services	
Total	account accou	nt nom	y N	PISHs	holds	ment	rations	rations		Transactions and balancing items	rations	rations	ment	holds	<b>NPISHs</b>	nomy	account	account	Total
3 595	3 595								P.1	Output	1 753	102	434	1 269	37	3 595			3 595
3 048	3 048								P.11	Market output / FISIM	1 722	102	74	1 129	21	3 048			3 048
171	171								P.12	Output for own final use	31	0	0	140	0	171			171
376	376								P.13	Other non-market output			360		16	376			376
1 904		1 90	14	6	694	246	29	881	P.2	Intermediate consumption / FISIM								1 904	1 904
133	133								D.21-D.31							133			133
1 824		1 82	4	31	575	188	73	872	B.1g/B.1*g	Value added, gross/ gross domestic product									
222		22	2	3	42	30	10	137	K.1	Consumption of fixed capital									
1 602		1 60	2	28	533	158	63	735	B.1n/B.1*n	Value added, net/ net domestic product									

P.11 Financial corporations: 102 including 48 for FISIM (P.119)

P.2 Total economy: 1904 corresponding to the sum of institutional sectors (1856) and to FISIM (48)

B.1g Total economy: 1824 corresponding to the sum of institutional sectors (1739), plus taxes less subsidies on products (133) less FISIM (48)



#### Distribution and use of income accounts (II)

8.15. Distribution and use of income are analysed in four stages: primary distribution, secondary distribution, redistribution in kind and use of income.

The first stage concerns the generation of income resulting directly from the production process and its distribution between the production factors (labour, capital) and general government (via taxes on production and imports, and subsidies). It enables the operating surplus (or mixed income in the case of households) and primary income to be determined.

The second stage traces redistribution of income via transfers other than social transfers in kind. This yields the disposable income.

The third stage describes redistribution via social transfers in kind, yielding the adjusted disposable income.

The fourth stage describes how the income is consumed and saved, yielding the saving.

## Primary distribution of income accounts (II.1)

Generation of income account (II.1.1)

The layout of the generation of income account by institutional sector is as shown in the Table 8.3:

- 8.16. The generation of income account is also presented by industries, in the columns of the supply and uses tables.
- 8.17. The generation of income account presents the sectors, sub-sectors and industries which are the source, rather than the destination, of primary income.

- 8.18. It analyses the extent to which value added can cover compensation of employees and other taxes less subsidies on production. It measures the operating surplus, which is the surplus (or deficit) on production activities before account has been taken of the interest, rents or charges which the production unit:
  - a) must pay on financial assets or on tangible non-produced assets which it has borrowed or rented;
  - b) must receive on financial assets or on tangible non-produced assets of which it is the owner.

The operating surplus corresponds to the income which the units obtain from their own use of their production facilities. It is the last balancing item which can be calculated for both the industries and the institutional sectors and sub-sectors.

- 8.19. In the case of unincorporated enterprises in the households sector, the balancing item of the generation of income account implicitly contains an element corresponding to remuneration for work carried out by the owner or members of his family which cannot be distinguished from his profits as entrepreneur. This is referred to as 'mixed income'.
- 8.20. In the case of own account production of accommodation services by owner-occupier households, the balancing item of the generation of income account is an operating surplus.

Table 8.3 Account II.1.1: Generation of income account

				Uses											Resoure	ces			
		oonding of the	5.1	S.15	5.14	5.13	5.12	5.11 Non-			S.11 Non-	S.12	S.13	S.14	S.15	S.1		ponding s of the	
	Goods	Rest					Finan-	finan-			finan-	Finan-					Rest	Goods	
	and	of the	Lotal			General		cial			cial	cial	General			Total	of the	and	
		world	eco-		Hous	e- govern-					corpo-			House-		eco-	world	services	
Total	account	account	nomy	NPISH		s ment				Transactions and balancing items	rations	rations			NPISHs	nomy	account	account	Total
									B.1g/B.1*g	Value added, gross/ gross domestic product	872	73	188	575	31	1 824			1 824
									B.1n/B.1*n	Value added, net/ net domestic product	735	63	158	533	28	1 602			1 602
762			762	2.		9 140	15	545	D.1	Compensation of employees									
569			569	12		9 87	10	421	D.11	Wages and salaries									
193			193	11		0 53	5	124	D.12	Employers' social contributions									
174			174	10	)	0 48	- 4	112	D.121	Employers' actual social contributions									
19			15	) 1		0 5	1	12	D.122	Employers' imputed social contributions									
235		0	235	(	)	3 2	3	86	D.2	Taxes on production and imports								0	
141		0	141						D.21	Taxes on products								O	
121		0	121						D.211	Value added type taxes (VAT)								0	
17		0	17	,					D.212	Taxes and duties on imports excluding VAT								0	
17		0	17	,					D.2121	Import duties								0	
0		0	(	)					D.2122	Taxes on imports excluding VAT								0	
										and duties									
3		0	3	1					D.214	Taxes on products except VAT								0	
										and import taxes									
94		0	94		)	3 2	3	86		Other taxes on production								0	
- 44		0	- 44		) -	1 0	0	- 35		Subsidies								0	
- 8		0	- 8	3					D.31	Subsidies on products								0	
0		0	C						D.311	Import subsidies								0	
- 8		0	- 8						D.319	Other subsidies on products								0	
- 36		0	- 36			1 0			D.39	Other subsidies on production								. 0	
429			429			92 46	55	276	B.2g	Operating surplus, gross									
442			442		4.				B.3g	Mixed income, gross									
217			217			0 16	45	139		Operating surplus, net									
432			432	?	43	12			B.3n	Mixed income, net									



Allocation of primary income account (II.1.2)

- 8.21. Unlike the generation account, the allocation of primary income account concerns the resident units and institutional sectors as recipients rather than producers of primary income.
- 8.22. 'Primary income' is the income which resident units receive by virtue of their direct participation in the production process, and the income receivable by the owner of a financial asset or a tangible non-produced asset in return for providing funds to, or putting the tangible nonproduced asset at the disposal of, another institutional unit.
- 8.23. The allocation of primary income account (II.1.2) can be calculated only for the institutional sectors and sub-sectors because, in the case of industries, it is impossible to break

- down certain flows connected with financing (capital loans and borrowings) and assets.
- 8.24. As financial intermediation services indirectly measured (FISIM) are not allocated to user sectors, the entries shown for interest are those for actual interest payable and receivable. An adjustment is made to resources in the column financial corporations (with a negative sign) and in the column nominal sector (with a positive sign). To lighten the presentation of accounts, it is possible not to insert a supplementary column for the nominal sector, but instead to present the corresponding figure in the column total economy.
- 8.25. The allocation of primary income account is broken down into an entrepreneurial income account (II.1.2.1) and an allocation of other primary income account (II.1.2.2).

Table 8.4 Account II.1.2: Allocation of primary income account

			Uses												Resoure	ces		
	and of		5.1 S.1  Iotal eco-		S.14	S.13 General govern-	Finan- cial	Non- finan- cial			S.11 Non- finan- cial corpo-		S.13 General govern-	S.14 House-	5.15	S.1 Total	Corresponding entries of the Rest Goods of the and world services	
Total	account acco	ount	nomy NPIS	Hs	holds	ment	rations	rations		Transactions and balancing items	rations	rations	ment	holds	NPISHs	nomy	account account	Lotal
									B.2g	Operating surplus, gross	276	55	46	92	8	429		429
									B.3g	Mixed income, gross				442		442		442
									B.2n	Operating surplus, net	139	45	16	60	5	217		217
									B.3n	Mixed income, net				432		432		432
- 6		6							D.1	Compensation of employees				766		766	2	768
- 6		6							D.11	Wages and salaries				573		573	2	575
									D.12	Employers' social contributions				193		193	0	193
									D.121	Employers' actual social contributions				174		174	0	174
									D.122	Employers' imputed social contributions				19		19	0	19
		0							D.2	Taxes on production and imports			235			235	0	235
		0							D.21	Taxes on products			141			141	0	141
		0							D.211	Value added type taxes (VAT)			121			121	0	121
		0							D.212	Taxes and duties on imports excluding VAT			17			17	0	17
		0							D.212	Import duties			17			17	0	17
		0							D.212	,			0			0	0	0
									D.214	Taxes on products except VAT and import taxes			3			3	0	3
		0							D.29	Other taxes on production			94			94	0	94
		0							D.3	Subsidies			- 44			- 44	0	- 44
		0							D.31	Subsidies on products			- 8			- 8	0	- 8
		0							D.311	Import subsidies			0			0	0	0
		0							D.319	Other subsidies on products			- 8			- 8	0	- 8
116		0	200	7		16	120	4.15	D.39	Other subsidies on production	70	1.00	- 36	474		- 36	0	- 36
446 222		66	380 206	7	44 17			145	D.4 D.41	Property income Interest	78 25	160 125	30	134 33	5 5	407 200	39 22	446
0		16	0	/	17	39	//	00	P.119	Adjustment FISIM	25		12	3.3		200	22	222 0
120		36	84	0		0	36	40	D.42	Distributed income of corporations	3	- 48 25	18	57	0		17	120
60		0	60	U		U	36		D.421	Distributed income of corporations  Dividends	3		18	13	0		14	60
60		36	24				0		D.421	Withdrawals from income of quasi-corporations		23	13	44	0		3	60
14		14	0	0		0			D.422	Reinvested earnings on direct foreign investment	4	7	0	3	0		0	14
25		1.4	25	U		U	25	U	D.44	Property income attributed to insurance policy holders	5		0	20	0		0	25
65			65	0	27	7		31	D.45	Rent	41	3	0	21	0		· ·	65
1 855			1 855	6	1 390		29			5*g Balance of primary incomes, gross/National income, gross	41	3	Ü	4.1	Ü	0.5		05
1 633			1 633		1 348					5*n Balance of primary incomes, net/National income, net								

The adjustment FISIM for Total economy (0) is the sum of Financial corporations sector (-48) and of the nominal sector (+48)



Entrepreneurial income account (II.1.2.1)

- 8.26. The purpose of the entrepreneurial income account is to determine a balancing item corresponding to the concept of current profit before distribution and income tax, as normally used in business accounting.
- 8.27. In the case of general government and nonprofit institutions serving households, this account concerns only their market activities.
- 8.28. Entrepreneurial income corresponds to the operating surplus or mixed income (on the resources side):
  - plus property income receivable in connection with financial and other assets belonging to the enterprise (on the resources side);
  - minus interest on debts payable by the enterprise and rents payable on land and other non-produced tangible assets rented by the enterprise (on the uses side).

Property income payable in the form of dividends or reinvested earnings on direct foreign investment is not deducted from entrepreneurial income.

Allocation of other primary income account (II.1.2.2)

8.29. The purpose of the allocation of other primary income account is to return from the concept

- of entrepreneurial income to the concept of primary income. It therefore contains the elements of primary income not included in the entrepreneurial income account:
- a) in the case of corporations, distributed dividends and reinvested earnings on direct foreign investment (on the uses side);
- b) in the case of households:
  - (1) property income payable, excluding rents and interest payable in connection with the entrepreneurial activity (on the uses side);
  - (2) compensation of employees (on the resources side).
  - (3) property income receivable, excluding that receivable in connection with the activity of the enterprise (on the resources side);
- c) in the case of general government:
  - property income payable, excluding that payable in connection with the market activities (on the uses side);
  - (2) taxes on production and imports less subsidies (on the resources side);
  - (3) property income receivable, excluding that receivable in connection with the market activities (on the resources side).

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Table 8.5 Accounts II.1.2.1: Entrepreneurial income and II.1.2.2: Allocation of other primary income

				Uses	C 1 F	611	C 1 2	C 11	E 44			C 44	E * 0	643	C 4 4		Resource	:5			
		Goods and services	ponding s of the Rest of the world	S.1 Total	S.15	5.14 House	42	cial corpo	Non- finan cial				S.12 Finan- cial corpo-	S.13 General govern-		5.15	S.1 Total eco-	entrie Rest of the world	ponding s of the Goods and services		
ccounts	Total	account	account	nomy	NPISH	s holds	ment	ration	s ration		Transactions and balancing items		rations	ment		NPI5Hs	_	account	account	Total	Accounts
1.2.1. trepre- urial										B.2g B.3g B.2n	Operating surplus, gross Mixed income, gross Operating surplus, net	139		46 16	442	5	442			429 442 217	II.1.2.1. Entrepre neurial
ome										B.3n	Mixed income, net				432		432			432	income
	244		27	217	2		9	10	2 97	D.4	Property income	78	160	4	5	0	247	21		268	
	160		13	147	- 2	. (	) 2	7	7 60	D.41	Interest	25	125	0	0	0	150	16		166	
	0			0						P.119	Adjustment FISIM		- 48				0			0	
										D.42	Distributed income of corporations	3	25	4	5	O	37	5		42	
										D.421	Dividends	3	25	4	5	O	37	5		42	
										D,422	Withdrawals from income of quasi-corporations	0	0	0		0		0		0	
	1.4		14							D.43	Reinvested earnings on direct foreign investment	4	7	0			11			11	
	25			25					5	D.44	Property income attributed to insurance policyholders	5	0	0			5			5	
	45			45			, ,		0 31		Rent	41	3	0			44			44	
	901 679			901 679					5 257		Entrepreneurial income, gross										
.2.2.	6/9			6/9		490	) 11		5 120	B.4n B.4g	Entrepreneurial income, net Entrepreneurial income, gross	257	6.5		5.00		003			001	
cation										B.4n	Entrepreneurial income, goss  Entrepreneurial income, net	257 120	65 55	41		6					
ther	6		6							D.1	Compensation of employees	120	33		766	3	766	2		76B	of other
iary	6		6							D.11	Wages and salaries				573		573	2		575	primary
me										D.12	Employers' social contributions				193		193	0		193	income
										D.121	Employers' actual social contributions				174		174	0		174	
										D.122	Employers' imputed social contributions				19		19	0		19	
	0		0							D.2	Taxes on production and imports			235			235	0		235	
	0		0							D.21	Taxes on products			141			141	0		141	
	O		0							D.211	Value added type taxes (VAT)			121			121	0		121	
	0		0							D.212	Taxes and duties on imports excluding VAT			17			17	0		17	
	0		0							D.2121	Import duties			17			17	0		1.7	
	0		0							D,2122	Taxes on imports excluding VAT and duties			0			0	0		0	
	0		0							D.214	Taxes on products except VAT, and import taxes			3			3	0		3	
	0		0							D,29	Other taxes on production			94			94	0		94	
	0		0							D.3	Subsidies			- 44			- 44	0		- 44	
	0		0							D.31	Subsidies on products			- 8			- 8	0		- 8	
	0		0							D,311	Import subsidies			0			0	0		0	
	0		0							D.319 D.39	Other subsidies on products			- 8			- 8	0		- 8	
	202		39	163		37	37		6 48		Other subsidies on production Property income			- 36 26	129	5	- 36 160	18		- 36 178	
	62		39	59					- 40	D.41	Interest			12	33	5		18		56	
	120		36	84		,,,	3.		6 48		Distributed income of corporations			14	52	0		12		78	
	60		0	60					6 24		Dividends			1	8	0		9		18	
	60		36	24					0 24		Withdrawals from income of quasi-corporations			13		0		3		60	
	0			0					0 (		Reinvested earnings on direct foreign investment				3	D		,		3	
										D.44	Property income attributed to insurance policyholders				20	0				20	
	20			20	(	) 2(	)			D.45	Rent				21	0				21	
	1 855			1 855	6	1 390	221	2	9 209	B.5g/B.5*g	Balance of primary incomes, gross/National income, gross										
	1 633			1 633	3	1 348	191	1	9 72	B.5n/B.5*n	Balance of primary incomes, net/National income, net										



## Secondary distribution of income account (II.2)

- 8.30. The secondary distribution of income account shows how the balance of the primary income of an institutional sector is allocated by redistribution: current taxes on income, wealth etc., social contributions and benefits (excluding social transfers in kind) and other current transfers.
- 8.31. The balancing item of the account is disposable income, which reflects current transactions and explicitly excludes capital transfers, real holding gains and losses and the consequences of events such as natural disasters.
- 8.32. Social contributions are recorded<sup>2</sup> on the uses side of the secondary distribution of income account of households and on the resources side of the secondary distribution of income account of the institutional sectors responsible for management of social insurance. When payable by employers for their employees, they are first included under compensation of employees, on the uses side of the employers' generation of income account, since they form part of wage costs; they are also recorded, as compensation of employees, on the resources side of the households' allocation of primary

income account, since they correspond to benefits to households

#### Redistribution of income in kind account (II.3)

- 8.33. The redistribution of income in kind account gives a broader picture of households' income by including the flows corresponding to the use of individual goods and services which these households receive free of charge, i.e. social benefits in kind and transfers of individual non-market goods and services, these two categories of flows being grouped together under the concept of social transfers in kind. This facilitates comparisons over time when there are differences or changes in economic and social conditions, and supplements the analysis of the role of general government in the redistribution of income.
- 8.34. Social transfers in kind are recorded on the resources side of the redistribution of income in kind account in the case of households, and on the uses side in the case of general government and non-profit institutions serving households.
- 8.35. The balancing item in the redistribution of income in kind account is adjusted disposable income.

<sup>2</sup> The social contributions shown on the uses side of the secondary distribution of income account of households are net of the service charges of the pension funds and other insurance companies, all or part of whose resources are made up of actual social contributions.

Table 8.7 Account II.3: Redistribution of income in kind account

	U	ses											Resource	25		
Correspondi		S.15	S.14	S.13	5.12	S.11			S.11	S.12	S.13	S.14	S.15	5.1	Corresponding	
entries of th	2					Non-			Non-						entries of the	
Goods Res					Finan-	finan-			finan-	Finan-					Rest Goods	
and of th	ie Total			General	cial	cial			cial	cial	General			Total	of the and	
services wor	d eco-		House-	govern-	corpo-	corpo-			corpo-	corpo-	govern-	House-		eco-	world services	
fotal account account	int nomy N	1PISHs	holds	ment	rations	rations		Transactions and balancing items	rations	rations	ment	holds	NPISH <sub>5</sub>	nomy	account account	Total
							B.6g	Disposable income, gross	185	32	382	1 187	40	1 826		1 82
							B.6n	Disposable income, net	48	22	352	1 145	37	1 604		1 60
219	219	13		206			D.63	Social transfers in kind				219		219		21
162	162	0		162			D.631	Social benefits in kind				162		162		16
78	78			78			D.6311	Social security benefits, reimbursements				78		78		7
65	65			65			D.6312	Other social security benefits in kind				65		65		6
19	19	0		19			D.6313					19		19		19
57	57	13		44			D.632	Transfers of individual non-market				57		57		5
3/	3/	15		77			D.032	goods and services				57				
1 826	1 826	27	1 406	176	32	185	B.7g	Adjusted disposable income, gross								
1 604	1 604	24	1 364	146	22	48	B.7n	Adjusted disposable income, net								



#### Use of income account (II.4)

- 8.36. For the institutional sectors with final consumption, the use of income account shows how disposable income (or adjusted disposable income) is divided between final consumption expenditure (or actual final consumption) and saving.
- 8.37. In the system, only government, NPISHs and households have final consumption. In addition, the use of income account includes, for households and for pension funds, an adjustment item (D.8 Adjustment for the change in the net equity of households in pension funds reserves) which relates to the way that transactions between households and pension funds are recorded<sup>3</sup>.

Use of disposable income account (II.4.1)

- 8.38. The use of disposable income account includes the concept of final consumption expenditure financed by the various sectors concerned: households, general government and non-profit institutions serving households.
- 8.39. The balancing item in the use of disposable income account is saving.

Use of adjusted disposable income account (II.4.2)

8.40. The use of adjusted disposable income account includes the concept of actual final consumption, which corresponds to the value of the goods and services actually at the disposal of households for final consumption, even if

their acquisition is financed by general government or non-profit institutions serving households.

Consequently, the actual final consumption of general government corresponds only to collective final consumption. Since final consumption expenditure by non-profit institutions serving households is regarded as entirely individual, their actual final consumption is zero.

- 8.41. At the level of the total economy, final consumption expenditure and actual final consumption are equal; it is only the distribution over the institutional sectors which differs. The same is true of disposable income and adjusted disposable income.
- 8.42. Saving is the balancing item in both versions of the use of income account. Its value is identical for all sectors, regardless of whether it is obtained by subtracting final consumption expenditure from disposable income or by subtracting actual final consumption from adjusted disposable income.
- 8.43. Saving is the (positive or negative) amount resulting from current transactions which establishes the link with accumulation. If saving is positive, non-spent income is used for the acquisition of assets or for paying off liabilities. If saving is negative, certain assets are liquidated or certain liabilities increase.

<sup>3</sup> See chapter 4., 'Distributive transactions'.

Table 8.8 Account II.4.1: Use of disposable income account

				Uses											Resourc	es			
			S.1	5.15	5,14	5.13	5.12	5.11			5.11	5.12	5.13	5.14	5.15	5.1			
	Correspo	onding															Corresp	onding	
	entries	of the						Non-			Non-						entrie	s of the	
	Goods	Rest					Linan-	finan-			finan-	Finan-					Rest	Goods	
	and	of the	Total			General	cial	cial			cial	cial	Genera			Total	of the	and	
	services	world	eco-		House-	govern-	corpo-	corpo-			corpo-	corpo-	govern-	House-		eco-	world	services	
Fotal	account a	ecount	nomy	NPISHs	holds	ment	rations	rations		Transactions and balancing items	rations	rations	ment	holds	NPISHs	nomy	account	account	Total
									B.6g	Disposable income, gross	185	32	382	1 187	40	1 826			1 826
									B.6n	Disposable income, net	48	22	352	1 145	37	1 604			1 604
1 371			1.371	13	996	362			P.3	Final consumption expenditure								1.371	1.371
1 215			1 2 1 5	13	996	206			P.31	Individual consumption expenditure								1 215	1 215
156			156			156			P.32	Collective consumption expenditure								156	156
11		0	11	0		0	11	0	D.8	Adjustment for the change in net equity				11		11	0		11
										of households in pension funds reserves									
455			455	27	202	20	21	185	B.8g	Saving, gross									
233			233	24	160	- 10	11	48	B.8n	Saving, net									
- 41		- 41							B.12	Current external balance									

Table 8.9 Account II.4.2: Use of adjusted disposable income account

			Uses											Resoure	ces			
		5.1	5.15	5.14	5.13	5.12	5.11			5.11	5.12	S.13	5.14	5.15	5.1			
	Corresponding entries of the						Non-			Non-							ponding s of the	
	Goods Rest					Finan-	finan-			finan-	Finan-					Rest	Goods	
	and of the	Total			General	cial	cial			cial	cial	General			Total	of the	and	
	services world	eco-		House-	govern-	corpo-	corpo			corpo-	corpo-	govern-	House-		6co-	world	services	
Total	account account	nomy	NPISH:	s holds	ment	rations	s ration	š	Transactions and balancing items	rations	rations	ment	holds	NPISHs	nomy	account	account	Total
								B.7g	Adjusted disposable income, gross	185	32	176	1 406	27	1 826			1 826
								B.7n	Adjusted disposable income, net	48	22	146	1 364	24	1 604			1 604
1.371		1.371		1 215	156			P.4	Actual final consumption								1 371	1 371
1 215		1 215	5	1 215				P.41	Actual individual consumption								1 215	1 215
156		150	i		156			P.42	Actual collective consumption								156	156
11	0	11	0		0	11	0	D.8	Adjustment for the change in net equity				11		11	0		11
									of households in pension funds reservesz									
455		455	27	202	20	21	185	B.8g	Saving, gross									
233		233	24	160	- 10	11	48	B.8n	Saving, net									
- 41	- 41							B.12	Current external balance									



# Accumulation accounts (III)<sup>4</sup>

- 8.44. The accumulation accounts are flow accounts. They record the various causes of changes in the assets and liabilities of units and the change in their net worth.
- 8.45. Changes in assets are recorded on the left-hand side of the accounts (plus or minus), changes in liabilities and net worth on the right-hand side (plus or minus).

## Capital account (III.1)

- 8.46. The capital account records acquisitions less disposals of non-financial assets by resident units and measures the change in net worth due to saving (final balancing item in the current accounts) and capital transfers.
- 8.47. The capital account makes it possible to determine the extent to which acquisitions less disposals of non-financial assets have been financed out of saving and by capital transfers. It shows a net lending corresponding to the amount available to a unit or sector for financing, directly of indirectly, other units or sectors, or a net borrowing corresponding to the

amount which a unit or sector is obliged to borrow from other units or sectors.

# Change in net worth due to saving and capital transfers account (III.1.1)

8.48. This account makes it possible to determine the change in net worth due to saving and capital transfers, which corresponds to net saving plus capital transfers receivable, minus capital transfers payable.

## Acquisitions of non-financial assets account (III.1.2)

8.49. This account records acquisitions less disposals of non-financial assets in order to return from the concept of change in net worth due to saving and capital transfers to net lending or borrowing.

#### Financial account (III.2)

- 8.50. The financial account records, by type of financial instrument, the changes in the financial assets and liabilities that compose net lending or borrowing.
- 8.51. The classification of assets and liabilities used in the financial account is identical to that used in the balance sheets.

<sup>4</sup> See chapter 5., 'Financial transactions' and chapter 6., 'Other flows'.

Table 8.10 Account III.1.1: Change in net worth due to saving and capital transfers account

		Change	es in asset	s								Char	nges in l	iabilities	and ne	t worth		
	Corresponding entries of the Goods Rest	S.1		5.14	S.13		S.11 Non- finan-			S.11 Non- finan-	S.12 Finan-	S.13	S.14	S.15	S.1		oonding s of the Goods	
	and of the	Total			Genera		cial			cial		General			Total	of the	and	
se	ervices world	eco-	ŀ	louse-	govern-	corpo-	corpo-			corpo-	corpo-	govern-	House-		eco-	world	services	
Total ac	ccount account	nomy	NPISHs	holds	ment	rations i	rations		Transactions and balancing items	rations	rations	ment	holds	NPISHs	nomy	account	account	Tota
								B.8n	Saving, net	48	11	- 10	160	24	233			23
								B.12	Current external balance							- 41		- 4
								D.9	Capital transfers, receivable	33		6	23		62	4		6
								D.91	Capital taxes, receivable			2			2			
								D.92	Investment grants, receivable	23					23	4		2
								D.99	Other capital transfers, receivable	10		4	23		37			3
								D.9	Capital transfers, payable	16	-7	34	5	3	65	- 1		- 6
								D.91	Capital taxes, payable				- 2		2			-
								D.92	Investment grants, payable			-27			27			- 2
								D.99	Other capital transfers, payable	16	7	7	3	3	36	- 1		- 3
192	- 38	230	21	178	- 38	4	65	B.10.1	Changes in net worth due to saving and capital transfers									

Table 8.11 Account III.1.2 : Acquisition of non financial assets account

			Change	es in ass	ets								Cha	inges in	liabilitie	s and ne	t worth		
			5.1	5.15	5.14	5.13	5.12	5.11			5.11	5.12	5.13	5.14	S,15	5.1			
	Correspon	ding															Corres	ponding	
	entries of	the						Non-			Non-						entrie	s of the	
	Goods R	Rest					Finan-	finan-			finan-	Finan-					Rest	Goods	
		fthe	Total			General	cial	cial			cial	cial	General			Total	of the	and	
	services w	orld	eco-			govern-	corpo-	corpo-			corpo-	corpo-	govern-			eco-	world	services	
Total	account acc	count	nomy	NPISHs	holds	ment	rations	rations		Transactions and balancing items		rations	ment		NPISHs		account	account.	Total
									B.10.1	Changes in net worth due to saving	65	4	- 38	178	21	230	- 38		19
										and capital transfers									
376			376	19	61	37	9	250		Gross fixed capital formation								376	37
303			303	14	49	23	8	209	P.511	Acquisitions less disposals of tangible fixed assets								303	30
305			305	13	50	) 24	7	211	P.5111	Acquisitions of new tangible fixed assets								305	30
11			11	1	4	1	1	4	P.5112	Acquisitions of existing tangible fixed assets								11	1
- 13			- 13		- 5	- 2	!	- 6	P.5113	Disposals of existing tangible fixed assets								- 13	- 1
51			51	5	12	! 12	! 1	21	P.512	Acquisitions less disposals of intangible fixed assets								51	
53			53	10		12	1	21	P.5121	Acquisitions of new intangible fixed assets								53	
6			- 6		3	3 2	!	1	P.5122	Acquisitions of existing intangible fixed assets								6	
- 8			- 8	- 5		- 2	!	- 1	P.5123	Disposals of existing intangible fixed assets								- 8	
22			22			2	!	20	P.513	Additions to the value of non-produced								22	2
										non-financial assets									
5			.5			2	!	3	P.5131	Major improvements to non-produced								5	
										non-financial assets									
17			17					17	P.5132	Costs of ownership transfer on non-produced								17	1
										non-financial assets									
- 222			- 222	- 3	- 42	- 30	- 10	- 137	K.1	Consumption of fixed capital									
28			28		2			26	P.52	Changes in inventories								28	2
10			10		5	; 3	1	2	P.53	Acquisitions less disposals of valuables								10	1
				1	4	2	2	- 7	K.2	Acquisitions less disposals of non-produced									
										non-financial assets									
				1	3	3 2	2	- 6	K.21	Acquisitions less disposals of land and other									
										tangible non-produced assets									
					1			- 1	K.22	Acquisitions less disposals of intangible									
										non-produced assets									
		- 38	38	4	148	- 50	5	- 69	RO	Net lending (+) net borrowing (-)									

Table 8.12 Account III.2: Financial account

			Chang	es in ass	sets								Char	nges in	liabilitie	s and ne	et worth	
			5.1	5.15	5.14	5.13	5.12	5.11			S.11	S.12	5.13	5.14	S.15	5.1		
	Corresp entries							Non-			Non-						Corresponding entries of the	
	Goods	Rest					Finan-	finan-			finan-	Finan-					Rest Goods	
	and	of the	Total			General	cial	cial			cial	cial	General			Total	of the and	
	services	world	GCO-		House-	govern-	corpo-	corpo	-		corpo-	corpo-	govern-			GCO-	world services	
Total	account	account	nomy	NPISHS	holds	ment	rations	ration:	5	Transactions and balancing items	rations	rations	ment	holds	NPISHs	nomy	account accoun	t Total
									B.9	Net lending (+)/net borrowing (-)	- 69		- 50	148	4	38	- 38	0
691		50	641	32	181	120	237	71	F	Net acquisition of financial assets/								
									F	Net incurrence of liabilities	140	232	170	33	28	603	88 ·	691
		1	- 1				- 1		Γ.1	Monetary gold and SDRs								
130		11	119	1.2	68	7	15	1.7	F.2	Currency and deposits		130	2			132	- 2	130
37		3	34	2	10	2	15	5	F.21	Currency		35				35	2	37
64		2	62	7	41	4		10	F.22	Transferable deposits		63	2			65	- 1	64
29		6	23	3	17	1		2	F.29	Other deposits		32				32	- 3	29
143		.5	138	12	29	26	53	18	F.3	Securities other than shares	6	53	64			123	20	143
254		10	244		-5	45	167	27	Γ.4	Loans	71		94	28	24	217	37	254
86		3	83		3	1	63	1.6	F.41	Short-term	16		32	11	17	76	10	86
168		7	161		2	44	104	11	F.42	Long-term	55		62	17	7	141	27	168
46		2	44		3	36	3	2	F.5	Shares and other equity	26	13			4	43	3	46
36			36		36				F.6	Insurance technical reserves		36				36		36
33			3.3		33				F.61	Net equity of households in life insurance		33				33		33
										reserves and in pension funds reserves								
22			22		22				F.611	Net equity of households		22				22		22
										in life insurance reserves								
11			11		11				F.612	Net equity of households		11				11		11
										in pension funds reserves								
3			3		3				F.62	Prepayments of insurance premiums and		3				3		3
										reserves for outstanding claims								
82		21	61	8	40	6		7	F.7	Other accounts receivable/payable	37		10	5		52	30	82
36		18	18		11	1		6	F.71	Trade credits and advances	8		6	4		18	18	36
46		3	43	8	29	5		1	F.79	Other accounts receivable/payable	29		4	1		34	12	46
					34					except trade credits and advances								



## Other changes in assets account (III.3)

8.52. The other changes in assets account records changes in assets and liabilities of units, other than in connection with saving and voluntary transfers of wealth, these being recorded in the capital and financial accounts. It is divided into two: the other changes in volume of assets account (III.3.1) and the revaluation account (III.3.2).

## Other changes in volume of assets account (III.3.1)

8.53. The movements recorded in the other changes in volume of assets account affect the net worth of the balance sheets of the units, sectors and sub-sectors concerned. This change, called change in net worth due to other volume changes of assets, is the balancing item in the account.

#### Revaluation account (III.3.2)

8.54. The revaluation account records changes in the value of assets and liabilities due to changes in their prices.

For a given asset or liability, this change is measured as:

 a) either the difference between its value at the end of the accounting period and its value at the start of the accounting period

- or the date on which it was first entered in the balance sheet:
- b) or the difference between its value at the date on which it was written out of the balance sheet and its value at the start of the accounting period or the date on which it was first entered in the balance sheet.

This difference is called 'nominal holding gain (or loss)'.

A nominal holding gain corresponds to the positive revaluation of an asset or the negative revaluation of a (financial) liability.

A nominal holding loss corresponds to the negative revaluation of an asset or the positive revaluation of a (financial) liability.

- 8.55. The flows recorded in the revaluation account change the net worth of the balance sheets of the units concerned. This change, called 'change in net worth due to nominal holding gains and losses', is the balancing item in the account. It is recorded on the changes in liabilities and net worth side.
- 8.56. The revaluation account is broken down into two sub-accounts: the neutral holding gains and losses account (III.3.2.1) and the real holding gains and losses account (III.3.2.2).

Table 8.13 Account III.3.1: Other changes in volume of assets account

			Change:	in ass	ets								Cha		liabilities		worth		
	Correspon	ding	5,1	5.15	5.14	5.13	5.13	5.11			5.11	5.12	5.13	5.14	S.15	S.1	Corres	ponding	
	entries of							Non			Non-						entrie	s of the	
		est					Finar	- finan			finan	Finan-					Rest	Goods	
		the	Total			Genera					cial		General			Total	of the	and	
	services w		eco-		House	govern							govern-	House		eco-		services	
										I was at the other flows and halancing flows			ment		NIDISHE		account		Total
otal	account acc	tnuo	nomy	APISHS	holds	ment				Iransactions, other flows and balancing items	rations	radons	ment	HORIS	18013015	HOTHY	account	account	100
10			10					2 1:		Non-financial assets									
- 7			- 7			- 3		2 -:		Produced assets									
3			3			3			K.4	Economic appearance of produced assets									
- 9			- 9			- 4		- 5		Catastrophic losses									
						1			7 440	Uncompensated seizures									
1			1							Other volume changes in non-financial assets n.e.c.									
- 2			- 2			- 3		2		Changes in classifications and structure									
						- 3		-	K.12.1	Changes in sector classification and structure									
- 2			- 2					2	K.12.2	Changes in classification of assets and liabilities									
- 2			- 2					2	K.12.2	Monetisation/demonetisation of gold									
									K.12.2	Changes in classification of assets or liabilities									
										other than monetisation/demonetisation of gold									
									of whice	h:									
- 4			- 4			- 3			AN.11	Fixed assets									
- 1			- 1						AN.12	Inventories									
- 2			- 2					2	AN.13	Valuables									
17			17			3		1.		Non-produced assets									
24			24					2.	1 K.3	Economic appearance of non-produced assets									
4			4			4			K.5	Natural growth of non-cultivated biological resources									
. 9			- 9			- 2				Economic disappearance of non-produced assets									
- 8			- 8			- 2		-		Depletion of natural assets									
- 1			- 1							Other economic disappearance of non-produced asset	•								
- 2			- 2			- 2			K.7	Catastrophic losses									
- 2			- 2			4				Uncompensated seizures									
						-		-	K.9	Other volume changes in non-financial assets n.e.c.									
						- 1			K.12	Changes in classifications and structure									
										Changes in sector classification and structure									
						- 3													
									K,12.2	Changes in classification of assets and liabilities									
									K.12,2										
										other than monetisation/demonetisation of gold									
									of whi										
17			17			3		-1-		Tangible non-produced assets									
									AN.22	Intangible non-produced assets									
5			5		2	1			AF.	Financial assets/liabilities	- 3	1 2	- 1			- 2			
									K.7	Catastrophic losses									
						3			K.8	Uncompensated seizures									
3			3		2			1	K.10	Other volume changes in financial assets and	- 4	2				- 2			
										liabilities n.e.c.									
2			2			- 2		2	K,12	Changes in classifications and structure	1		- 1						
						- 2	2		K.12.1	Changes in sector classification and structure	1		- 1						
2			2					2	K.12.2	Changes in classification of assets and liabilities									
2			2					2	K.12.2	Monetisation/demonetisation of gold									
									K.12.2	Changes in classification of assets or liabilities									
										other than monetisation/demonetisation of gold									
									of whi										
7			7					7	AF.1	Monetary gold and SDRs									
									AF.2	Currency and deposits									
						3		3	AF.3	Securities other than shares									
- 4			- 4			~		4	AF.4	Loans	- 3	3	- 1			- 4			
- 4						- 2			2 AF.5	Shares and other equity						,			
			2		2				AF.6	Insurance technical reserves		2				2			
					- 2							-				-			
2			-						AF 7	Other accounts receivable/navable									
2									AF.7 B.10.2	Other accounts receivable/payable Changes in net worth due to other	17	7 - 4	2	2		17			





Neutral holding gains and losses account (III.3.2.1)

8.57. The neutral holding gains and losses account records changes in the value of assets and liabilities in proportion to changes in the general price level. Such changes correspond to the revaluation necessary to maintain the general purchasing power of assets and liabilities. The general index price to be applied for this calculation is the price index for final national uses, excluding changes in inventories.

Real holding gains and losses account (III.3.2.2)

8.58. Real holding gains and losses measure the difference between nominal holding gains and losses and neutral holding gains and losses.

8.59. If the nominal holding gains net of the nominal holding losses on a given asset exceed the neutral holding gains net of the neutral holding losses, there is a real holding gain on the asset for the unit holding it. This gain reflects the fact that the actual price of the asset has, on average, risen faster than the general price level. Conversely, a drop in the relative price of the asset produces a real holding loss for the unit holding it.

By the same token, a rise in the relative price of a liability produces a real holding loss on liabilities, while a drop in the relative price of a liability generates a real holding gain on liabilities.



Table 8.14 Account III.3.2: Revaluation account

			Chang	ges in as		611	6 12	6 12	C 11		
				S.1	5.15	5.14	5.13	5.12	5.11		
			ponding								
			s of the						Non-		
		Goods	Rest					Finan-			
		and	of the	Total			General		cial		
		services	world	eco-			govern-	corpo-	corpo-		
\ccounts	Total	account	account	nomy	NPISHs	holds	ment	rations	rations		Other flows and balancing items
11.3.2.										K.11	Nominal holding gains / losses
evaluation	280			280	8	80	44	4	144	AN	Non-financial assets
ccount	126			126	5	35	20	2	63	AN.1	Produced assets
	111			111	5	28	18	2	58	AN.11	Fixed assets
	7			7		2	1		4	AN.12	Inventories
	8			8		5	1		1	AN.13	Valuables
	154			154	3	45	23	2	81	AN.2	Non-produced assets
	152			152	3	45	23	1	80	AN,21	Tangible non-produced assets
	2			2					1	AN.22	Intangible non-produced asset
	91		7	84	1	16	2	57	8	AF	Financial assets/liabilities
	12			12			1	11		AF.1	Monetary gold and SDRs
										AF.2	Currency and deposits
	44		4	40	1	6		30	3	AF.3	Securities other than shares
										AF.4	Loans
	34		3	31	1	10		16	5	AF.5	Shares and other equity
						, ,		, 0		AF.6	Insurance technical reserves
										AF.7	
											Other accounts receivable/payab
										B.10.3	Changes in net worth due to
											nominal holding gains/losses
1.3.2.1.										K.11.1	Neutral holding gains / losses
leutral	198			198	6	56	32	3	101	AN	Non-financial assets
olding	121			121	5	34	20	2	60	AN.1	Produced assets
ains	111			111	5	28	18	2	58	AN.11	Fixed assets
ccount	5			5		2	1		2	AN.12	Inventories
ccount	5			5		4	1		1	AN.13	Valuables
					2		12	-		AN.2	
	78			78	2	22		1	41		Non-produced assets
	76			76	2	22	12	1	40	AN,21	Tangible non-produced assets
	1			1					1	AN.22	Intangible non-produced asset
	147		11	136	3	36	8	70	18	AF	Financial assets/liabilities
	15			1.5			2	14		AF.1	Monetary gold and SDRs
	32		2	30	2	17	3		8	AF.2	Currency and deposits
	28		3	25	1	4		19	2	AF.3	Securities other than shares
	29		1	28			2	24	1	AF.4	Loans
	28		2	26		8	_	13	4	AF.5	Shares and other equity
	8		1	7		6		1	1	AF.6	Insurance technical reserves
								,			
	7		3	5		1			3	AF.7	Other accounts receivable/payab
										B.10.31	Changes in net worth due to
											neutral holding gains/losses
1.3.2.2.										K.11.2	Real holding gains / losses
eal	81			81	2	24	12	1	43	AN	Non-financial assets
olding	5			5		1			3	AN.1	Produced assets
ains										AN.11	Fixed assets
ccount	3			3					3	AN.12	Inventories
	2			2		1				AN.13	Valuables
					3	22	12		40	AN.2	
	77			77	2		12	1			Non-produced assets
	76			76	2	22	12	1	40	AN.21	Tangible non-produced assets
	1			1						AN.22	Intangible non-produced asset
	- 57		- 5	- 52	- 2	- 20	- 6	- 13	- 10	AF	Financial assets/liabilities
	- 3			- 3				- 3		AF.1	Monetary gold and SDRs
	- 32		- 2	- 30	- 2	- 17	- 3		- 8	AF.2	Currency and deposits
	17		1	15		2		11	1	AF.3	Securities other than shares
	- 29		- 1	- 28			- 2	- 24	- 1	AF.4	Loans
	6			5		2	2	3	1	AF.5	Shares and other equity
	- 8 - 7		- 1	- 7		- 6		- 1	- 1	AF.6	Insurance technical reserves
	- 7		- 3	- 5		- 1			- 3	AF.7	Other accounts receivable/payab
	- /									B.10.32	Changes in net worth due to



S.11 Non-	S.12	S.13	S.14	S.15	S.1		ponding s of the		
finan- cial corpo-	Finan- cial corpo-	General govern-			Total eco-	Rest of the world	Goods and services		
rations	rations	ment	holds	NPISHs	nomy	account	account	Total	Accounts
									Revaluation account

18	51	7			76	3	78
1	34	7			42	2	44
16	17				34		34
134	10	38	96	10	288	4	292
			e e	8 85			III.3.2 Neutra
							holdin
							gains
							accou
36	68	14	6	2	126	6	132
36	68 26	14	6	1	126 29	2	32
			6				
1	26	2	3		29	2	32
1	26	2 4		1	29 26	2	32 28
1 1 18	26 21	2 4		1	29 26 29	2	32 28 29
1 1 18	26 21 14	2 4		1	29 26 29 28	2 2	32 28 29 28

III.3.2.2. Real holding gains account

- 18	- 17	- 7	-6	- 2	- 50	- 3	- 54
- 1	- 26	- 2		- 1	- 29	- 2	- 32
1	13	3			16	1	17
- 18		- 7	- 3	- 1	- 29		- 29
3	3				6		6
	- 7				- 7	- 1	- 8
- 3			- 2	- 1	- 6	- 1	- 7
51	5	12	9	2	80	- 1	78



# Balance sheets (IV)<sup>5</sup>

- 8.60. The aim of the balance sheets is to give a picture of the assets, liabilities and net worth of units at the start and end of the accounting period and of changes between balance sheets. The sequence is as follows:
  - a) opening balance sheet (IV.1);
  - b) changes in balance sheet (IV.2);
  - c) closing balance sheet (IV.3).

## Opening balance sheet (IV.1)

8.61. The opening balance sheet records the value of assets and liabilities held by units at the start of the accounting period.

These items are categorised on the basis of the classification of assets and liabilities.

They are valued at prices current at the start of the accounting period.

The difference between assets and liabilities – the balancing item in the account – is the net worth at the start of the accounting period.

## Changes in balance sheet (IV.2)

8.62. The changes in balance sheet account records changes in the value of assets and liabilities in

the course of the accounting period and aggregates the amounts recorded in the various accumulation accounts, i.e. change in net worth due to saving and capital transfers, change in net worth due to other volume changes in assets and change in net worth due to nominal holding gains and losses.

## Closing balance sheet (IV.3)

8.63. The closing balance sheet records the value of assets and liabilities held by units at the end of the accounting period. These items are categorised on the basis of the same classification used in the opening balance sheet and are valued at prices current at the end of the period.

The difference between assets and liabilities is the net worth at the end of the accounting period.

8.64. The value of an asset or liability in the closing balance sheets is equal to the sum of its value in the opening balance sheets and the amount recorded for the said item in the changes in balance sheet account.

<sup>5</sup> See chapter 7., 'Balance sheets'.



Table 8.15 Account IV: Balance sheets

				Assets							
		Correct	ponding	5.1	5.15	5.14	5.13	5.12	5.11		
			ponding s of the						Non-		
		Goods	Rest					Finan-			
		and	of the	Total			General	cial	cial		
		services	world	eco-		House-					Transactions, other flows, stocks
Accounts	Total	account			NPISHs		ment		rations		and balancing items
V.1.	9 922			9 922	324	2 822	1 591		5 041	AN	Non-financial assets
Opening	6 047			6 047	243	1 698	1 001		3 001	AN.1	Produced assets
alance	5 544			5 544	231	1 423	913		2 878	AN.11	Fixed assets
heet	231			231	2	97	47		85	AN.12	Inventories
	272			272	10	178	41	5	38	AN.13	Valuables
	3.875			3 875	81	1 124	590	40	2 040	AN.2	Non-produced assets
	3 809			3 809	81	1 124	578	37	1 989	AN.21	Tangible non-produced assets
	66			66			12	3	51	AN.22	Intangible non-produced assets
	7 365		573	6 792	172	1 819	396	3 508	897	AF	Financial assets/liabilities
	770			770			80	690		AF.1	Monetary gold and SDRs
	1 587		105	1 482	110	840	150		382	AF.2	Currency and deposits
	1 388		125	1 263	25	198		950		AF.3	Securities other than shares
	1 454		70	1 384	8	24	115			AF.4	Loans
	1 409		113	1 296	22	411	12	651	200	AF.5	Shares and other equity
	396		26	370	4	291	20	30		AF.6	Insurance technical reserves
	361		134	227	3	55	19		150	AF.7	Other accounts receivable/payable
										B.90	Net worth
V.2.											Total changes in assets/liabilities:
Changes	482			482	25	110	56	1	290	AN	Non-financial assets
n	289			289	21	61	25	- 1	182	AN.1	Produced assets
alance	239			239	21	47	20	1	150	AN.11	Fixed assets
heet	34			34		4	1	_	29	AN.12	Inventories
	16			16		10	4	- 2		AN.13	Valuables
	193			193	4	49	30	2		AN.2	Non-produced assets
	191			191	4	48	30	1	108	AN.21	Tangible non-produced assets
	797		-7	720	22	100	422	20.1	04	AN.22	Intangible non-produced assets
	787 19		57 1	730 18	33	199	123 1	294 17		AF.1	Financial assets/liabilities  Monetary gold and SDRs
	130		11	119	12	68	7	15		AF.2	Monetary gold and SDRs Currency and deposits
	187		9	178	13	35	29	80		AF.3	Securities other than shares
	250		10	240	1.3	5	45	163		AF.4	Loans
	80		5	75	1	13	34	19		AF.5	Shares and other equity
	38			38		38			,	AF.6	Insurance technical reserves
	82		21	61	8	40	6		7	AE.7	Other accounts receivable/payable
					-					B.10	Changes in net worth, total
											due to:
										B.10.1	Saving and capital transfers
										B.10.2	Other changes in volume of assets
										B.10.3	Nominal holding gains/losses
										B.10.31	Neutral holding gains/losses
										B.10.32	Real holding gains/losses
V.3.	10 404			10 404	349	2 932	1 647		5 331	AN	Non-financial assets
Closing	6 336			6 3 3 6	264	1 759	1 026	103	3 183	AN.1	Produced assets
oalance	5 783			5 783	252	1 470	933	100	3 028	AN.11	Fixed assets
heet	265			265	2	101	48		114	AN.12	Inventories
	288			288	10	188	45	3		AN.13	Valuables
	4 068			4 068	85	1 173	620		2 148	AN.2	Non-produced assets
	4 000			4 000	85	1 172	608		2 097	AN.21	Tangible non-produced assets
	68			68		1	12	3		AN.22	Intangible non-produced assets
	8 152		630	7 522	205	2 018	519	3 802	978	AF	Financial assets/liabilities
	788			788			81	707		AF.1	Monetary gold and SDRs
	1 717		116	1 601	122	908	157	15		AF.2	Currency and deposits
			134	1 441	38	233	29	1 030		AF.3	Securities other than shares
	1 575			1 694	8	29	160	1 350	77	AF.4	Loans
	1 575 1 704		80	1 624					0.00	11 -	characteristic descent
	1 575 1 704 1 489		118	1 371	23	424	46	670		AF.5	Shares and other equity
	1 575 1 704						46 20 25	670 30		AF.5 AF.6 AF.7	Shares and other equity Insurance technical reserves Other accounts receivable/payable



Liabilities and net worth

5.11	5.12	5.13	5.14	5.15	5.1				
Non-							ponding s of the		
finan-	Finan-					Rest	Goods		
cial	cial	General			Total	of the	and		
corpo-	corpo-	govern-	House-		eco-	world	services		
rations	rations	ment	holds	<b>NPISHs</b>	nomy	account	account	Total	Accounts

IV.1. Opening	6 595	297	6 298	121	289	687	3 384	1 817
balance	1 587	116	1 471	38	10	102	1 281	40
sheet	1 388	77	1 311		2	212	1 053	44
	1 454	17	1 437	43	169	328		897
	1 409	3	1 406			4	715	687
	396	25	371	5		19	335	12
	361	59	302	35	108	22		137
	10 692	276	10 416	375	4 352	1 300	268	4 121

IV.2.	767	91	677	28	33	176	285	155
Changes								
in	130	- 2	132			2	130	
balance	187	22	165			71	87	7
sheet	250	37	213	24	28	93		68
	80	3	7.7	4			30	42
	38		38				38	
	82	30	52		5	10		37
	501	- 34	535	31	276	2	10	216
	192	- 38	230	21	178	- 38	4	65
	17		17		2	2	- 4	1.7
	292	4	288	10	96	38	10	134
	214	6	208	8	87	26	5	82
	78	- 1	80	2	9	12	5	51

1 972	3 669	863	322	149	6 975	388	7 362	IV.3. Closing
40	1 411	104	10	38	1 603	114	1 717	balance
51	1 140	283	2		1 476	99	1 575	sheet
965		421	197	67	1 650	54	1.704	
729	745	4		4	1 483	- 6	1 489	
12	373	19		.5	409	2.5	434	
174		32	113	35	354	89	443	
4 337	278	1 302	4 628	406	10 951	242	11 193	



## REST OF THE WORLD ACCOUNTS (V)

- 8.65. The rest of the world accounts record transactions between resident and non-resident units. The rest of the world does not constitute an institutional sector as such, but in the structure of the system it plays a similar role.
- 8,66. The sequence of rest of the world accounts follows the same general pattern as the institutional sector accounts, i.e.:
  - a) current accounts;
  - b) accumulation accounts;
  - c) balance sheets.
- 8.67. These accounts are drawn up from the point of view of the rest of the world. Thus, what is a resource for the rest of the world is a use for the total economy and vice versa. By the same token, a financial asset held by the rest of the world is a liability for the total economy and vice versa (except monetary gold and special drawing rights).

#### Current accounts

## External account of goods and services (V.I)

- 8.68. Imports of goods and services are recorded on the resources side of the account and exports of goods and services on the uses side. The difference between resources and uses is the balancing item in the account, called 'external balance of goods and services'. If it is positive, there is a surplus for the rest of the world and a deficit for the total economy and vice versa if it is negative.
- 8.69. In order to be consistent with measures of the output of resident units, imports are valued at an equivalent of the basic price, i.e. net of import taxes but including import subsidies.

Imports of goods recorded in the external account of goods and services are valued f.o.b., i.e. at the border of the country of export. Exports of goods are also valued f.o.b.

When transport and insurance services included in the f.o.b. value of imports of goods (i.e. between the factory and the border of the country of export) are provided by resident units, they must be included in the value of exports of services by the economy importing the goods. Conversely, when transport and insurance services included in the f.o.b. value of exports of goods are provided by non-resident units they must be included in the value of imports of services by the economy exporting the goods.

# External account of primary incomes and current transfers (V.II)

- 8.70. The purpose of the external account of primary incomes and current transfers is to determine the current external balance, which, in the structure of the system, corresponds to saving by the institutional sectors. This account is a condensed version of the sequence, for an institutional sector, extending from the allocation of primary income account to the use of income account.
- 8.71. On the resources side, the external account of primary incomes and current transfers shows the external balance of goods and services. It also records, on the resources or uses side, all distributive transactions which may involve the rest of the world, apart from capital transfers.

## External accumulation accounts (V.III)

## Capital account (V.III.1)

- 8.72. The rest of the world capital account records acquisitions less disposals of non-produced non-financial assets by non-resident units and measures the changes in net worth due to saving and capital transfers.
- 8.73. The balancing item of the capital account is the net lending or borrowing of the rest of the world. It is equal, but has the opposite sign, to the sum of the net lending or borrowing of the resident institutional sectors.

#### Financial account (V.III.2)

8.74. The layout of the rest of the world financial account is identical to that of the institutional sectors' financial account.

## Other changes in assets account (V.III.3)

- 8.75. As for the institutional sectors, the changes in net worth due to other changes in volume of assets and due to nominal holding gains and losses are determined successively, holding gains and losses themselves being broken down into neutral and real holding gains and losses.
- 8.76. The absence of produced assets in the accumulation accounts and balance sheets of the rest of the world is due to the convention whereby a notional institutional unit is created, the rest of the world being deemed to have acquired a financial asset and vice versa for assets held in other economies by resident units.

#### Balance sheets (V.IV)

8.77. The balance sheets of the rest of the world contain financial assets and liabilities. On the assets side, they record the total acquisitions less disposals between non-resident and resident units of monetary gold and SDRs.



## V.I: External account of goods and services

	Uses			Resources	
P.6	Exports of goods and services	536	P.7	Imports of goods and services	497
P.61	Exports of goods	462	P.71	Imports of goods	392
P.62	Exports of services	74	P.72	Imports of services	105
B,11	External balance of goods and services	- 39			

## V.II: External account of primary incomes and current transfers

	Uses			Resources	
D.1	Compensation of employees	6	B.11	External balance of goods and services	- 39
D.11	Wages and salaries	6			
			D.1	Compensation of employees	2
D.2	Taxes on production and imports	0	D.11	Wages and salaries	2
D.21	Taxes on products	0	D.12	Employers, social contributions	0
D.211	Value added type taxes (VAT)	0	D.121	Employers, actual social contributions	0
D.212	Taxes and duties on imports excluding VAT	0	D.122	Employers, imputed social contributions	0
D.2121	Import duties	0			
D.2122	Taxes on imports excluding VAT and duties	0	D.2	Taxes on production and imports	0
D.214	Taxes on products except VAT and import taxes		D.21	Taxes on products	0
D.29	Other taxes on production	0	D.211	Value added type taxes (VAT)	0
			D.212	Taxes and duties on imports excluding VAT	0
D.3	Subsidies	0	D.2121	Import duties	0
D.31	Subsidies on products	0	D.2122	Taxes on imports excluding VAT and duties	0
D.311	Import subsidies	0	D.214	Taxes on products except VAT and import	
D.319	Other subsidies on products	0		taxes	0
D.39	Other subsidies on production	0	D.29	Other taxes on production	0
				·	
D.4	Property income	66	D.3	Subsidies	0
D.41	Interest	16	D.31	Subsidies on products	0
D.42	Distributed income of corporations	36	D.311	Import subsidies	0
D.421	Dividends	0	D.319	Other subsidies on products	0
D.422	Withdrawals from income of quasi-corporations	36	D.39	Other subsidies on production	0
D,43	Reinvested earnings on direct foreign investment	14			
			D.4	Property income	39
D.5	Current taxes on income, wealth, etc.	1	D.41	Interest	22
D.51	Taxes on income	1	D.42	Distributed income of corporations	17
D,59	Other current taxes	0	D.421	Dividends	14
			D.422	Withdrawals from income of quasi-corporations	3
D.61	Social contributions	0	D.43	Reinvested earnings on direct foreign investment	0
D.611	Actual social contributions	0	D.44	Property income attributed to insurance policyholders	0
D.6111	Employers, actual social contributions	0			
D.61111	Compulsory employers, actual social contributions	0	D.5	Current taxes on income, wealth, etc.	0
D.61112	2 Voluntary employers, actual social contributions	0	D.51	Taxes on income	0
D.6112	Employees, social contributions	0	D.59	Other current taxes	0
D.6112	Compulsory employees, social contributions	0			
D.61122	2 Voluntary employees, social contributions	0	D.61	Social contributions	0
D.612	Imputed social contributions	0	D.611	Actual social contributions	0
D.62	Social benefits other than social transfers in kind	0	D.6111	Employers, actual social contributions	0
D.622	Private funded social benefits	0	D.61111	Compulsory employers, actual social contributions	0
D.623	Unfunded employee social benefits	0	D.61112	Voluntary employers, actual social contributions	0



#### V.II: External account of primary incomes and current transfers [cont.]

	Uses			Resources	
D.7	Other current transfers	9	D.6112	Employees, social contributions	0
D.71	Net non-life insurance premiums	2	D.61121	Compulsory employees, social contributions	0
D.74	Current international cooperation	1	D.61122	Voluntary employees, social contributions	0
D.75	Miscellaneous current transfers	2	D.612	Imputed social contributions	0
			D.62	Social benefits other than social transfers in kind	0
D.8	Adjustment for the change in net equity		D.621	Social security benefits in cash	0
	of households in pension funds reserves	0	D.622	Private funded social benefits	0
			D.624	Social assistance benefits in cash	0
				ther current transfers	39
			D.72	Non-life insurance claims	3
			D.74	Current international cooperation	31
			D.75	Miscellaneous current transfers	1
			D.8 Ac	fjustment for the change in net equity	
			of	households in pension funds reserves	0
B.12	Current external balance	- 41			

#### V.III: Accumulation accounts

#### V.III.1: Capital accounts

## V.III.1.1: Change in net worth due to saving and capital transfers account

	Uses			Resources	
B.10.1	Changes in net worth due to saving and capital transfers	- 38	B.12	Current external balance	- 41
	and capital datistics		D.9	Capital transfers, receivable	4
			D.91	Capital taxes	0
			D.92	Investment grants	4
			D.99	Other capital transfers	0
			D.9	Capital transfers, payable	- 1
			D.91	Capital taxes	0
			D.92	Investment grants	0
			D.99	Other capital transfers	- 1

## V.III.1.2: Acquisition of non-financial assets account

	Changes in assets			Changes in liabilities and net worth	
K.2	Acquisitions less disposals of non-produced non-financial assets	0	B.10.1	Changes in net worth due to saving and capital transfers	- 38
K.21	Acquisitions less disposals of land and other				
	tangible non-produced assets	0			
K.22	Acquisitions less disposals of intangible				
	non-produced assets	0			
B.9	Net lending (+) / net borrowing (-)	- 38			



## V.III.2: Financial account

	Changes in assets			Changes in liabilities and net worth		
F	Net acquisition of financial assets		F	Net incurrence of liabilities	88	
F.1	Monetary gold and SDRs	1				
É.2	Currency and deposits	11	F.2	Currency and deposits	- 2	
F.21	Currency	3	F.21	Currency	2	
F,22	Transferable deposits	2	F.22	Transferable deposits	- 1	
F,29	Other deposits	6	F.29	Other deposits	- 3	
F.3	Securities other than shares	5	F.3	Securities other than shares	20	
F.4	Loans	10	F.4	Loans	37	
F.41	Short-term	3	F.41	Short-term	10	
F.42	Long-term	7	F.42	Long-term	27	
F.5	Shares and other equity	2	F.5	Shares and other equity	3	
F.6	Insurance technical reserves	0	F.6	Insurance technical reserves	0	
F.61	Net equity of households in life insurance reserves		F.61	Net equity of households in life insurance reserves		
	and in pension funds reserves	0		and in pension funds reserves	0	
F.611	Net equity of households in life insurance reserves	0	F.612	Net equity of households in pension funds reserves	0	
F.62	Prepayments of insurance premiums and reserves for outstanding claims	0				
	To various gentles	-	F.7	Other accounts payable	30	
F.7	Other accounts receivable	21	F.71	Trade credits and advances	18	
F.71	Trade credits and advances	18	F.79	Other accounts payable' except trade credits and		
F.79	Other accounts receivable, except trade credits and			advances	12	
	advances	3				
			B.9	Net lending(+)/net borrowing(-)	- 38	



## V.III.3: Other changes in assets accounts

## V.III.3.1: Other changes in volume of assets account

	Changes in	assets			Changes in liabilities and net worth		
AN	Non-financial assets		0	AF	Liabilities	C	
AN.2	Non-produced assets		0	K.7	Catastrophic losses	0	
K.8	Uncompensated seizures		0	K.8	Uncompensated seizures	0	
K.12	Changes in classifications ar	d structure	0	K.10	Other volume changes in financial assets and		
K.12.2	Changes in classification		0		liabilities n.e.c.	(	
K.12.22	Changes in classification of assets or liabilities			K.12	Changes in classifications and structure	(	
	-	n/demonetisation of gold	0	K.12.1	Changes in sector classification and structure	(	
of which:			K.12.2	Changes in classification of assets and liabilities	0		
AN.21			0	K.12.22			
AN.22	Intangible non-produced as		0		other than monetisation/demonetisation of gold	(	
				of which:			
AF	Financial assets		0	AF.2	Currency and deposits	(	
K.7	Catastrophic losses		0	AF.3	Securities other than shares	(	
K.8	Uncompensated seizures		0	AF.4	Loans	(	
K.10	Other volume changes in fina	ncial assets and		AF.5	Shares and other equity	(	
	liabilities n.e.c.		0	AF.6	Insurance technical reserves	(	
K.12	Changes in classifications and	structure	0	AF.7	Other accounts payable	(	
K.12.2	Changes in classification of	assets and liabilities	0		•		
K.12.22	Changes in classification						
	other than monetisation/o		0				
of which:							
AF.1	Monetary gold and SDRs		0				
AF.2	Currency and deposits		0				
AF.3	Securities other than shares		0				
AF.4	Loans		0				
AF.5	Shares and other equity		0				
AF.6	Insurance technical reserves		0				
AF.7	Other accounts receivable		0				
				B.10.2	Changes in net worth due to other	C	
					changes in volume of assets		

## V.III.3.2: Revaluation account

	Changes in assets			Changes in liabilities and net worth	
K.11	Nominal holding gains(+)/losses(-):		K.11	Nominal holding gains(-)/losses(+):	
AN.2	Non-produced assets	0	AF	Liabilities	3
AN.21	Tangible non-produced assets	0	AF.2	Currency and deposits	0
AN.22	Intangible non-produced assets	0	AF.3	Securities other than shares	2
			AF.4	Loans	0
AF	Financial assets	7	AF.5	Shares and other equity	0
AF.1	Monetary gold and SDRs	0	AF.6	Insurance technical reserves	0
AF.2	Currency and deposits	0	AF.7	Other accounts payable	0
AF.3	Securities other than shares	4			
AF.4	Loans	0			
AF.5	Shares and other equity	3			
AF.6	Insurance technical reserves	0			
AF.7	Other accounts receivable	0			
			B.10.3	Changes in net worth due to nominal holding gains/losses	4



## V.III.3.2.1: Neutral holding gains/losses account

	Changes in assets			Changes in liabilities and net worth					
K.11.1	Neutral holding gains $(+)/losses$ $(-)$ :		K.11.1	Neutral holding gains (-)/losses (+):					
AN.2	Non-produced assets	0	AF	Liabilities	6				
AN.21	Tangible non-produced assets	0	AF.2	Currency and deposits	2				
AN.22	Intangible non-produced assets	0	AF.3	Securities other than shares	2				
			AF.4	Loans	0				
AF	Financial assets	11	AF.5	Shares and other equity	0				
AF,1	Monetary gold and SDRs	0	AF.6	Insurance technical reserves	1				
AF.2	Currency and deposits	2	AF.7	Other accounts payable	1				
AF,3	Securities other than shares	3							
AF,4	Loans	1							
AF,5	Shares and other equity	2							
AF.6	Insurance technical reserves	1							
AF.7	Other accounts receivable	3							
			B.10.31	Changes in net worth due to neutral holding gains/losses	6				

## V.III.3.2.2: Real holding gains/losses account

Changes in assets				Changes in liabilities and net worth				
K.11.2	Real holding gains(+)/losses(-):		K.11.2	Real holding gains(-)/losses(+):				
AN.2	Non-produced assets	0	AF	Liabilities	- 3			
AN.21	Tangible non-produced assets	0	AF.2	Currency and deposits	- 2			
AN.22	Intangible non-produced assets	0	AF.3	Securities other than shares	1			
			AF.4	Loans	0			
AF	Financial assets	- 5	AF.5	Shares and other equity	0			
AF.1	Monetary gold and SDRs	0	AF.6	Insurance technical reserves	- 1			
AF.2	Currency and deposits	- 2	AF.7	Other accounts payable	- 1			
AF.3	Securities other than shares	1						
AF.4	Loans	- 1						
AF.5	Shares and other equity	0						
AF.6	Insurance technical reserves	- 1						
AF.7	Other accounts receivable	- 3						
			B.10,32	Changes in net worth due to real holding gains/losses	- 1			

#### V.IV: External assets and liabilities account

## V.IV.1: Opening balance sheet

	Assets			Liabilities and net worth	
AN	Non-financial assets	0	AF	Liabilities	297
AN.2	Non-produced assets	0	AF.2	Currency and deposits	116
AN.21	Tangible non-produced assets	0	AF.3	Securities other than shares	77
AN.22	Intangible non-produced assets	0	AF.4	Loans	17
			AE.5	Shares and other equity	3
AF	Financial assets	573	AF.6	Insurance technical reserves	25
AE.1	Monetary gold and SDRs	0	AF.7	Other accounts payable	59
AF.2	Currency and deposits	105			
AF,3	Securities other than shares	125			
AE.4	Loans	70			
AF.5	Shares and other equity	113			
AF.6	Insurance technical reserves	26			
AF.7	Other accounts receivable	134			
			B.90	Net worth	276



## V.IV.2: Changes in balance sheet

Assets				Liabilities and net worth					
	Total changes in assets			Total changes in liabilities					
AN AN.2 AN.21 AN.22	Non-financial assets Non-produced assets Tangible non-produced assets Intangible non-produced assets	0 0 0	AF AF.2 AF.3 AF.4	Liabilities Currency and deposits Securities other than shares Loans	91 - 2 22 37				
AF AF.1	Financial assets  Monetary gold and SDRs	57 1	AF.5 AF.6 AF.7	Shares and other equity Insurance technical reserves Other accounts payable	3 0 30				
AF.3 AF.4	Currency and deposits Securities other than shares Loans	11 9 10							
AF.5 AF.6 AF.7	Shares and other equity Insurance technical reserves Other accounts receivable	5 0 21							
			B.10	Changes in net worth' total due to:	- 34				
			B.10.1 B.10.2 B.10.3	Saving and capital transfers Other changes in volume of assets Nominal holding gains/losses	- 38 0 4				
			B.10.31 B.10.32	Neutral holding gains/losses Real holding gains/losses	6 - 1				

## V.IV.3: Closing balance sheet

	Assets			Liabilities and net worth	
AN	Non-financial assets	0	AF	Liabilities	388
AN.2	Non-produced assets	0	AF.2	Currency and deposits	114
AN.21	Tangible non-produced assets	0	AF.3	Securities other than shares	99
AN.22	Intangible non-produced assets	0	AF.4	Loans	54
			AF.5	Shares and other equity	6
AF	Financial assets	630	AF.6	Insurance technical reserves	25
AF.1	Monetary gold and SDRs	0	AF.7	Other accounts payable	89
AF.2	Currency and deposits	116			
AF.3	Securities other than shares	134			
AF.4	Loans	80			
AF.5	Shares and other equity	118			
AF.6	Insurance technical reserves	26			
AF.7	Other accounts receivable	155			
	~		B.90	Net worth	242



## GOODS AND SERVICES ACCOUNT (0)

- 8.78. The purpose of the goods and services account is to show, by product group and for the total economy, how the products available are used.
- 8.79. It therefore shows, by product group and for the total economy, the resources (output and imports) and the uses of goods and services (intermediate consumption, final consumption, gross fixed capital formation, changes in inventories, acquisitions less disposals of valuables, exports).
- 8.80. Given the way in which output is valued at basic prices and uses at purchaser's prices, taxes less subsidies on products must be included in the resources section.
- 8.81. Uses are recorded on the right-hand side of the goods and services account and resources on the left, i.e. on the opposite side from that used in the current accounts for the institutional sectors, since the product flows are the counterparts of the monetary flows.
- 8.82. The goods and services account is by definition in balance and therefore has no balancing item.



# Table 8.17 Account 0: Goods and services account

	Resources			Uses	
P.1	Output	3 595	P.2	Intermediate consumption	1 904
P.11	Market output	3 048		· ·	
P.12	Output for own use	171	P.3/P.4	Final consumption expenditure/Actual	
P.13	Other non-market output	376		final consumption	1 371
			P.31/P.	11 Individual consumption expenditure/Actual	
D.21	Taxes on products	141		individual consumption	1 215
			P.32/P.	12 Collective consumption expenditure/Actual	
D.31	Subsidies on products	- 8		collective consumption	156
P.7	Imports of goods and services	497	P.51	Gross fixed capital formation	376
P.71	Imports of goods	392	P.511	Acquisitions less disposals of tangible fixed assets	303
P.72	Imports of services	105	P.5111	Acquisitions of new tangible fixed assets	305
			P.5112	Acquisitions of existing tangible fixed assets	11
			P.5113	Disposals of existing tangible fixed assets	- 13
			P.512	Acquisitions less disposals of intangible fixed assets	51
			P.5121	Acquisitions of new intangible fixed assets	53
			P.5122	Acquisitions of existing intangible fixed assets	6
			P.5123	Disposals of existing intangible fixed assets	- 8
			P.513	Additions to the value of non-produced	
				non-financial assets	22
			P.5131	Major improvements to non-produced	
				non-financial assets	5
			P.5132	Costs of ownership transfer on non-produced	
				non-financial assets	17
			P.52	Changes in inventories	28
			P.53	Acquisitions less disposals of valuables	10
			P.6	Exports of goods and services	536
			P.61	Exports of goods	462
			P.62	Exports of services	74



## INTEGRATED ECONOMIC ACCOUNTS

- 8.83. The integrated economic accounts give a concise overview of the accounts of an economy: current accounts, accumulation accounts and balance sheets.
  - They bring together in the same table the accounts of all the institutional sectors, the total economy and the rest of the world, and balance all the flows and all the assets and liabilities. They also enable the aggregates to be read off directly.
- 8.84. In the table of integrated economic accounts, uses, assets and changes in assets are recorded on the left-hand side, while resources, liabilities, changes in liabilities and net worth are recorded on the right-hand side.

- 8.85. To make the table readable while giving a picture of the whole economic process, the levels of aggregation used are the highest compatible with an understanding of the structure of the system.
- 8.86. The columns in the table represent the institutional sectors, namely: non-financial corporations, financial corporations, general government, non-profit institutions serving households, and households. There are also a column for the total economy, a column for the rest of the world, and a column which balances uses and resources of goods and services
- 8.87. The rows in the table represent the various categories of transactions, assets and liabilities, balancing items and certain aggregates.



Table 8.18 Integrated economic accounts

## Current accounts

			Us	es							
		Goods and	Rest	S.1 Total	S.15	5.14	S.13 General	S.12 Finan- cial	S.11 Non- finan- cial		
		service	of the	eco-		House-	govern-	corpo-	corpo-		Transactions and other flows
Accounts	Total	(res.)	world	nomy	<b>NPISHs</b>	holds	ment	rations	rations	Code	stocks and balancing items
I. Production/	497	497								P.7	Imports of goods and services
external account	536		536							P.6	Exports of goods and services
of goods and	3 595	3 595								P.1	Output
ervices	1 904			1 904	6	694	246	29	881	P.2	Intermediate consumption
	133	133								D.21-D.31	Taxes less subsidies on products
	1 824			1 824	31	575	188	73	872	B.1g/B.1*g	Value added, gross/Gross domestic product
	222			222	3	42	30	10	137	K.1	Consumption of fixed capital
	1 602			1 602	28	533	158	63	735	B.1n/B.1*n	Value added, net/Net domestic
											product
	- 39		- 39							B.11	External balance of goods and services
I.1.1. Generation of	768		6	762	23	39	140	15	545	D.1	Compensation of employees
ncome account	191		0	191	O	2	2	3	51	D.2-D.3	Taxes less subsidies on production
											and imports
	133		O	133						D.21-D.31	Taxes less subsidies on products
	58		0	58	0	2	2	3	51	D.29-D.39	Other taxes less subsidies on
											production
	429			429	8	92	46	55	276	B.2g	Operating surplus, gross
	442			442		442				B.3g	Mixed income, gross
	217			217	5	60	16	45	139	B.2n	Operating surplus, net
1. D. All	432			432		432				B.3n	Mixed income, net
.1.2. Allocation of	446		66	380	7	44	46	138	145	D.4	Property income
rimary income	1 855			1 855	6	1 390	221	29	209	B.5g	Balance of primary incomes,
ccount											gross/National income, gross
	1 633			1 633	3	1 348	191	19	72	B.5n/B.5*n	
12 Cassadani	242			210	-						net/National income, net
.2. Secondary	213		1	212	0	178	0	10	24	D.5	Current taxes on income, wealth etc.
istribution of	222			222							
ncome account	322		0	322		322				D.61	Social contributions
	332		0	332	1	0	289	29	13	D.62	Social benefits other than social transfers in kind
	278		9	269	2	71	139	46	11	D.7	Other current transfers
	1 826			1 826	40	1 187	382	32	185	B.6g	Disposable income, gross
l.3. Redistribution	1 604			1 604	37	1 145	352	22	48	B.6n	Disposable income, net
of income in kind	1 826			1 826	13 27	1 406	206 176	22	105	D.63	Social transfers in kind
ccount	1 604			1 604	24	1 406	146	32 22	48	B.7g	Adjusted disposable income, gross
.4. Use of income	1 004			1 00-4	24	1 304	140	22	46		Adjusted disposable income, net
count										B.6g	Disposable income, gross
www.MIIK	1 371			1 371		1 215	156			B.6n P.4	Disposable income, net
	1 371			1 371	13	996	156 362			P.4 P.3	Actual final consumption Final consumption expenditure
	11		0	11	0	990	0	11	0	D.8	
					0		U	- 11	0	5.0	Adjustment for the change in net equity of households in pension funds reserves
	455			455	27	202	20	21	185	B.8g	Saving, gross
	233			233	24	160	- 10	11			Saving, net
	- 41		- 41							B.12	Current external balance



				Resou	rces				
5.11	5.12	5.13	5.14	S.15	5.1				
Non-							C		
finan-	Finan-	Carrel			Tarel	Deat	Goods and		
cial	cial	General	Hausa		Total	Rest of the	service	*	
		govern-		NIDICUL-	eco-	world	(uses)	Total	Accounts
rations	rations	ment	Holds	NPISHs	nomy	497	(uses)		I. Production/
						457	536	536	external account
1 753	102	434	1 269	37	3 595		330	3 595	of goods and
1 755	102	434	1 200	3,	2 222		1 904	1 904	services
					133			133	
872	73	188	575	31	1 824			1 824	II.1.1. Generation of
									income account
735	63	158	533	28	1 602			1 602	
						- 39		- 39	
			766		766	2		768	II.1.2. Allocation of
		191			191	0		191	primary income
									account
		133			133	0		133	
		58			58	0		58	
276	55	46	92	8	429			429	
			442	_	442			442	
139	45	16	60		217			217	
70	1.00	20	432		432	20		432	
78	160		134		407	39		446	II 2 Consoder
209	29	221	1 390	6	1 855			1 855	
7.5	10	101	1 2 10		1 (77			1 (22	distribution of income account
72	19	191	1 348	3	1 633			1 633	income account
		213			213	0		213	
		213			213	U		213	
14	39	268	0	1	322	0		322	
1.4	39	200	332		332	0		332	
			222		332	0		332	
10	49	108	36	36	239	39		278	
185	32		1 187		1 826			1 826	II.3. Redistribution
48	22		1 145		1 604			1 604	
			219		219			219	account
185	32	176			1 826			1 826	II.4. Use of income
48	22	146	1 364	24	1 604			1 604	account
185	32	382	1 187	40	1 826			1 826	
48	22	352	1 145	37	1 604			1 604	
							1 371	1 371	
							1 371	1 371	
			11		11	0		11	



Table 8.18 Integrated economic accounts (cont.)

## Accumulation accounts

			Changes	S.1		S.14	S.13	S.12	S.11		
				3.1	S.15	3,14	3,13	3.12	Non-		
		Goods						Finan-	finan-		
		and	Rest	Total			General		cial		
		service	of the	eco-		House-	govern-				Transactions and other flows
Accounts	Total	(res.)	world		NPISHs				rations	Code	stocks and balancing items
III.1.1 Change in	TOIL	(100.)	World	Homy	141 151 15	Holus	mem	radons	THUCHS	B.8n	Saving, net
net worth due to										B.12	Current external balance
saving and capital										D.9	Capital transfers, receivable
ransfer account										D.9	Capital transfers, payable (-)
dilition decodine										B.10.1	Changes in net worth due to saving
	192		- 38	230	21	178	- 38	4	65		and capital transfers
II.1.2 Acquisition											
of non-financial											
ssets account	376			376	19	61	37	9	250	P.51	Gross fixed capital formation
	- 222			- 222	- 3	- 42		- 10		K.1	Consumption of fixed capital (-)
	28			28	0	2					Changes in inventories
	10			10	0	5		0			Acquisitions less disposals of
					_				_		valuables
	0		0	0	1	4	2	0	- 7	K.2	Acquisitions less disposals of
											non-produced
											non-financial assets
	0		- 38	38	4	148	- 50	5	- 69	B.9	Net lending (+-/ net borrowing (-)
II.2. Financial	691		50	641	32	181	120	237	71	F	Net acquisition of financial assets\
account										F	Net incurrence of liabilities
	0		1	- 1			0	- 1		F.1	Monetary gold and SDRs
	130		11	119	12	68	7	15	17	F.2	Currency and deposits
	143		5	138	12	29	26	53	18	F.3	Securities other than shares
	254		10	244	0	5	45	167	27	F.4	Loans
	46		2	44	0	3	36	3	2	F.5	Shares and other equity
	36		0	36	0	36	0	0	0	F.6	Insurance technical reserves
	82		21	61	8	40	6	0	7	F.7	Other accounts receivable/payable
II.3.1. Other	15			15	0	2	1	- 2	14	K.3-10	Other volume changes, total
changes in										and K.12	
volume of assets	24			24	0	0	0	0	24	K.3	Economic appearance of
account											non-produced assets
	3			3	0	0	3	0	0	K.4	Economic appearance of produced
											assets
	4			4	0	0	4	0	0	K.5	Natural growth of non-cultivated
									_		biological resources
	- 9			- 9	0	0	- 2	0	- 7	K.6	Economic disappearance of
			_						-	V 7	non-produced assets
	- 11		0	- 11	0	0		0	- 5	K.7	Catastrophic losses
	0		0	0	0	0		- 3 0	- 5	K.8	Uncompensated seizures
	1			1	0	0	0	0	1	K.9	Other volume changes in non-financial
	3		0	3	0	-	0		^	K 10	assets n.e.c Other volume changes in financial
	3		U	3	U	2	0	1	0	K.10	assets and liabilities n.e.c
	0		0	0	0	0	- 6	0	6	K.12	Changes in classifications and structure
	U		U	U	U	U	- 0	U	0	of which:	Changes in classifications and surreture
	10		0	10	0	0	0	- 2	12	AN	Non-financial assets
	- 7		J	- 7	0	0		- 2			Produced assets
	17		0	17	0	0		0			Non-produced assets
	5		0	5	0	2		0			Financial assets/Liabilities
			-			-	·		-	B.10.2	Changes in net worth due to other
											changes in volume of assets
III.3.2. Revaluation										K.11	Nominal holding gains/losses
account	280		0	280	8	80	44	4	144	AN	Non-financial assets
	126			126	5	35		2	63	AN.1	Produced assets
	154		0	154	3	45		2		AN.2	Non-produced assets
	91		7	84	1	16		57	8		Financial assets/Liabilities
										B.10.3	Changes in net worth due to
											nominal holding gains (+)/losses (-)



C	6.13			liabilitie		et worth			
S.11 Non-	5.12	S.13	5.14	5.15	S.1				
finan-	Finan-						Goods		
					Torol	0			
cial	cial	General			Total	Rest	and		
		govern-			eco-	of the	service	4	
	rations	ment		NPISHs		world	(uses)	Total	Accounts
48	11	- 10	160	24	233			233	III.1.1 Change in
						- 41		- 41	net worth due to
33	0	6	23		62	4		66	saving and capital
- 16	- 7	- 34	- 5	- 3	- 65	- 1		- 66	transfer account
									III.1.2 Acquisition
65	4	- 38	178	21	230	- 38		192	of non-financial
									assets account
							376	376	
							28	28	
							10	10	
- 69	5	- 50	148	4	38	- 38			III.2. Financial
0.5	3	50			-				account
									100
140	232	170	33	28	603	88		691	
. 10	202				50.7	00		0.1	
0	130	2	0	0	132	- 2		130	
6					123	20		143	
71	0				217	37		254	
26				4	43	3		46	
0				0	36	0		36	
37	0				52	30		82	
- 3			0		- 2	0		- 2	III.3.1. Other
- 3	- 2	- 1	Ü	J	- 2	0		- 2	changes in
									volume of assets
									account
									account
0	0	0	0	0	0	0		0	
0					0	o		0	
0	0	Ö		0	-	0		J	
- 4	2	0	0	0	- 2	0		- 2	
1	0	- 1	0	0	0	0		0	
- 3	2	- 1	C	0	- 2	0		- 2	
17	- 4	2	2	. 0	17	0		17	
									III.3.2. Revaluatio
									account
18	51	7	C	0	76	3		78	
					288	4		292	
134	110	CHC!	20	10	200	**		232	



# Table 8.18 Integrated economic accounts (cont.)

# Balance sheets

			Ass	sets							
				S.1	S.15	5.14	5.13	S.12	S.11		
									Non-		
		Goods						Finan-	finan-		
		and	Rest	Total			General	cial	cial		
		service	of the	eco-		House-	govern-	corpo-	corpo-		Transactions and other flows
Accounts	Total	(res.)	world	nomy	<b>NPISHs</b>	holds	ment	rations	rations	Code	stocks and balancing items
IV.1, Opening	9 922		0	9 922	324	2 822	1 591	144	5 041	AN	Non-financial assets
balance sheet	6 047			6 047	243	1 698	1 001	104	3 001	AN.1	Produced assets
	3 875		0	3 875	81	1 124	590	40	2 040	AN.2	Non-produced assets
	7 365		573	6 792	172	1 819	396	3 508	897	AF	Financial assets/liabilities
										B.90	Net worth
IV.2. Changes in											Total changes in assets
balance sheet	482		0	482	25	110	56	1	290	AN	Non-financial assets
	289			289	21	61	25	- 1	182	AN.1	produced assets
	193		0	193	4	49	30	2	108	AN.2	non-produced assets
	787		57	730	33	199	123	294	81	AF	Financial assets/liabilities
										B.10	Changes in net worth, total
										B.10.1	Saving and capital transfers
										B.10.2	Other changes in volume of assets
				_						B.10.3	Nominal holding gains (+)/losses (-)
IV.3. Closing	10 404		0	10 404	349	2 932	1 647	145	5 331	AN	Non-financial assets
balance sheet	6 3 3 6			6 3 3 6	264	1 759	1 026	103	3 183	AN.1	produced assets
	4 068		0	4 068	85	1 173	620	42	2 148	AN.2	non-produced assets
	8 152		630	7 522	205	2 018	519	3 802	978	AF	Financial assets/liabilities
										B.90	Net worth



				Liabil					
S.11 Non-	5.12	S.13	S.14	S.15	5.1				
	Finan- cial corpo- rations	General govern- ment		NPISHs	Total eco-	Rest of the world	Goods and service (uses)	Total	1
	144(0)(5	11112112	Holos	141 151 15	HOMY	World	(uses)	TOTAL	Accounts
									IV.1. Opening balance sheet
1 817	3 384	687	289	121	6 298	297		6 595	
4 121	268	1 300	4 352	375	10 416	276		10 692	
									IV.2. Changes in balance sheet
155	285	176	33	28	677	91		767	
216	10	2	276	31	535	- 34		501	
65	4	- 38	178	21	230	- 38		192	
17	- 4	2	2	0	17	0		17	
134	10	38	96	10	288	4		292	
							7		IV.3. Closing balance sheet
1 972	3 669	863	322	149	6 975	388		7 362	
4 337	278	1 302	4 628	406	10 951	242		11 193	



# Aggregates

8.88. The aggregates are summary indicators of the result of the activity of the total economy and key magnitudes for purposes of macro-economic analysis and comparisons over time and space.

# Gross domestic product at market prices (GDP)

#### 8.89. Definition:

Gross domestic product at market prices is the final result of the production activity of resident producer units.

#### It can be defined in three ways:

- a) GDP is the sum of gross value added of the various institutional sectors or the various industries plus taxes and less subsidies on products (which are not allocated to sectors and industries). It is also the balancing item in the total economy production account;
- b) GDP is the sum of final uses of goods and services by resident institutional units (actual final consumption and gross capital formation), plus exports and minus imports of goods and services;
- c) GDP is the sum of uses in the total economy generation of income account (compensation of employees, taxes on production and imports less subsidies, gross operating surplus and mixed income of the total economy).
- 8.90. By deducting consumption of fixed capital from GDP, we obtain net domestic product at market prices (NDP).

#### Operating surplus of the total economy

8.91. The gross (or net) operating surplus of the total economy is the sum of the gross (or net) operating surpluses of the various industries or the various institutional sectors.

#### Mixed income of the total economy

8.92. The gross (or net) mixed income of the total economy is identical with the gross (or net) mixed income of the household sector.

#### Entrepreneurial income of the total economy

8.93. The gross (or net) entrepreneurial income of the total economy is the sum of the gross (or net) entrepreneurial incomes of the various sectors.

#### National income (at market prices)

8.94. Gross (or net) national income (at market prices) represents total primary income receivable by resident institutional units: compensation of employees, taxes on production and imports less subsidies, property income (receivable less payable), (gross or net) operating surplus and (gross or net) mixed income.

Gross national income (at market prices) equals GDP minus primary income payable by resident units to non-resident units plus primary income receivable by resident units from the rest of the world.

Gross national income (at market prices) is conceptually identical with gross national product (GNP) (at market prices), as hitherto understood in national accounts generally.

However, the GNP was calculated differently in 1979 ESA<sup>6</sup>

National income is not a production concept but an income concept, which is more significant if expressed in net terms, i.e. after deduction of the consumption of fixed capital.

## National disposable income

8.95. Gross (or net) national disposable income is the sum of the gross (or net) disposable incomes of the institutional sectors. Gross (or net) national disposable income equals gross (or net) national income (at market prices) minus current transfers (current taxes on income, wealth etc., social contributions, social benefits and other current transfers) payable to non-resident units, plus current transfers receivable by resident units from the rest of the world.

#### Saving

8.96. This aggregate measures the portion of national disposable income that is not used for final consumption expenditure. Gross (or net) national saving is the sum of the gross (or net) savings of the various institutional sectors.

#### Current external balance

8.97. The balancing item in the external account of primary incomes and current transfers represents the surplus (if it is negative) or the deficit (if it is positive) of the total economy on its current transactions (trade in goods and services, primary incomes, current transfers) with the rest of the world.

<sup>6</sup> In 1979 ESA, GNP (at market prices) was calculated by adding to gross domestic product (at market prices) the compensation of employees and the property income received from the rest of the world and by deducting the corresponding flows paid to the rest of the world.



# Net lending (+) or borrowing (-) of the total economy

8.98. The net lending (+) or borrowing (-) of the total economy is the sum of the net lending or borrowing of the institutional sectors. It represents the net resources that the total economy makes available to the rest of the world (if it is positive) or receives from the rest of the world (if it is negative). The net lending (+) or borrowing (-) of the total economy is equal but of opposite sign to the net borrowing (-) or lending (+) of the rest of the world.

#### Net worth of the total economy

8.99. The net worth of the total economy is the sum of the net worth of the institutional sectors. It represents the value of the non-financial assets of the total economy minus the balance of financial assets and liabilities of the rest of the world.

#### MATRIX PRESENTATION

- 8.100. Previous parts of this chapter have presented a sequence of (T-) accounts. At the same time, the concepts and definitions of the system allow other methods of presentation. These serve to provide additional insights and to enable different types of analysis.
- 8.101. The input-output table is a widely used matrix framework to supply detailed and coherently arranged information on the flow of goods and services and on the structure of production costs. This matrix contains more information than (T-) accounts for goods and services, production and the generation of income; for example, final consumption expenditure is shown by product group or industry of origin and intermediate consumption is shown both by product group or industry of origin and by product group or industry of destination. Disaggregated linkages between these accounts are further developed in the ESA's supply and use tables, through a specification of output of product groups by industry.
- 8.102. The rest of this section will demonstrate, first, that the full sequence of accounts and balancing items can also be presented in a matrix format. In this table, all transactions are presented for the total economy and for the rest of the world, respectively. In addition, an aggregate goods and services account is included.
- 8.103. Next, the general purposes that can be served by an accounting matrix will be discussed. A crucial feature is the wide range of possibilities for expanding or condensing such a matrix in

accordance with specific circumstances and needs. Finally, it will be illustrated how this works out in practice. In particular, the linkages between the supply and use tables and the sectoral accounts will be elaborated through the insertion of labour accounts, to arrive at a Social Accounting Matrix (SAM) framework. A SAM serves, among other things, to enable a more integrated analysis of economic and social policy issues, including unemployment.

# Matrix presentation of ESA accounts

- 8.104. Table 8.19 presents the full sequence of accounts and balancing items in a matrix. For this purpose, the accounts for the primary distribution of income, for use of income and for other changes in assets have not been subdivided. Besides, the option is left open whether or not to combine the account for the redistribution of income in kind with the secondary distribution of income. Finally, an account that records net worth has been inserted.
- 8.105. The figures which are presented in the tables of this section correspond exactly to the numerical example worked out in the preceding part of this chapter. In all matrices, the boxes containing a balancing item have been framed with bold lines.
- 8.106. A matrix presentation permits each transaction to be represented by a single entry and the nature of the transaction to be inferred from its position. Each account is represented by a row and column pair and the convention is followed that resources are shown in the rows and uses are shown in the columns. For instance, net domestic product (1602) is payable by the economy's producers and received on the primary distribution of income account. Table 8.19 shows this in cell (3,2), that is, in row 3 and column 2. Since this table distinguishes transactions with the rest of the world in a separate account, its diagonal items, that is cells (3,3), (4,4), (5,5), (6,6), (7,7) and (8,8), contain only transactions among resident institutional units.
- 8.107. The row and column totals have not been named. Their main function in matrix accounting is to ensure that all accounts indeed represent complete balances, in the sense that total incomings (row sums) equal total outgoings (column sums). In turn, meaningful balancing items, which connect successive accounts, can only be derived if this condition is fulfilled.
- 8.108. Row 1 shows the uses of goods and services, at purchaser's prices: intermediate consumption (1904) in column 2, final consumption (1371) in column 5, gross capital formation (414) in column 7 and exports (536) in column 14.



- 8.109. The elements in row 1 add up to total use of goods and services, at purchaser's prices (4225). Column 1 presents the supply of goods and services (also totalling 4225, of course). Output (at basic prices) plus taxes less subsidies on products (3728) is shown at the intersection with row 2. Imports (497) originate from the external account of goods and services (row 14).
- 8.110. Row 2 shows output (at basic prices) plus taxes less subsidies on products. Because of this valuation, the sum of row 2 (3728), and the concomitant sum of column 2, are inclusive of taxes less subsidies on products. This ensures that these taxes are incorporated in the balancing item of account 2, net domestic product (NDP), see cell (3,2). Most balancing items can be calculated gross or net. In this matrix, all balancing items are shown net. Consumption of fixed capital (222) is put directly on the capital subaccount for the acquisition of non-financial assets (row 7 and column 2).
- 8.111. Row 3 shows the receipts of primary income by the total economy: net domestic product in cell (3,2), property income from other resident sectors (341) on the diagonal, and primary income flows from the rest of the world (72) in cell (3,15). As this matrix does not subdivide the account for primary distribution of income, it does not break down value added payable by producers into various categories of value added, as recorded in the generation of income account.
- 8.112. Apart from the diagonal item, column 3 contains primary income payable to the rest of the world (41) in cell (15,3) and the balancing item, net national income (1633), that connects this account and the next one.
- 8.113. This matrix leaves open the option whether or not to combine the account for the redistribution of income in kind with the secondary distribution of income. If redistribution of income in kind is not shown, then the diagonal contains current transfers, excluding social transfers in kind, between resident sectors (1096). These transfers consist of current taxes on income, wealth, etc., social contributions and benefits other than social transfers in kind, and other current transfers. If redistribution of income in kind is incorporated, then the diagonal of account 4 also records social transfers in kind; aggregated with the other current transfer flows, this equals 1315. In both cases, row 4 opens with net national income, while current transfers from the rest of the world (10) are recorded in cell (4,15). Column 4 shows, in addition to the diagonal item, current transfers to the rest of the world (39), in cell (15,4), while the balancing item, (adjusted) net disposable income (1604), is put on the use of (adjusted) disposable income account.

- 8.114. If redistribution of income in kind is incorporated, then account 5 is the use of adjusted disposable income account. Otherwise, this account is the use of disposable income account. At the aggregate level, this is only a matter of terminology, for total disposable income equals total adjusted disposable income and total final consumption expenditure equals total actual final consumption. Apart from disposable income, the row of this account records an adjustment for changes in net equity of households on resident pension funds reserves (11) on the diagonal and an adjustment for changes in net equity of households on non-resident pension funds reserves (0) in column 15. The column contains, in addition to final consumption (1371) and the diagonal item, an adjustment for changes in net equity of non-resident households on resident pension funds reserves (0), see cell (15,5), and the balancing item, net saving (233), which is put on the first capital subaccount (account 6).
- 8.115. For the capital account, two subaccounts have been distinguished. First, in the row of the account for change in net worth due to saving and capital transfers, net saving is augmented with capital transfers receivable from resident sectors (61), see cell (6,6), and from abroad (1), see cell (6,16).

In the column of this account, capital transfers payable are shown, to resident sectors and to abroad (4), see cell (16,6). This yields a balancing item, change in net worth due to saving and capital transfers (230), that is transferred to the changes in balance sheet account (account 11).

8.116. Next, the row of the account for acquisition of non-financial assets presents consumption of fixed capital (cell 7,2), the acquisitions less disposals of non-produced non-financial assets by resident units (0), see cell (7,7), and by non-resident units (0), see cell (7,17) and the changes in assets due to saving and capital transfers (833), see cell (7,12). This yields the total sum that is available to residents for the acquisition of assets. That acquisition is shown in two stages: first the acquisition of non-financial assets, in the column of this account, and then the acquisition of financial assets (including external financial assets), in the column of the next account. The column of this account, account 7, thus contains gross capital formation (cell 1,7), the diagonal item (7,7) discussed above, the changes in liabilities due to saving and capital transfers (603), see cell (12,7), and a balancing item, net lending of the total economy (38), that is put on the next account, for financial transactions.



- 8.117. Account 8, the financial account, opens with net lending of the total economy (cell 8,7) and adds financial transactions between resident sectors (553) on the diagonal and also the net incurrence of external liabilities (50), see cell (8,18). The column contains the diagonal item and the net acquisition of external financial assets (88) in cell (18,8). Of course, the net incurrence of external liabilities plus net lending of the total economy equals the net acquisition of external financial assets, so that in this account too the balance between row and column totals is maintained.
- 8.118. The account for other changes in assets, account 9, records in the row the changes in assets due to other changes (379), see cell (9,12), and in the column: the changes in liabilities due to other changes (74), see cell (12,9), and the balancing item, changes in net worth due to other changes (305), see cell (11,9).
- 8.119. The last four accounts for the total economy refer to the balance sheets and the changes therein. First, the opening balance sheet gives in the row the opening stock of assets (16714), see cell (10,12), and in the column the opening stock of liabilities (6298), see cell (12,10), and the opening net worth (10416), see cell (13,10). Next, the account for changes in balance sheet records both components of these changes in the row, see cells (11,6) and (11,9), and the total changes in net worth (535) in the column, see cell (13,11). Then, the closing balance sheet presents in the row the opening stock of liabilities (cell 12,10), both components of changes in liabilities (cells 12,7 and 12,9), and the closing net worth (10951), see cell (12,13). Of course, the sum of these elements equals the closing stock of assets, which is also computed in the column of this account: the opening stock of assets (cell 10,12) plus both components of changes in assets, see cells (7,12) and (9,12). Finally, the extra account for net worth gives opening net worth (cell 13,10) and total changes in net worth (cell 13,11) in the row and closing net worth in the column (cell 12,13).
- 8.120. For the rest of the world, the same accounts have been included as for the total economy, albeit in a slightly more aggregate form. First, the external account of goods and services presents in the row imports by the total economy (cell 14,1) and in the column: exports (cell 1,14) and the balancing item (cell 15,14), the external balance of goods and services (-39). Note that all balancing items of accounts for the rest of the world are viewed from the perspective of the rest of the world. In order to obtain the relevant aggregates for the total economy, the sign must therefore be reversed.
- 8.121. Secondly, the external account of primary incomes and current transfers records the bal-

- ancing item of the previous account, and also primary income, current transfers and adjustment for the change in net equity of households on pension funds reserves, to and from the rest of the world, respectively. These items have already been discussed above. All this yields the current external balance (-41), shown in cell (16,15).
- 8.122. Thirdly, the capital account for the rest of the world has also been split into two subaccounts: one for the current external balance, capital transfers to and from the rest of the world and the balancing item, changes in the net external financial position due to the current external balance and capital transfers (-38), see cell (21,16); another one for changes in assets due to the current external balance and capital transfers (50), see cell (17,22), acquisitions less disposals of non-produced non-financial assets by non-resident units, see cell (7,17), changes in liabilities due to the current external balance and capital transfers (88), see cell (22,17), and the balancing item net lending of the rest of the world (-38), transferred to the next account.
- 8.123. Fourthly, the financial account gives the net acquisition of external financial assets (cell 18,8) and net lending of the rest of the world (cell 18,17) in the row, and the net incurrence of external liabilities (cell 8,18) in the column. Fifthly, the account for other changes in assets presents in the row such changes of assets (7), see cell (19,22), and in the column such changes of liabilities (3), see cell (22,19), and also the balancing item, changes in the net external financial position due to other changes (4), see cell (21,19).
- 8.124. Finally, the balance sheets for the rest of the world are analogous to those for the total economy. Elements not yet mentioned above are: the opening stock of external assets (573), see cell (20,22), the opening stock of external liabilities (297), see cell (22,20), the opening net external financial position of the rest of the world vis-à-vis the total economy (276), see cell (23,20), total changes in the net external financial position of the rest of the world (-34), see cell (23,21), and the closing financial position of the rest of the world vis-à-vis the total economy (242), see cell (22,23).
- 8.125. As a next step, this reduced format matrix can be disaggregated to show the full sequence of accounts, including details for transactors and transaction categories. However, the full potential of matrix accounting can be realised if not all accounts are detailed in the same way, but instead for each account the most relevant classification is selected. This feature is dealt with at greater length in the next subsection.



# Properties of accounting matrices

- 8.126. Each entry in an aggregate matrix such as Table 8.19 can be considered as the grand total of a submatrix in which categories of transactors involved at either end of the set of transactions under consideration are presented. A very useful option in a matrix presentation of accounts is that different types of transactors and groupings thereof can be selected in each account, without giving up the coherence and the integration of the complete accounting system. This means that one may apply 'multiple actoring and multiple sectoring', by choosing in each account a unit and a classification of units which are most relevant to the set of economic flows under consideration.
- 8.127. In principle, each account can be broken down in two rather different ways: by subdividing the total economy into groups of units, or by assigning the categories of transactions shown in an account to various sub-accounts. For instance, a subdivision of the total economy in the first five accounts could run as follows:
  - a) distinguish products in the goods and services account and classify these by product groups;
  - distinguish local kind-of-activity units in the production account and classify these by industries;
  - distinguish institutional units in the accounts for the primary and secondary distribution of income and for the use of income and classify these by institutional (sub)sectors.
- 8.128. These subdivisions have two major consequences. First, for all categories of transactions distinguished in a single cell of these accounts it becomes clear which group of paying units has exchanged what with which group of receiving units. Secondly, the interrelations among various economic flows are revealed through detailed cross- classifications. For instance, in the example given in the previous paragraph, a simple circular flow of income is presented, at a meso-level, through the following mappings:
  - a) submatrix (3,2) shows which institutional sub-sector receives net value added from which industries;
  - b) submatrices (4,3) and (5,4) show which institutional sub-sector receives primary income and disposable income from which institutional sub-sector (naturally, in the distribution of income accounts and in the use of income account different classifications

- can be applied, and then these submatrices are no longer diagonal);
- submatrix (1,5) shows which product group is consumed by which institutional sub-sectors; and
- d) submatrix (2,1) shows which industry makes which product groups.
- 8.129. When compiling such a matrix, it is convenient to start by designing an accounting structure which is relevant to the applications envisaged. Subsequently, in each account the most appropriate units and classifications of units are selected. However, in practice it will be an interactive process. Suppose, for instance, that there is a transaction category for which only total receipts and payments of transactors (the row and column totals of a submatrix) are known, and not who paid whom (the interior structure of the submatrix). This problem can be solved by the insertion of an undivided, dummy account.
- 8.130. Among the general properties of a matrix presentation of accounts are the following:
  - a) a detailed matrix presentation is suitable for mathematical treatment using matrix algebra; this can also be of help when balancing the accounts;
  - b) a detailed matrix presents a simultaneous breakdown of interrelated transactions by paying and receiving units; as a consequence, it is an appropriate format to reveal, at a meso-level, interrelations among economic flows; this includes those flows which involve two different types of units (e.g. final consumption expenditure on various categories of goods and services by a number of household sub-sectors);
  - c) for a set of accounts giving a breakdown of transactions by paying and receiving units, a matrix presentation is more concise than other methods of presentation; the payment by one unit and the receipt by another unit involved in each transaction are represented by a single entry.
- 8.131. An aggregate matrix for the total economy can serve as a reference table for subsequent, more detailed tables. As soon as the reader is then introduced to a detailed presentation of parts of the system (supply and use tables, sector accounts, etc.), the relation of the detailed submatrices to the aggregate matrix should be clear through a system of codes. The matrix format is particularly advantageous if it is not possible or desirable to show an equally detailed classification in all accounts of the system.



8.132. The matrix presentation is a suitable tool for exploring the flexibility of the system. For instance, one may further elaborate on the interrelations between the social and economic aspects of the system to arrive at a Social Accounting Matrix. The SAM approach is set out and illustrated in the next subsection of this chapter.

# Adaptation of the reduced format matrix to specific types of analysis

- 8.133. The supply and use tables opt for a classification of rows and columns which is most suitable to describe the economic processes under consideration, namely the processes of production and use of products. However, those matrices do not incorporate the interrelations between value added and final expenditure. By extending a supply and use table, or an input-output table, to show the entire circular flow of income at a meso-level, one captures an essential feature of a Social Accounting Matrix (SAM).
- 8.134. A SAM is defined here as: The presentation of ESA-accounts in a matrix which elaborates on the linkages between a supply and use table and sector accounts. SAMs typically focus on the role of people in the economy, which may be reflected by, among other things, extra breakdowns of the household sector and a disaggregated representation of labour markets (i.e. distinguishing various categories of employed persons).
- 8.135. An important social concern is the level and composition of (un)employment. A SAM commonly provides additional information on this issue, via a subdivision of compensation of employees by type of person employed. This subdivision applies to both the use of labour by industry, as shown in the supply and use tables, and the supply of labour by socio-economic subgroup, as shown in the allocation of primary income account for households. It implies that the matrix presents not only the supply and use of various product groups, but also the supply and use of various categories of labour services.
- 8.136. The classification of (self-)employed persons may be based on a combination of background and (main) job characteristics, such as sex, schooling, age and place of residence on the one hand, and occupation, type of job contract (full-time/part-time, permanent/temporary) and region and sub-sector of employment on the other hand. Another consideration should be that within-group variations in relative wage rate changes are smaller than between-group variations. A classification by industry of employment is less relevant, because this is already shown in the SAM by the cross-classification of value added.

- 8.137. Both resident persons employed in non-resident enterprises and non-resident persons working for resident enterprises plus employees working temporarily abroad should be set apart. In this way, employment can be estimated by counting the number of (national) employed person units. Evidently, this includes the self-employed, for whose labour input an imputed remuneration may then be isolated from the rest of net mixed income in the SAM.
- 8.138. In particular, comparing (1) labour incomes of all employed persons as shown in the SAM, (2) a decomposition of these incomes into hours worked and average wage rates per hour and (3) the potential supply of labour by type of person and household group (expressed in 'full-time' equivalents) yields detailed information on the composition of unemployment and an aggregate indicator ('full-time equivalent unemployment') which is consistent, both conceptually and numerically, with the other macro-economic indicators; these can also be derived from the SAM framework. Moreover, juxtaposing the head-count of the employed persons (excluding foreigners) and the potential labour force in this data set reveals unemployment as conventionally defined.
- 8.139. At this stage, it is perhaps useful to work out an illustrative SAM. For this purpose, Table 8.20 exemplifies the design of a SAM which records all transactions distinguished in the system (that is, all flows excluding 'other changes in assets'). The main novelty refers to a new meaning that is attached to the generation of income account, in order to facilitate a linkage of detailed labour market analyses and the national accounts. The aggregate SAM shown here is meant as a summary table, to which subsequent, more detailed tables can refer. Possible types of classifications in each account are indicated in parentheses in the row and column headings.
- 8.140. The sequence of accounts in this matrix is the same as in Table 8.19. Turning that matrix into the aggregate SAM presented here implies:
  - a) deleting the other changes in assets account, the opening balance sheet, the changes in balance sheets account, the closing balance sheet and the net worth account, both for the total economy and for the rest of the world, and deleting the external financial account;
  - subdividing the primary distribution of income account and the second capital subaccount; and
  - c) combining both capital subaccounts (excluding fixed capital formation) and combining the external account of goods and services and the external account of primary incomes and current transfers.



- 8.141. The first two rows and columns of Table 8.20 contain an aggregated version of the supply and use table, here explicitly linked up with the other accounts of the system. Note that rows and columns of the supply table (cell II,I) have been transposed.
- 8.142. The third account records the generation of income and plays an important role. It is classified by primary input category: (1) compensation of various types of employees, (2) other taxes less subsidies on production, (3) net operating surplus and (4) net mixed income.
- 8.143. Here, this account accommodates transactions between two different types of units. In particular, this refers to compensation of employees, which is recorded as a transaction (work in return for compensation) between an institutional unit (employer) and a person (employee). In this SAM, employed persons are considered as separate units who receive compensation of employees in the generation of income account and distribute this income to their household in the allocation of primary income account. These units are subsequently classified into groups of (self-)employed persons. This representation serves to integrate labour market analyses and the national accounts.
- 8.144. The (residual) mixed income and operating surplus remain with the producing unit, but the classification of producing units need not be the same as in the production account. In effect, some classification by institutional subsector is particularly relevant to operating surplus and mixed income. This implies a cross-classification of these value added components by industry and institutional sub-sector in the SAM.
- 8.145. As the balancing item in cell (III, II) equals total domestic value added, the primary input categories encompass all persons employed in resident enterprises. In column III, compensation of non-resident persons employed in resident enterprises is then handed over to the rest of the world. A meaningful, national balancing item is only obtained in account III if compensation of resident persons employed in nonresident enterprises is added first. This is done in row III and for this purpose a separate category, resident persons employed in nonresident enterprises, may be created. An additional advantage of inserting this category is that it facilitates the estimation of employment as conventionally defined.
- 8.146. The result of all this is that the generation of income account is closed with a new balancing item (1473), in between total net value added and NNI. This balancing item, named total net generated income, at basic prices, gives total

- income earned by resident institutional units as a result of being engaged in production.
- 8.147. The allocation of primary income account of a detailed SAM presents household labour income(s) as a contribution by one or more (self-)employed household members. Among other things, this will indicate to what extent each household group depends on multiple sources of (labour) income. Apart from this, the transaction categories in the distribution and use of income accounts are the same as in the previous table.
- 8.148. In the design of this SAM, the capital and financial accounts have been interlaced, with the financial account classified not by institutional sector but by type of financial asset. As a consequence, a disaggregation of this SAM would show, by institutional sub-sector, both acquisitions less disposals of various types of financial assets, see cell (IX,VII), and incurrence less repayment of various types of liabilities, see cell (VII,IX). These two categories of transactions have been combined as far as the rest of the world is involved. This serves to include the balancing item net lending in Table 8.20, though with a reverse sign when viewed from the standpoint of the national economy (cell IX,XI).
- 8.149. A large part of total volume changes in net worth probably consists of increases in fixed assets. If one is particularly interested in the dynamics of an economy, it is important to show in which industries production capacity has been expanded. This is the aim of the fixed capital formation account (account VIII) inserted in this SAM. A more detailed table would then present:
  - a) who invests where in the rows of this account cell (VIII,VII); and
  - b) where does one invest in what in the columns – cell (I,VIII).

In this case, the who refers to an institutional sub-sector, the where refers to an industry, and the what refers to a product group. Through this fixed capital formation account the SAM shows at a meso-level the linkages which exist between fixed capital formation by institutional sector, as presented in the capital account, and fixed capital formation by product group, as contained in the supply and use tables.

- 8.150. Table 8.21 serves to illustrate what kind of information can be derived from a more detailed SAM. Its main purpose is to show:
  - a) the circular flow of income, including a subdivision of labour income by a few categories of employed persons; this enables



- a more detailed analysis of the linkage between value added of industries and primary income of household subgroups;
- b) the interdependence between the distribution of income and the structure of production; among other things, this is related to diverging demand patterns of various household subgroups;
- c) the sub-sectoral allocation of saving, including a subdivision of fixed capital formation by investing industry; this enables a more detailed analysis of the linkage between fixed capital formation of sub-sectors and fixed capital formation by product group.

For purposes of presentation, the number of groups in each account is kept to a minimum. Obviously, a fully-fledged SAM should distinguish more categories per account.

- 8.151. As a SAM integrates both income and expenditure flows and the supply and use tables at a meso-level, it may serve as a format for the estimation of a wide set of accounts. The SAM approach is particularly useful if one wants to reconcile detailed information on, for example, production and international trade with basic data from, for example, a labour force survey, a household budget survey and an investment survey for industries. In addition, casting accounts into a SAM framework implies that matrix algebra can be applied to balance them.
- 8.152. Integration of more basic data entails the possibility of more policy issues being monitored and analysed in an interrelated. Above all, the linkage of employment and income distribution aspects to more macro-oriented objectives such as NDP growth, balance of payments equilibrium, stable price levels, etc. comes within reach with a SAM. In addition, the SAM provides a framework and consistent (base-year) data for economy-wide (general equilibrium) models with detailed classifications of actors, including industries, labour types and household subgroups.
- 8.153. Table 8.22 shows part of the information contained in a fully-fledged SAM. It looks at total net value added, i.e. cell (3,2) of the aggregate Table 8.20, through a magnifying glass. To facilitate cross-reference with the supply and use table, industries are only classified by NACE rev.1 sections. Male and female labour incomes are broken down by category of occupation and place of residence of the employed person. Net operating surplus is shown accord-

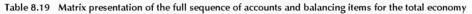
ing to the (sub)sector of the enterprise to which the establishment belongs, and net mixed income according to the location of the household enterprise. In this example, mixed income still includes an imputed remuneration for the labour of the self-employed. Obviously, the figures in this table add up to the concomitant totals shown in Tables 8.20 and 8.21. For instance, total net value added appears in the bottom right-hand corner.

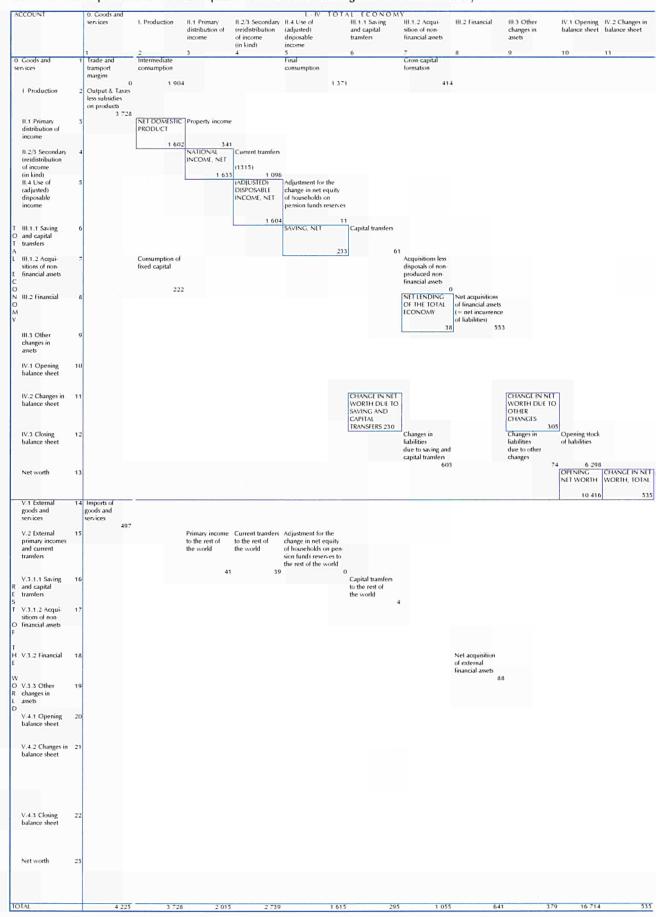
- 8.154. The additional insights which can be obtained from such a table include the following:
  - a) the share of female labour income by industry and region;
  - b) the degree of concentration of female labour income in a certain occupational category, by industry and region;
  - the composition of labour income by occupation in each industry and region, for both sexes;
  - d) the regional split of mixed income by industry;
  - e) the weight of public enterprise and foreigncontrolled corporations in the operating surplus of each industry.
- 8.155. In this table, the detailed information on compensation of employees comes from labour statistics; its integration into a national accounts framework will improve the relevance as well as the reliability of both this source and the national accounts.

Labour incomes as presented in this table can be decomposed into a volume and a price component by labour type and industry: full-time equivalent employment and (weighted, full-time equivalent) wage rates, respectively. Apart from that, a fully-fledged SAM also contains a table showing the allocation of these labour incomes and the concomitant employment to household groups. Similar transactions might be shown for imputed labour income of the self-employed.

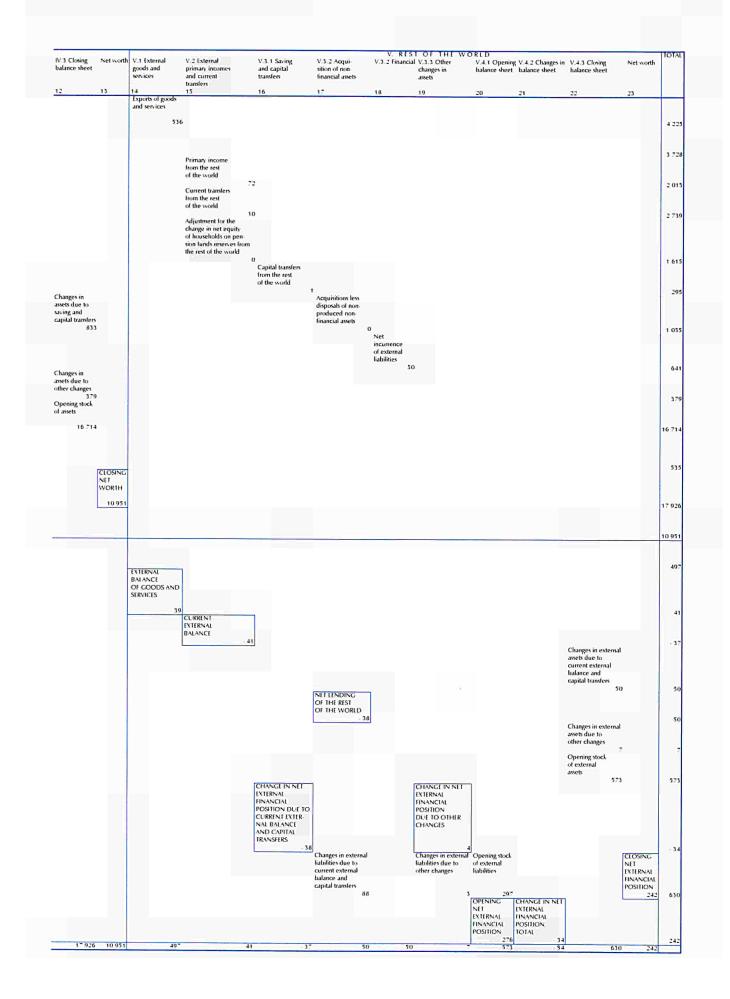
A data set which contains an estimate of imputed labour income of the self-employed person units as well as a split of all labour income into a volume and a price component yields detailed labour data which are quite useful for all kinds of analysis and which are directly linked to all important macro-economic aggregates, including employment (that is, the total number of employed person units) and full-time equivalent employment (that is, total labour input volume).











THE EUROPEAN SYSTEM OF ACCOUNTS

Table 8.20 Schematic presentation of a Social Accounting Matrix

ACCOUN	VΤ	0. Goods and				TOTAL	ECONOMY				REST OF THE	WORLD	TOTAL
		services (products)	L. Production (industries)	II.1.1 Generation of income (primary input	of primary income (institutional	II.2 Secondary distribution of income (institutional	II.4 Use of disposable income (institutional	Capital  (institutional	Gross fixed capital formation (industries)	III.2 Financial (financial	Current	Capital	
		1 = 1	II = 2	categories) III = 3a	sectors) IV = 3b	sectors) V = 4	sectors) VI = 5	sectors) VII = 6/7a	VIII = 7b	assets) IX = 8	X = 14/15	XI = 16/17	
). Goods and	I = 1	Trade and	Intermediate	III = 24	IV = 3D	V = 4	VI = 5 Final	Changes in	Gross fixed	IA = 0	Exports of goods	AI = 16/17	+
ervices products)		transport margins	consumption				consumption	inventories*	capital formation	286	and services		
Production     (industries)	11 = 2	Output	1 90-	•			1 37	1	38	376	5.	36	4 22
II.1.1 Generation of income (primary input	III = 3a	3 595	NET VALUE ADDED (BASIC PRICES)								Compensation of employees from the rest of the world		3 59
calegories) II.1-2 Allocation of primary income tinstitutional	IV = 3b	Taxes less subsidies on products	1 469	GENERATED INCOME, NET (BASIC PRICES)	Property income						Property income and taxes less subsidies on production from the rest of the world	6	1.47
sectors) If 2 Secondary distribution of income Of institutional	V = 4	133		1 473	34' NATIONAL INCOME, NET	Current transfers						56	2 01
1 sectors) 1 II.4 Use of 2 disposable income (institutional sectors)	VI = 5				1 63.	B 1 090 DISPOSABLE INCOME, NET	Adjustment for the change in net equity of households on pension funds reserves				Adjustment for the change in net equity of households on pen- sion funds reserves from the rest of the world	20	2 73
Capital (institutional sectors)	VII = 6/7a					1 604	SAVING, NET	Capital transfers		Net incurrence of liabilities		O Capital transfers from the rest of the world**	1.61
Gross fixed capital	VIII = 7b		Consumption of fixed				23	Net fixed capital formation	61	600	3	in the wind	1 89
formation (industries) III.2 Financial (financial assets)	IX = 8		capital 22:	2				1. Net acquisitions of financial assets	54			NET LENDING OF THE REST OF THE WORLD	37
Current	X = 14/15	Imports of goods and		Compensation of employees	Property income and taxes less	Current transfers	Adjustment for the change in net equity	6	41			- 31	8 60
		services 497		to the rest of the world	subsidies on pro- duction to the rest of the world	of the world	of households on pension funds reserves to the rest of the world	0					57
V Capital	XI = 16/17							Capital transfers to the rest of the world			CURRENT EXTERNAL BALANCE		
OTAL		4 225	3 59	5 1.475	2 01	3 2.73	1 61:	- "	98	376 60.	3 5		- 3

<sup>\*</sup> Including acquisitions less disposals of valuables.
\*\* Including acquisitions less disposals of non-produced non-financial assets.

Table 8.21 Example of a more detailed Social Accounting Matrix

ACCOUNT			0. G	oods ar	nd												TOTA	LE	CON	омү													ROW	TOTA
			servic				Producti		of inc	Generati ome ary input	on			II.1 Allos of prima income (institution	iry		II.2 Sedistribe of inco	ition me	у	di:	4 Use of isposable come institution	le		Capital			G fc	iross (ix apital ormatio ndustri	n		Financia ncial	ı C	urrent Capita	
			(proc	iucis)		(10)	austries	,		ary input sories)				sectors)			sector	s)		se	ectors)			sectors	1)					asse	ts)			
			la	IŁ	2		la II			IIIP II	c IIId	IIIe I	llf Illg	IVa	IVb IV	c IVd	Va	Vb	Vc				_	VIIa V	VIIP /	VIIc '	VIId \		/IIIb VI	lic IX	a IXb	IXc	X X	
0. Goods and	Agriculture, forestry and fishery products (0)	la					3 7														16 339 2		2		1	28	3	2	100 2				7 435	12 2 68
services	Ores and minerals, electricity, manufacturing and construction (1-5)	Њ					6 96																3		4	28	3		109 23	33				
(products)	Services (6-9)	lc	2			78	7 20	9 34	9											2	208 1	52 13	3 357						23				94	1 41
I. Production	Agriculture, hunting, forestry and fishing (A-B)  Mining, manufacturing, electricity and	lla llb	87	2 112	-																													2 12
(industries)	construction (C-F)	no.		2 112																														~ '-
	Services (G-P)	llc		39	134	14																												1 38
II.1.1 Generation	Compensation Domestic Resident male	Illa					8 31	1 15	3																									47
of income	of Resident female	шЬ					1 9		2																									28
(primary input	employees Non-residents	Ille						1	1																								6	
categories)	Residents abroad Other taxes less subsidies on production	IIId IIIe					2 4	9 1	1																								0	5
	Operating surplus, net	IIIf					1 6																											21
	Mixed income, net	10g					4 26																											43
T II.1.2 Allocation	Households, employees	IVa								278	6		16			5 11																		77
O of primary	Households, other	IVb							20	10			0 416			2 24																	32	61
T income	Corporations and NPISHs	1Vc										14		3	28 17																		27 7	38
A (institutional L sectors)	General government	IVd	2	111	2	20						58 1	b		-	3																	1	23
II.2 Secondary	Households, employees	Va	-										_	771	_		-		56	197														1 02
E distribution	Households, other	Vb													577				23	92														69
C of income	Corporations and NPISHs	Vc													9	4	58		16														4	24
O (institutional	General government	Vd														191	320	134	37	92													6	78
N sectors)																				_														
O II.4 Use of M disposable	Households, employees Households, other	Via Vib															646	499				2												64 50
Y income	Corporations and NPISHs	VIc																433	107			,	,											10
(institutional	General government	Vld																		352														35
sectors)																																		
Capital	Households, employees	VIIa																			85											1		8
(institutional	Households, other	VIII																				75					7				28	4		13 51
sectors)	Corporations and NPISHs General government	VIIc																				83	- 10	1	4	4	25			130		74		1 16
Gross fixed	Agriculture, hunting, forestry and fishing (A-B)	VIIIa				1	1																- 10	4	,							- 1		1
capital	Mining, manufacturing, electricity and	VIIIb					9	2																	4	36								13
formation	construction (C-F)																																	
(industries)	Services (G-P)	VIIIc						11	9															1		92	7							23
III.2 Financial	Currency and deposits	lXa ovi-																						56		44	7						13	
(financial assets)	Loans Other financial assets	IXb IXc																						26	5 1 82 1		45 68						- 2 - 2	
ROW Current	Cure marked uses	X	37	345	5 11	15					2			4	9 2	6			4	35				20	J. 1	.02	50							57
Capital		ΧI													-												4						- 41	- 3
TOTAL			128	2 685	1 41	12 8	9 2 12	3 1 38	3 472	288	2 6	58 21	7 432	778 6	514 38	4 237	1 024	692	243	780 €	548 5	08 107	352	86	130 5	16	166	11	132 23	33 132	2 217	254	577 -3	7

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THE EUROPEAN SYSTEM OF ACCOUNTS

Table 8.22 Example of a detailed submatrix: NET VALUE ADDED (BASIC PRICES)

								IND	USTRIE	S (by NACE-s	ections)	)								TOTAL
(Table 8.	.20, cell 3,2)			Agri- culture, hunting and forestry	Fishing			Elec- tricity, gas and water supply	Construc- tion	Wholesale, retail trade, repair of mo- tor vehicles households goods	and	s Transport storage, communi cation	inter-	and business	Public administra- tion, defence and compulsory soc.security	Educa- tion	- Health and social work	Other community, social, personal services	Financial inter- mediation services indirectly measured	
				lla	l lla2	IIb1	IIb2	IIb3	IIb4	llc1	llc	2 IIc	3 IIc			llc	7 IIc8	llc9		11
Com-	Resi- Agricultural	Ru	ıral IIIa1	6.2		0.0	0.0			0.0						0.0				6.8
pen-	dent	Ur	ban IIIa2	0.3	2 0.2	0.0	0.0	0.0	0.0	0.0	0.	0 0.	0 0.	0.0		0.0				0.5
sa-	male Manual		iral IIIa3	0.2		3.2	21.1	0.6		1.9						0.8				46.0
tion		Ur	ban Illa4	0.0		1.8	105.3	9.8	27.4	4.0						1.0				165.9
	Clerical, sal	es, service Ru	iral IIIa5	0.3		0.5	5.9	0.0		3.0						0.6				20.0
of	D		ban Illa6	0.0		1.5	35.6	2.1	3.7	6.6						0.6				75.9
	O Professiona		ıral IIIa7	0.		1.7	17,7	0.2		0.7						14.0				46.1
em-	M managerial,		ban IIIa8	0.0		2.5	47.7	2.7	4.4	1.3										111.0
	E Resi- Agricultural		ıral IIIb1	1.0		0.0	0.0	0.0		0,0						0.0				1.1
, ,	S dent		ban IIIb2	0.0		0.0	0.0	0.0		0.0						0.0				0.0
	T female Manual		iral IIIb3	0.0		0.0	5.7	0.0		0.1						0.4				7.5
	1		ban IIIb4	0.0		0.0	13.6	0.0		0.2						0.4				18.8
	C Clerical, sal		iral IIIb5	0.0		0.4	5.6	0.1	1.3	6.2						4.3				47.8
	o orenam, and		ban IIIb6	0.0		1.2	49.6	2.9		14.3		-				4.9				142.1
	Professiona		ral IIIb7	0.0		0.0	1.3	0.0		0.2						9.3				21.0
	managerial,		ban IIIb8	0.0		0.1	7.3	0.1	0.3	0.3						10.6				49.3
	Non-resident emplo		IIIc	0,		0.1	0.9	0.0		0.2						0.0				2.0
	Residents in non-reside		IIId				0.5	0.0	0.2	0.2		·		0,0	, ,,,,	0.0	, 0,0	, ,,,,		2.0
	xes less subsidies on pro		Ille	-2.0	0.0	-2.0	41.1	4.9	5.0	0.0	0.	0 -6.	0 8.	3 3.7	7 1.0	0.0	0.0	4.0		58.0
Opera- ting	Households (owner		IIIf1						5.0	0.0				60.0		0.0	0,0			60.0
sur-	enterprises		IIIf2	0.0	0.0	0.0	0,0	0.0	0.0	0.0	0.	0 0.	0.0	0.0	0.0	0.0	0.0	21.0	)	21.0
plus,	Corporations	Public	IIIf3	0.1	0.0	2.7	8.0	9.0	1.1	-12.1	0.	1 3.	6 1.	5 1.0	)	0.0	6.2	10.1	-5.0	26.3
net		National private	IIIf4	10.7	0.2	0.4	13.0	0.1	21.9	6,0	2.	7 7.	1 14.	8 49.0	)	0.0	1.3	11.5	-35.0	103.7
		Foreign	1015	0.0	0.0	1.4	6.0	0.0	0.4	0.5	0.	3 1.	8 2.	2 1,5	5	0.0	0.0	0.0	-8.0	6.1
Mixed in	come, Rural		Illg1	12.3	3 1.4	0.0	65.4	0.0	9.4	10.7	0.	5 0.	5 3.	0 32.9	0.0	0.0	3.4	2.1		141.6
net SUBTOT	Urban ALS:		IIIg2	0,2	2 0.2	0.0	161.6	0.0	25.6	20.4	4.	3 2.	5 2.	0 61.1	0.0	0.0	7.6	4.9		290.4
Compens	sation of employees (pa	id by resident prod.)		8.0	1.0	13.0	317.3	18.5	58.0	39.0	5.	3 15.	9 35.	5 18.4	4 39.1	67.0	22.3	103.6		761.8
-Resident			Illa	6.9		11.1	233.3	15.4	51.4	17,5										472.2
-Resident	t female		IIIb	1.0		1.7	83.1	3.0		21,3										287.6
-Non-res	ident		IIIc	0.1		0.1	0.9	0.0		0.2						0.0				2.0
Mixed in	come and operating sur	plus		23.2		4.5	254.0	9.1	58.4	25.5						0.0				
	ng surplus, net		IIIf	10.8		4.5	27.0	9.1	23.4	-5.6										
	ncome, net		IIIg	12.4		0.0	227.0	0.0	35.0	31.1						0.0				432.0
	ET VALUE ADDED		III	29.3		15.5	612.4	32.5	121.4	64.5										

# **CHAPTER 9**

# INPUT-OUTPUT FRAMEWORK

- 9.01. The input-output framework consists of three types of tables:
  - a) supply and use tables;
  - b) tables linking the supply and use tables to the sector accounts;
  - c) symmetric input-output tables.
- 9.02. Supply and use tables are matrices by industry and product describing the domestic production processes and the transactions in products of the national economy in great detail. These tables show:
  - a) the structure of the costs of production and the income generated in the production process;
  - b) the flows of goods and services produced within the national economy;
  - the flows of goods and services with the Rest of the World.
- 9.03. A supply table shows the supply of goods and services by product and by type of supplier, distinguishing output by domestic industries and imports. A simplified example of a supply table is given in Table 9.1.

- 9.04. A use table shows the use of goods and services by product and by type of use, i.e. as intermediate consumption (by industry), final consumption, gross capital formation or exports. Furthermore, the table shows the components of gross value added, i.e. compensation of employees, other taxes less subsidies on production, net mixed income, net operating surplus and consumption of fixed capital. A simplified example of a use table is given in Table 9.2.
- 9.05. Between the supply and use tables, two types of identities hold good (provided supplies and uses are valued consistently, see Tables 9.5 and 9.6):
  - a) The identity by inclustry:
    Output by inclustry = Input by inclustry.
    In terms of our simplified supply and use table, this indicates that the row vector in cell (2,1) in Table 9.1 should be equal to that in cell (3,1) in Table 9.2.

So, for each industry:

Output = Intermediate consumption + Value added;

Table 9.1 A simplified supply table

Supplies		Industries	Rest of the World	Total
		(1)	(2)	(3)
Products	(1)	Output by product and by industry	Imports by product	Total supply by product
Total	(2)	Total output by industry	Total imports	Total supply

Table 9.2 A simplified use table

Uses		Industries	ROW	Final cons.	Gross cap. formation	Total
		(1)	(2)	(3)	(4)	(5)
Products	(1)	Intermediate consumption by product and by industry	Exports	Final consumption expenditure	Gross capital formation	Total use by product
Components of value added	(2)	Value added by component and by industry				
Total	(3)	Total inputs by industry				



b) the identity by product: Total supply by product = Total use by product.

In terms of our simplified tables, the column vector in cell (1,3) of Table 9.1 should be equal to the column vector in cell (1,5) of Table 9.2.

So, for each product:

Output + Imports = Intermediate consumption + Exports + Final consumption expenditure + Gross capital formation.

These identities by industry and product can be used to check and improve the consistency and completeness of estimates (see paragraph 9.11.).

- 9.06. Supply and use tables are the central framework for all tables by industry, e.g. those on employment, gross fixed capital formation and capital stock.
- 9.07. The supply and use tables contain all the flows in the following accounts:
  - a) the goods and services account;
  - b) the production account;
  - c) the generation of income account.
- 9.08. A supply table and a use table can also be combined and presented as a single table. This can be achieved by adding two rows and a column to the use table, for output and imports (see Table 9.3). Note that the rows and columns from the supply table presented in paragraph 9.03. have been transposed here.

table. There is one major conceptual difference between a symmetric input-output table and a combined supply and use table: in the supply and use table, the statistics relate products to industries, while in the symmetric input-output table the statistics relate products to products or industries to industries. So, in a symmetric input-output table either a product or an industry classification is employed for both rows and columns (see Table 9.4).

Most statistical information that can be ob-9.10. tained from producer units indicates what type of products they have produced/sold and, usually less detailed, what type of products they have bought/used. The format of the supply and use tables is designed to fit in with this type of statistical information (i.e. industry by product). By contrast, information of a product by product or industry by industry nature as required by the symmetric input-output table is not often available. For example, surveys of industries usually provide information about the type of products used and about the products produced. However, information on the inputs in terms of products and value added components for each product produced is usually not collectable. Ideally, the administration of an enterprise should show all costs allocated to the various types of output and, simultaneously, show the composition of intermediate consumption by type of product. In practice, information arranged in the form of supply and use tables is therefore a practical starting point for constructing the more analytic

Table 9.3 A simplified combined supply and use table

		Products	Industries	ROW	Final cons.	Gross cap. formation	Total
		(1)	(2)	(3)	(4)	(5)	(6)
Products	(1)	=	Intermediate consumption	Exports	Final consumption expenditure	Gross capital formation	Total use by product
Industries	(2)	Output	-	-	-	-	Total output by industry
Components of value added	(3)	_	Value added				,
ROW	(4)	Imports	_				
Total	(5)	Total supply by product	Total inputs by industry				

9.09. A symmetric input-output table is a product by product or industry by industry matrix describing the domestic production processes and the transactions in products of the national economy in great detail. A symmetric input-output table rearranges both supply and use in a single

information in the symmetric input-output tables. The industry by product information in the supply and use tables can be converted into product by product or industry by industry, statistics by adding extra statistical information on the input structures, or by assuming con-



Table 9.4 A simplified symmetric input-output table (product by prod
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		Products	ROW	Final consumption expenditure	Gross capital formation	Total
		(1)	(2)	(3)	(4)	(5)
Products	(1)	Intermediate consumption	Exports	Final consumption expenditure	Gross capital formation	Total use by product
Components of value added	(2)	Value added	_	=	_	=
ROW	(3)	Imports	-	_	_	_
Total	(4)	Total supply by product	-	_	-	Total supply = Total use

stant input structures by product or by industry (see paragraphs 9.54. – 9.60.).

9.11. The supply and use tables serve both statistical and analytical purposes.

Important statistical purposes are:

- a) identifying gaps and inconsistencies in basic data sources;
- b) weighting and calculation of index numbers and price and volume measures;
- making estimates by residual (estimating a variable by first estimating all other variables in the identity), e.g. for the production or final consumption of specific products;
- d) checking and improving the consistency, plausibility and completeness of figures in the supply and use tables and the derived figures (such as those in the production accounts). To this end, the balancing process should not be limited to the supply and use tables at current prices:
  - by compiling supply and use tables at current and constant prices for two or more years, estimates of changes in volumes, values and prices can be balanced simultaneously: compared to integrating supply and use tables for a single year in isolation, this is a major extension of the effectiveness of the integration framework;
  - (2) with the aid of the tables showing the linkage with the sector accounts, a direct comparison can be made with information from the latter, e.g. information on the distribution of income, on saving and on net lending (calculated as the result of financial transactions). This at least guarantees that, after the balancing process, consistency is obtained between the supply and use tables and the sector accounts;

- (3) trying to derive symmetric input-output tables from the supply and use tables may reveal inconsistencies and weaknesses in the supply and use tables. In this respect, there is therefore also a feedback from the symmetric input-output tables to the supply and use tables;
- e) estimating figures for periods on which less reliable information is available, e.g. estimating annual figures on the basis of the detailed supply and use figures for a benchmark year or estimating quarterly figures on the basis of annual supply and use tables.
- 9.12. The supply and use tables and symmetric inputoutput table give a detailed picture of the composition of the supply and use of goods, services and labour and the primary incomes involved. These tables and the ratios that can be derived from them, such as productivity figures, are an important subject for economic analysis.
- 9.13. The supply and use tables and symmetric inputoutput tables can also be used as tools of economic analysis. Both types of tables have different merits. For calculating direct and indirect effects, the supply and use tables need to be accommodated with specific assumptions or extra statistical information. For calculating cumulative effects, these assumptions and extra data requirements are the strongest. In fact, the requirements for calculating cumulative effects with a supply and use table amount to constructing a symmetric input-output table. Therefore, for calculating cumulative effects, the symmetric input-output table is the preferable tool. However, for calculating direct effects and first-order effects, the supply and use tables adjusted with a selected amount of assumptions (or extra statistical information) is in general to be preferred, because:
  - a) the calculation is less dependent on assumptions;
  - b) the supply and use table provides more detail than the symmetric input-output table;



 the information in the supply and use table can be better linked to other types of statistical data.

These features are also helpful when the supply and use tables are integrated in a macro-economic model: the resulting overall model is more close to real statistics, can show a lot of detail and can relatively easily be linked to areas on which other statistical data are available, e.g. on the labour market or the environment.

- 9.14. The supply and use tables and symmetric input-output tables can be used to calculate:
  - a) effects of changes in prices or tax rates on the values of supply or use;
  - effects of changes in volumes on the values of supply or use;
  - effects of changes in prices of supply on prices of use;
  - d) effects of changes in the volume of use on the volume of supply;
  - e) effects of changes in the volume of supply on the volume of use.

The calculations can show indirect as well as direct effects. For example, a significant increase in energy prices will affect not only those industries that use energy intensively, but also those industries that use the outputs of the energy-intensive producers. With the aid of some assumptions, estimates of the size of such indirect effects can be deduced from the supply and use and symmetric input-output tables. Examples of common assumptions are:

- a) a constant input structure in terms of values;
- a constant composition of the value of output by industry and by product;
- c) a constant composition of the value of final consumption expenditure of households by product.

These assumptions are rather rigid as they imply that relative prices do not change, that the production processes remain technically the same and that no substitution occurs between categories of final consumption expenditure by households. However, these general assumptions can be modified by allowing first for changes in relative prices, e.g. the Leontief-price model. This can then be extended with econometric or other estimates of the influence of relative prices and other variables on technical coefficients or final consumption expenditure by households.

The calculations need not be confined to the supply and use of goods and services. They could also be applied to the supply and use of labour and the components of value added.

- 9.15. The supply and use tables and the symmetric input-output table can be integrated into macro-economic models to provide the latter with a detailed meso-economic foundation. Specific types of analysis served by supply and use tables and the symmetric input-output table are, for example:
  - a) analysis of production, cost structures and productivity;
  - b) analysis of prices;
  - c) analysis of employment;
  - d) analysis of the structure of capital formation, final consumption, exports, etc.;
  - e) analysis of the relationship between domestic production and the environment (e.g. focusing on the use of specific products like fuel, paper and glass);
  - f) analysis of imports of energy required;
  - g) impact analysis of new technologies;
  - h) sensitivity analysis of the effects of changes in tax rates and regulation.

## **SUPPLY AND USE TABLES**

- 9.16. Tables 9.5 and 9.6 show the supply and use tables in more detail.
- 9.17. The classification used for industries is the NACE rev. 1 and the classification employed for products is the CPA; these classifications are fully aligned to each other: at each level of aggregation, the CPA shows the principal products of the industries according to the NACE rev. 1.
- 9.18. In the supply and use tables, the classification for products is at least as detailed as the classification for industries, e.g. the three digit-level of the CPA and the two digit-level of the NACE rev. 1.
- 9.19. The distinction between market output, output for own final use and other non-market output is only to be used for the total output by industry; the distinction is not required for each product group.
- 9.20. The distinction between market producers and producers for own final use on the one hand and other non-market producers on the other hand should only be used by industry when both types of producers are present within one industry. In general, this distinction will therefore only be used for subclassifying a very limited number of industries, e.g. health care and education (see paragraph 3.66.).
- 9.21. Imports and exports should be subdivided into:
  - a) intra-EU deliveries;
  - b) imports and exports with other countries.

Table 9.5 A supply table at basic prices, including a transformation into purchasers prices

		Industries (NACE)  1 2 3 4 n	Σ (1)	Imports c.i.f.	Total supply at basic prices	Trade and transport margins	Taxes less subsidies on products	Total supply at purchasers' prices
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
1 2 3 4	(1)	Output by product and by industry at basic prices						
m (Adjustment items)								
$\Sigma$ (1)	(2)	Total output by industry				0		
Total of which: Market output For own final use	(3)			0		0		
Other non-market output				0		0		

Labour inputs

			Industries (NACE) 1 2 3 n	Σ (1)	Final uses a) b) c) d) e) f)	Σ (3)	$\Sigma$ (1) + $\Sigma$ (3
			(1)	(2)	(3)	(4)	(5)
Products (CPA)	1 2 3	(1)	Intermediate consumption at purchasers' prices by product and by industry		Final uses at purchasers' prices/f.o.b.:  Final consumption expenditure: a) by households b) by NPISH c) by government  Gross capital formation: d) gross fixed capital formation and valuables e) changes in inventories  f) exports (f.o.b.)		
(Adjustment items)	m						
Σ (1)		(2)	Total intermediate consumption by industry		Total final uses by type		Total use
Compensation of employees Other net taxes on producti Consumption of fixed capita Operating surplus, net	on	(3)	Components of value added by industry		333 37 4/22	1	
Σ (3)		(4)	Value added by industry				
$\Sigma(1) + \Sigma(3)$		(5)	Output at basic prices by industry				
Supplementary information: Gross fixed capital formation Stocks of fixed assets		(6)					



- 9.22. In the supply table, flows of goods and services are valued at basic prices. In the use table, the flows of goods and services are valued at purchasers' prices. In order to attain identities between supply and use, Table 9.5 also shows the transition of supply at basic prices to supply at purchasers' prices. As supply should be equal to use, the table reveals also the transition of uses at purchasers' prices to uses at basic prices. As a consequence, two identities can be derived from this transition:
  - a) supply at purchasers' prices is equal to use at purchasers' prices;
  - b) supply at basic prices is equal to use at basic prices.
- 9.23. Value added is recorded at basic prices. It is the net result of output valued at basic prices less intermediate consumption valued at purchasers' prices.
- 9.24. Value added at factor cost is not a concept in the ESA. Nevertheless, it could be derived from value added at basic prices by subtracting other taxes less subsidies on production.
- 9.25. GDP is valued at market prices. This aggregate can be derived from the supply and use tables in three different ways:
  - a) the aggregate of output at basic prices by industry minus the aggregate of intermediate consumption at purchasers' prices by industry plus net taxes on products (the production approach); the intermediate consumption by industry includes the use of financial intermediation services indirectly measured that are recorded in a nominal industry (see paragraph 9.33.);
  - b) the aggregates of the various components of value added at basic prices by industry minus the use of financial intermediation services indirectly measured (recorded in a nominal industry, see paragraph 9.33.) plus the net taxes on products (the income approach);
  - c) the sum of final uses categories minus imports: exports imports + final consumption expenditure + gross capital formation (all at purchasers' prices) (the expenditure approach).
- 9.26. The use Table 9.6 also contains some supplementary information: gross fixed capital formation, stocks of fixed assets and labour inputs by industry. This information is crucial for productivity analysis and may also serve several other types of analyses, e.g. analysis of employment
- 9.27. In the ESA, the stocks of fixed assets are valued at the market prices prevailing on the date of

- the balance sheet. For fixed assets bought in earlier years, this implies that consumption of fixed capital of the foregoing years is to be deducted from the current market prices of new assets of the same type and quality. This net concept of fixed capital stock could be used in calculating capital intensity. However, for productivity analysis more often a specific gross concept of fixed capital stock is used. According to this gross concept all fixed assets should be valued at the current market prices of new assets of the same type and quality; no deduction should be made for capital consumption in the last and earlier years. This gross concept of fixed capital stock is no standard concept in the ESA, but can easily be calculated with the aid of the Perpetual Inventory Method. Considering the great use of such gross figures, it is recommended to include both gross and net figures on fixed capital stock as supplementary information.
- 9.28. For productivity analysis, hours worked is the preferable labour input variable. In drawing inferences about employed persons, however, also the number of jobs may be relevant. Both variables can be subclassified, e.g. into the part pertaining to employees and to self-employed persons.
- 9.29. For a proper compilation and understanding of the supply and use tables, it is important to recall some of the accounting conventions employed in the ESA:
  - a) the outputs of ancillary activities are not recorded separately; all the inputs consumed by an ancillary activity are treated as inputs into the principal or secondary activity which it supports. Ancillary activities may be, for example, marketing, accounting, storage and cleaning (see paragraphs 3.12. and 3.13.);
  - b) goods or services produced and consumed within the same accounting period and within the same local KAU are not separately identified. They are therefore not recorded as part of the output or intermediate consumption of that local KAU. This may pertain for example to:
    - (1) seeds and plants for sowing and planting;
    - (2) hard coal consumed in the production of briquettes by coal mines;
    - (3) electrical energy consumed by power stations.
  - minor processing, maintenance, servicing or repair on behalf of other local KAUs is to be recorded net, i.e. excluding the value of the goods involved. By contrast, when the



- goods are subject to a substantial physical change, the transaction should be recorded gross, i.e. as the purchase and sale of the goods involved;
- d) durable goods can be rented or be subject to operating leasing. In such instances, they are recorded as fixed capital formation and fixed capital stock in their owner's industry; in the industry of the user intermediate consumption by amount of the rent is recorded;
- e) persons working via temporary agencies are recorded as being employed in the industry of these agencies and not in the industries in which they are actually working. As a consequence, in the latter industries, the payments for these persons are recorded as intermediate consumption and not as compensation of employees. Labour contracted out is treated similarly;
- f) employment and compensation of employees in the ESA are broad concepts:
  - (1) employment for social reasons is also counted as employment; this applies, for example, to work placements for disabled people, employment projects for people who have been unemployed for a long time and employment programmes for young people seeking jobs. As a consequence, the people involved are employees and receive compensation of employees (not social transfers), though their productivity may be (much) lower than that of the other employees;
  - (2) employment includes also some cases in which the persons involved are not expected to work at all, e.g. persons dismissed but receiving for some period payments from their former employer. However, labour input in terms of hours worked is not distorted by this convention, as no hours are actually worked.
- 9.30. In the supply and use tables, two adjustment items should be introduced for reconciling the valuation of imports in the supply and use tables and in the sector accounts (see also Tables 9.5 and 9.6).

In the supply table, imports of goods are valued at cif values. This is an overstatement of the costs of imports when the transport and insurance services incorporated in the cif value are provided by residents (e.g. own-account transport or transport by specialised resident carriers). In order to obtain the right balance between imports and exports, exports of services should thus also be increased by amount

- of this overstatement of imports. In the sector accounts, imports of goods are valued at fobvalues. This is an overstatement of imports like in the case of cif valuation. However, in the case of fob valuation the overstatement is smaller, which implies that the imputed increase in exports is smaller too. The result of employing different valuation principles is thus that net total imports are the same, but that both total imports and total exports are larger for cif valuation. The two valuation principles can be reconciled in the supply and use tables by introducing adjustment items for imports as well as exports. The adjustment items should be equal to the value of the transport and insurance services by residents incorporated in the cif value but not in the fob value, i.e. referring to the transport and insurance from the border of the exporting country to the border of the importing country. These adjustment items, once incorporated in the supply and use tables, need no special treatment in the input-output calculations.
- 9.31. The transfer of existing goods is recorded in the use table as a negative expenditure for the seller and a positive expenditure for the purchaser. For the product group involved, the transfer of an existing good amounts to a reclassification among uses. Only the transaction costs are not a reclassification: they are recorded as a use of business or professional services. For the purposes of description and analysis, it can be useful to show for some product groups the relative size of the transfer of existing goods separately, e.g. the importance of second-hand cars or the importance of recycled paper.
- 9.32. Direct purchases abroad by residents and purchases on the domestic territory by non-residents are commonly estimated as a special exercise in the statistical compilation process. They are introduced as adjustments to initial estimates of imports, exports and, by amount of the consumption part of the purchases abroad, final consumption expenditure. In order to obtain a balance between supply and use by product, all these purchases should be split over the various product groups involved. For the product groups where these types of purchases are important, they could be shown as a subcategory, e.g. expenditure on accommodation.
- 9.33. Throughout the supply and use tables, the NACE rev. 1 industry classification is extended with a nominal industry for the use of financial intermediation services indirectly measured. In the supply table, no transactions are recorded at all for this industry. In the use table, the total use of financial intermediation services indi-



rectly measured is recorded as the intermediate consumption of this nominal industry. As this nominal industry does not have any other transactions, its net operating surplus is negative by the amount of its intermediate consumption; all other components of its value added are zero. As a consequence, its total gross value added is equal to its (negative) net operating surplus.

- 9.34. The transition from supply and use at basic prices to purchasers' prices involves:
  - a) reallocating trade margins;
  - b) reallocating transport margins;
  - c) adding taxes on products (except deductible VAT);
  - d) deducting subsidies on products.

The estimation of this transition is an important part of the balancing process. Separate tables can show the transition in more detail (see Tables 9.7 and 9.8). These tables can also serve important analytical purposes, e.g. analysis of prices and analysis of the consequences of changes in the rates of taxes on products.

- 9.35. In general, when preparing supply and use tables and making the proper balancing between the two sides, there is always a choice of emphasis between two opposite ways of adjusting statistical data:
  - a) supply of each product at basic prices could be adjusted to a purchasers' prices valuation to allow balancing with uses at purchasers' prices;
  - b) each of the uses at purchasers' prices could be adjusted to a basic prices' valuation to match with supply at basic prices.

- 9.36. In practice, both types of balances may be needed to build up a supply and use table. Both alternatives deal with or require similar kinds of adjustments, i.e. for taxes less subsidies on products and trade and transport margins by products. In fact, the first alternative is not possible without the second, since it is usually not possible to know the columns of taxes on products, subsidies on products and trade and transport margins broken down by products in the supply table unless the distribution among uses of the individual products is known from the use table at purchasers' prices (Table 9.6).
- 9.37. Thus, the following tables are involved in the balancing process:
  - a) the supply and use Tables 9.5 and 9.6 showing the final results of balancing totals of supply and use by products at purchasers' prices and at basic prices;
  - b) the tables on trade and transport margins and on taxes less subsidies on products (Tables 9.7 and 9.8).
- 9.38. The transition of supply and use from basic prices to purchasers' prices (see paragraph 9.34.) amounts to reallocating trade margins: valuation at basic prices implies that the trade margins are recorded as part of the product trade, while valuation at purchasers' prices implies that the trade margins are allocated to the products to which they pertain. An analogous situation holds for transport margins.
- 9.39. The total of trade margins by product is equal to the total of trade margins by the trade industries plus the secondary trade margins by other industries. An analogous equation holds for the transport margins.

		Industries (NACE) 1 2 3 n	Σ (1)	Final uses a) b) c) d) e) f)	Σ (3)	$\Sigma$ (1) + $\Sigma$ (3)
		(1)	(2)	(3)	(4)	(5)
Products (CPA)	1 2 3	Trade and transports margins on intermediate consumption by product and by industry		Trade and transport margins on final uses:  Final consumption expenditure: a) by households b) by NPISH c) by government  Gross capital formation: d) gross fixed capital formation and valuables e) changes in inventories  f) exports		
Σ (1)	(2)	Trade and transports margins on intermediate consumption by industry		Trade and transport margins on final uses by type		Total trade & trade margin

Table 9.8 A simple taxes less subsidies on products table

			Industries (NACE)		Σ (1)	Final uses	$\Sigma$ (3) $\Sigma$ (1)	$\Sigma(1) + \Sigma(3)$
			1 2 3	n		a) b) c) d) e) f)		
			(1)		(2)	(3)	(4)	(5)
	Products (CPA)	1 2 3 3 · · · · · · · · · · · · · · · · ·	Taxes less subsidies on produ intermediate consumption by industry	cts on product and by		Taxes less subsidies on products for final uses:  Final consumption expenditure: a) by households b) by NPISH c) by government  Gross capital formation: d) gross fixed capital formation and valuables e) changes in inventories f) exports		
Σ (1)		(2)	Taxes less subsidies on produ- intermediate consumption by			Taxes less subsidies on products for final uses by type		Total taxes less subsidies on products



- 9.40. The transport margins include transportation costs paid separately by the purchaser and included in the use of products at purchasers' prices but not in the basic prices of a manufacturers' output or in the trade margins of wholesale or retail traders. Such transport margins include in particular:
  - a) transport of goods from the place where it is manufactured to the place where the purchaser takes delivery of it in case the manufacturer pays a third party for the transport, if this amount is invoiced separately to the purchaser;
  - b) transport of goods arranged by the manufacturer or by the wholesale or retail trader in such a way that the purchaser has to pay separately for the transport costs even when the transport is done by the manufacturer or the wholesale or retail trader himself.

All other costs of transporting goods are not recorded as transport margins, e.g.:

- a) if the manufacturer transports the goods himself, these transportation costs will be included in the basic prices of the manufacturer's output; this transport represents an ancillary activity and the individual costs of transport will be not identifiable as transportation costs;
- b) if the manufacturer arranges for the goods to be transported without a separate invoice for the transport services, these transportation costs will be included in the basic prices of the manufacturer's output; these transportation costs will be identifiable as such and be recorded as part of the manufacturer's intermediate consumption;
- c) if wholesale and retail traders arrange for goods to be moved from where they take delivery of them to where another purchaser takes delivery, these costs will be included in the trade margin if no separate charge is made for transportation to the purchaser. Again, as with manufacturers, these costs may represent ancillary activity of wholesale and retail traders or the purchase of an intermediate service, thus entering trade margins but not transport margins;
- d) if a household buys goods for final consumption purposes and arranges for transport by a third party, these transport costs are recorded as final consumption expenditure on transport services and not included in some trade or transport margin.
- 9.41. Table 9.7 shows a somewhat simplified picture of a trade and transport margins matrix, because:

- a) no explicit distinction is made between trade and transport margins. Both types of margins could be shown for each product group. Another solution is to have separate tables: one for trade margins and one for transport margins;
- b) for trade margins, a distinction between wholesale trade and retail trade should be made in order to take account of the differences in their prices. In drawing up the tables, it should be realised that wholesale traders may also sell directly to households (e.g. furniture) and that retail traders may also sell to industries (e.g. to cafes and restaurants);
- c) in calculating and analysing trade margins on products for final consumption expenditure by households, for each product group the most important distribution channels could also be distinguished in order to take account of the differences in their prices; the distinction between wholesale trade and retail trade is in fact too rough. For example, goods and services can be bought by households in the supermarket, the grocery, flower shop, department store, abroad or obtained as income in kind. Furthermore, for some products, secondary sales may be very important, e.g. in the case of cigarettes this can pertain to the sales by cafes, restaurants and petrol stations. Of course, such more refined distinctions can only be introduced if the available data sources provide sufficient information for at least rough estimates of the importance of each of the distribution channels;
- d) In calculating transport margins, a distinction by type of transport (e.g. by rail, air, sea/inland waterway or road) could be very useful.
- 9.42. Taxes on production and imports consist of:
  - a) taxes on products (D.21):
    - (1) value-added-type taxes (VAT) (D.211);
    - (2) taxes and duties on imports; except VAT (D.212);
    - (3) taxes on products, except VAT and import taxes (D.214).
  - b) other taxes on production (D.29).

Similar categories are distinguished for subsidies on production and imports. Subsidies are treated as if they were negative taxes on production and imports.

The definitions of all these categories are given in paragraphs 4.14. – 4.39.



- 9.43. Supply at basic prices includes net other taxes on production, i.e. less other subsidies on production. In order to make the transition from basic prices to purchasers' prices (or vice versa; see paragraph 9.34.), the various taxes on products should be added and the subsidies on products should be deducted (or vice versa).
- 9.44. VAT may be deductible, non-deductible or just not applicable:
  - a) deductible VAT usually applies to most of intermediate consumption, most of gross fixed capital formation and part of changes in inventories;
  - b) non-deductible VAT often applies to final consumption expenditure, part of gross fixed capital formation, part of changes in inventories and part of intermediate consumption;
  - c) VAT is in general not applicable for:
    - exports (at least those to countries outside the EU);
    - (2) any goods or services subject to a zero rate of VAT regardless of their use;
    - (3) any producers exempted from VAT registration, e.g. small businesses and religious organisations.
- 9.45. VAT is recorded net in the ESA: all supplies are valued at basic prices, i.e. excluding invoiced VAT; intermediate and final uses are recorded at purchasers' prices, i.e. excluding deductible VAT.
- 9.46. Table 9.8 on taxes less subsidies on products is simplified, because:
  - a) the different types of taxes on products are not distinguished and subsidies are not shown separately;
  - different tax rates and subsidies can apply to different distribution channels; the latter should therefore also be distinguished when relevant and sufficient information exists.
- 9.47. Taxes and subsidies on products are the amounts due for payment only when evidenced by tax assessments, declarations, etc. or the amounts actually paid (see paragraph 4.27.). Taxes (and subsidies) on products are usually estimated by product by applying the official tax (subsidy) rates to the various flows. Afterwards an analysis should be made of the differences with the tax assessments or the amounts actually paid.
  - a) Some of these differences indicate that the initial estimate of taxes on products does not comply to the ESA definitions:

- (1) in case of exemption the initial estimate of taxes on products should therefore be lowered;
- (2) in case of evasion of the payment of taxes on products (e.g. the payment of taxes is compulsory but there is no tax assessment), the estimate of taxes on products should therefore be lowered;
- (3) in case of fines the estimate of taxes on products should be increased.

Changes in the estimates of taxes on products have concomitant effects on variables estimated by adding up or deducting the estimates of taxes on products. For example, output at basic prices of a specific product group may be estimated by deducting *inter alia* taxes on products from the estimated use at purchasers' prices. However, an estimate of output at basic prices may also be combined with *inter alia* estimates of taxes on products to arrive at an estimate of uses at purchasers' prices.

- b) several other types of differences should not be accounted for in the supply and use table:
  - differences in timing, e.g. payments may relate to tax assessments of several years;
  - (2) enterprises being unable to pay (bankruptcies): this should be recorded as an other change in the volume of financial assets and liabilities, i.e. not in the supply and use table.
- c) in some instances, the differences may also indicate that the initial estimate for taxes and subsidies on products is subject to serious error, e.g. because the output of some product is underestimated. Then also modifications of the estimates of the flows of goods and services can be justified.

In the transition from uses by product at purchasers' prices to basic prices, the modification of the initial estimate of taxes and subsidies on products may be shown as a separate item. However, for all input-output calculations it will be necessary to allocate this modification by product, even if this can only be based on a simple mathematical device, e.g. proportional allocation.

9.48. The use Table 9.6 does not show to what extent the goods and services used have been produced domestically or imported. This information is necessary for all analyses in which the link between supply and use of goods and services within the national economy plays a role. A case in point is the analysis of the impact of changes in exports or final consumption



- expenditure on imports, domestic production and related variables such as employment. In fact, it applies to most analyses indicated in paragraphs 9.14. and 9.15. The input-output framework therefore contains also a use table for imported products and one for domestically produced goods and services (see Tables 9.9 and 9.10).
- 9.49. The use table for imported products should be compiled by exploiting all information available on the uses of imports, e.g. for some products the major importing enterprises may be known and for some producers information on the amount of imports may exist. However, in general, direct statistical information on the use of imports is scarce. This information has therefore usually to be supplemented by assumptions by product group.
- 9.50. The use table for goods and services produced domestically can then be obtained by deducting the use table for imported products from the general use table.
- 9.51. In order to serve more specific purposes, the supply and use tables presented above can be modified by introducing alternative and supplementary classifications. Important cases in point are:
  - a) more detailed product and industry classifications based on national classifications or to take account of specific purposes, e.g. for

- the analysis of the role of research and development in the national economy;
- b) more detailed geographical breakdown of imports and exports, e.g. intra-EU trade subclassified by country and extra-EU trade subclassified by economic regions and some specific countries such as the United States and Japan;
- c) classification of imports into:
  - imports of products that are also domestically produced ('competitive imports');
  - imports of products that are not domestically produced ('complementary imports').

Both types of imports can be expected to have a different relationship with and importance for the national economy. Competitive imports can be the subject of analysis and economic policy as they may be a substitute for domestic output; they could therefore be incorporated as a separate category of (potential) final use in the use tables. For complementary imports, analyses will mainly focus on the impact of changes in their prices or volume (e.g. in the case of an oil crisis) on the national economy;

Table 9.9 A use table for imports

			Industries (NACE)	Σ (1)	Final uses	Σ (3)	$\Sigma$ (1) + $\Sigma$ (3)
			1 2 3 n		a) b) c) d) e) f)		
			(1)	(2)	(3)	(4)	(5)
		1 2 3			For imported products: Final uses at purchasers' prices/c.i.f. values:		
	Products		For importal products, letermodiste		Final consumption expenditure:  a) by households b) by NPISH c) by government		
	(CPA)		For imported products: Intermediate consumption at c.i.f. values by product and by industry		Gross capital formation: d) gross fixed capital formation and valuables e) changes in inventories		
		m			f) exports		
Σ (1)		(2	Total intermediate consumption of imported products by industry		Total final uses of imported products by type		Total imports

Labour inputs

 $\Sigma$  (3)

(4)

(3)

 $\Sigma(1) + \Sigma(3)$ 

(5)

Total domestic output

Total net taxes on products

Total imports

Total use



- d) classification of compensation of employees by criteria such as level of education, part-time/full-time, age and sex. This classification could then also be applied to the supplementary information on employment. In this way, the supply and use tables can also be used for all kinds of analyses of the labour market;
- e) breakdown of compensation of employees into:
  - (1) wages and salaries, of which:
    - social contributions by employees<sup>1</sup>;
  - (2) employers' social contributions.

This breakdown permits analysis of the role of social contributions for the price of labour inputs and the shifting of this burden towards gross operating surplus;

- f) classification of final consumption by purpose (for households: COICOP and for government: COFOG). The functional classification of these expenditure enables the impact of each function on the rest of the economy to be assessed. For example, the importance of public and private expenditure on health care, transport and education can then be assessed. Another case in point is the analysis of the impact of government expenditure on defence for some domestic industries, in particular the producers of aircraft, trucks and weapons;
- g) reclassification of fixed capital formation and fixed capital stock for fixed assets that are rented out by the owner, e.g. in the case of operating leasing: the fixed assets can be

- recorded as if owned by the user (unlike the standard treatment in the ESA). The purpose of this reclassification is to make the cost structures of industries that rent fixed assets and those that own similar fixed assets comparable. For a consistent accounting treatment, this reclassification requires also the modification of the intermediate consumption of the lessee and the output of the lessor by amount of the rent of the fixed asset;
- h) reclassification of employment and compensation of employees for labour contracted out and persons working via temporary employment agencies: the purpose of this reclassification is to make the cost structure of industries more comparable by recording persons as employees in the industries 'where they actually work'. This reclassification also amounts to a modification of the concepts of intermediate consumption and output of the industries involved.

# TABLES LINKING THE SUPPLY AND USE TABLES TO THE SECTOR ACCOUNTS

9.52. The information in the supply and use tables should be linked to the sector accounts, to ensure that the supply and use table is consistent with the sector accounts. This is achieved by introducing a table with variables cross-classified by industry and by sector (see Table 9.11).

Global estimation of this concept may be necessary when the social contribution of an employee depends not only on the wage and salary but also on, e.g. the other revenues of the employee, the age and the marital status.



Table 9.11 Table linking the supply and use tables to the sector accounts

		Industries (NACE) 1 2 3n	Σ (1)
I. Non-financial corporations Total output Market output Output for own final use Other non-market output Intermediate consumption Gross value added Compensation of employees Other net taxes on production Consumption of fixed capital Operating surplus, net Gross fixed capital formation  II. Financial corporations Total output Gross fixed capital formation  III. General government IV. Households	(1)	1 2 3n (1)	$\frac{\sum (1)}{(2)}$
V. NPISH  Total of sectors Output Gross fixed capital formation	(2)		

#### SYMMETRIC INPUT-OUTPUT TABLES

- 9.53. In the ESA, the product-by-product input-output table is the most important symmetric input-output table and this table is described here.
- 9.54. The product-by-product input-output table (see Tables 9.4 and 9.12) can be compiled by converting the supply and use tables, both at basic prices. This involves a change in format, i.e. from two asymmetric tables to one symmetric table (see paragraph 9.09.). The conversion can be divided into three steps:
  - a) allocation of secondary products in the supply table to the industries of which they are the principal products;
  - b) rearrangement of the columns of the use table from inputs into industries to inputs into homogeneous branches (without aggregation of the rows);
  - aggregation of the detailed products (rows) of the new use table to the homogeneous branches shown in the columns, if appropriate.

- 9.55. Step a) involves transfers of outputs in the form of secondary products in the supply table. Since secondary products appear as 'off-diagonal' entries in the supply table, this kind of transfer is a comparatively simple matter. These secondary products are treated as additions into the industries for which they are principal and removed from the industries in which they were produced.
- 9.56. Step b) is more complicated, as the basic data on inputs relate to industries and not to each individual product produced by each industry. The kind of conversion to be made here entails the transfer of inputs associated with secondary outputs from the industry in which that secondary output has been produced to the industry to which they principally (characteristically) belong. In making this transfer, two different approaches might be taken:
  - (1) by means of supplementary statistical and technical information;
  - (2) by means of assumptions.
- 9.57. Supplementary statistical and technical information should be utilised as much as possible. For example, it might be possible to obtain specific information on the inputs required to produce certain kinds of output. However,



- information of this kind is usually incomplete. Ultimately it will usually be necessary to resort to simple assumptions to make the transfers.
- 9.58. The assumptions used to transfer outputs and associated inputs hinge on two types of technology assumptions:
- a) industry technology, assuming that all products produced by local KAUs in an industry are produced with the same input structure;
- b) product technology, assuming that all products in a product group have the same input structure, whichever industry produces them.

Table 9.12 A symmetric input-output table at basic prices (product by product)

Labour inputs

		Products (CPA)	Σ (1)	Final uses	Σ (3)	$\Sigma$ (1) + $\Sigma$ (3)
		1 2 3 n		a) b) c) d) e) f)		
		(1)	(2)	(3)	(4)	(5)
Products (CPA)	(1)	Intermediate consumption at basic prices by product and by product		Final uses at basic prices: Final consumption expenditure: a) by households b) by NPISH c) by government  Gross capital formation: d) gross fixed capital formation and valuables e) changes in inventories  f) exports		
Σ (1)	(2)	Total intermediate consumption at basic prices by product		Final use at basic prices by type		Total use at basic prices
Taxes on products Subsidies on products (-)	(3)	Net taxes on products by product		Net taxes on products by type of final use		Total net taxes on products
$\Sigma$ (1) + (3)	(4)	Total intermediate consumption at purchasers prices by product		Total final uses by type at purchasers prices		Total use at purchasers prices
Compensation of employees Other net taxes on production Consumption of fixed capital Operating surplus, net	(5)	Components of value added by product				
Σ (5)	(6)	Value added by product				
$\Sigma(1) + (3) + \Sigma(5)$	(7)	Output at basic prices by product				
Imports	(8)	Imports c.i.f. by product				
(7) +(8)	(9)	Supply at basic prices by product				
Fixed capital formation Fixed capital stock	(10)					

Table 9.13 A symmetric input-output table for domestic output (product by product)

		Products (CPA)	Σ (1)	Final uses	Σ (3)	$\Sigma$ (1) + $\Sigma$ (3)			
		1 2 3 n		a) b) c) d) e) f)					
		(1)	(2)	(3)	(4)	(5)			
1				For domestic output: Final uses at basic prices:					
1				Final consumption expenditure:					
	'			a) by households					
				b) by NPISH					
				c) by government					
Products	(1)	For domestic output: Intermediate		Gross capital formation:					
(CPA)	(1)	consumption at basic prices by product and by product		d) gross fixed capital formation and valuables					
				e) changes in inventories					
r				f) exports					
Σ (1)	(2)	Total intermediate consumption of domestic output at basic prices by product		Final use of domestic output at basic prices Total domest					
Use of imported products	(3)	Total intermediate consumption of imported products by product		Final use of imported products at basic prices		Total imports			
Net taxes on products	(4)	Net taxes on products for intermediate consumption by product		Net taxes on products for final use		Total net taxes on products			
$\Sigma$ (1) + (3) + (4)	(5)	Total intermediate consumption at purchasers prices by product		Total final uses by type		Total use			
Compensation of employees									
Other net taxes on production	(6)	Components of value added by product							
Consumption of fixed capital									
Operating surplus, net									
Σ (6)	(7)	Value added by product							
$\Sigma$ (1) + (3) + (4) + $\Sigma$ (6)	(8)	Output at basic prices by product							
Fixed capital formation									
Fixed capital stock	(9)								
Labour inputs									



The choice of the best assumption to apply in each case is not an easy one. It must, in fact, depend on the structure of national industries, e.g. the degree of specialisation, and on the homogeneity of the national technologies used to produce products within the same product group. For example, boots may be made from leather and from plastic. Assuming the same product technology for all boots (or, when a higher level of aggregation is used, e.g. footwear) can thus be problematic; assuming industry technology can then be a better alternative.

Simple application of the product technology assumption has often shown results that are unacceptable, insofar as the input-output coefficients sometimes generated are improbable or even impossible, for example, negative coefficients. Improbable coefficients may be due to errors in measurement and to heterogeneity (product-mix) in the industry of which the transferred product is the principal product. This might be overcome by making adjustments based on supplementary information or exploiting informed judgement to the fullest extent possible. Of course, another solution is to apply the alternative assumption of industry technology. In practice, employing mixed technology assumptions combined with supplementary information is the best strategy for compiling symmetric input-output tables.

9.59. The importance of the role played by the assumptions depends on the extent of secondary production, which in turn depends not only on how production is organised in the economy but also on the product breakdown. The more detailed the product breakdown, the more secondary output can be expected.

- 9.60. Step c) involves the aggregation of the products in the new use table to the industries that generate them according to step a) and this results in a symmetric input-output table with products cross-classified against by-products. While these amendments start from data based on local KAUs, the resulting entries are made to conform to those of 'homogeneous units of production'.
- 9.61. The classifications in the symmetric input-output table coincide with those in the supply and use tables, as the former is a transformation of the latter (except of course the classification by industry/homogeneous branch).
- 9.62. The symmetric input-output Table 9.12 should be accompanied by at least two tables:
  - a) a matrix showing the use of imports; the format of this table is the same as that of the import table supporting the supply and use tables (see Table 9.10), except that the product-by-product classification is used;
  - b) a symmetric input-output table for domestic output (Table 9.13).

The latter table should be used in calculating the cumulated coefficients, i.e. the Leontief-inverse. In terms of Table 9.13, the Leontief-inverse is the inverse of the difference between the identity matrix I and the matrix of technical coefficients obtained from the matrix (1), (1). The Leontief-inverse could also have been calculated for domestic output and competitive imports (see paragraph 9.51.). It should then be assumed that the competitive imports have been produced in the same way as the competing domestic produce.

# CHAPTER 10 PRICE AND VOLUME MEASURES

10.01. In a system of economic accounts, all the flows and stocks are expressed in monetary units. The monetary unit is the only common denominator which can be used to value the extremely diverse transactions recorded in the accounts and to derive meaningful balancing items.

The problem when using the monetary unit as a measuring unit is that this unit is neither a stable nor an international standard. A major concern in economic analysis is to measure economic growth in volume terms between different periods. It is then necessary to distinguish, in the value changes for certain economic aggregates, the changes arising solely from price changes from the remainder which is called the change in 'volume'.

Economic analysis is also concerned with comparisons in space, i.e. between different national economies. These focus on international comparisons in volume terms of the level of production and income, but the level of prices is also of interest. It is therefore necessary to factor the differences in value of economic aggregates between pairs or groups of countries into components, which reflect the differences in volume and the differences in price.

10.02. When time comparisons of flows and stocks are concerned, equal importance should be attached to the accurate measurement of changes in prices and in volumes. In the short term, observation of price changes is of no less interest than the measurement of the volume of supply and demand. On a longer term basis, the study of economic growth has to take account of movements in the relative prices of the different types of goods and services.

The primary objective is not simply to provide comprehensive measures of changes in prices and volumes for the main aggregates of the system but to assemble a set of interdependent measures which make it possible to carry out systematic and detailed analyses of inflation and economic growth and fluctuations.

10.03. The general rule for comparisons in space is that accurate measures must be made for both the volume and the price components of the

economic aggregates. As the spread between the Laspeyres and Paasche formulae often is significant in spatial comparisons, the Fisher index formula is the only acceptable one for this purpose.

10.04. The economic accounts have the advantage of providing a suitable framework for constructing a system of volume and price indices as well as ensuring the consistency of the statistical data.

The advantages of an accounting approach can be summarised as follows:

- a) on a conceptual level, the use of an accounting framework covering the entire economic system requires the prices and physical units for the different products and flows in the system to be specified consistently. In a framework of this type, it is imperative that, for example, the price and volume concepts for a given group of products should be defined identically in both resources and uses;
- b) on a statistical level, the use of the economic accounts framework imposes accounting constraints which must be respected at both current and constant prices and will normally require some adjustments to be made to ensure consistency of the price and volume data;
- c) furthermore, the creation of an integrated system of price and volume indices in the context of a system of economic accounts provides the national accountant with extra checks. Assuming the existence of a balanced system of supply and use tables at current prices, the construction of such balanced tables at constant prices means that a system of implicit price indices can be automatically derived. Examination of the plausibility of these derived indices can lead to revision and correction of the data at constant prices and even, in some cases, of the values at current prices;
- d) finally, the accounting approach permits the measurement of price and volume changes for certain balancing items in the accounts, the latter being derived by definition from the other elements in the accounts.



10.05. Despite the advantages of an integrated system based on the balance, both overall and by industry, of transactions in goods and services, it has to be acknowledged that the price and volume indices thus obtained do not meet all needs or answer all possible questions on the subject of change in prices or volume. Accounting constraints and the choice of price and volume index formulae, although essential for the construction of a coherent system, can sometimes be a hindrance. There is also a need for information for shorter periods such as months or quarters. In these cases, other forms of price and volume indices may prove useful.

# SCOPE OF PRICE AND VOLUME INDICES IN THE ACCOUNTS SYSTEM

10.06. Amongst the flows, which appear in economic accounts at current prices, there are some (mainly concerning products) where the distinction between changes in price and volume is similar to that made at micro-economic level. For many other flows in the system, the distinction is far less obvious.

In the former case, the flows cover a group of elementary transactions in goods and services, the value of each being equivalent to the product of a number of physical units and their respective unit price. In this case it is sufficient to know the breakdown of the flow in question into elementary transactions in order to determine its average variation in price and volume.

In the latter case, which concerns a number of transactions relating to distribution and financial intermediation as well as to balancing items such as value added, it is difficult or even impossible to separate directly current values into price and volume components and special solutions have to be adopted.

There is also a need to measure the real purchasing power of a number of aggregates, such as compensation of employees, disposable income of households or national income. This can be done, for example, by deflating them by means of an index of the prices of the goods and services which can be bought with them.

10.07. It must be emphasised that the objective and the procedure followed when measuring the real purchasing power are fundamentally different from those followed when deflating goods and services and balancing items. For these an integrated system of price and volume indices can be established, which is useful, amongst other things, for measuring economic growth. The valuation in real terms of flows of the last type uses price indices of flows other than those considered, which may differ according to the objectives of the analysis: it can only be a convention and cannot be done in a unique way within an integrated system of price and volume indices.

# The integrated system of price and volume indices

10.08. The systematic division of changes in current values into the components 'changes in price' and 'changes in volume' is restricted to flows representing transactions, recorded in the goods and services accounts (0) and in the production accounts (I); it is carried out both for the data relating to individual industries and for those relating to the total economy. Flows representing balancing items, e.g. value added, cannot be directly factored into price and volume components; this can only be done indirectly using the relevant flows of transactions.

The use of the accounting framework imposes a double constraint on the calculation of the data:

- a) the balance of the goods and services account must for any sequence of two years be obtained at both constant and current prices;
- each flow at the level of the total economy must be equal to the sum of the corresponding flows for the various industries.

A third constraint, not inherent in the use of an accounting framework but resulting from a deliberate choice, is that every change in the value of transactions must be attributed either to a change in price or to a change in volume, or to a combination of the two.

If these three requirements are fulfilled, valuation of the goods and services accounts and production accounts at constant prices means that an integrated set of price and volume indices can be obtained.

10.09. The items to be considered when constructing such an integrated set are as follows:



Output	P.1
Market output	P.11
Output for own final use	P.12
Other non-market output	P.13
Intermediate consumption	P.2
Final consumption expenditure Individual final consumption expenditure	P.3 P.31
Collective final consumption expenditure	
Actual final consumption Actual final individual consumption Actual final collective consumption	P.4 P.41 P.42
Gross capital formation Gross fixed capital formation Changes in inventories Acquisition less disposals of valuables	R5 R51 R52 R53
Exports of goods and services Exports of goods Exports of services	P.6 P.61 P.62
Imports of goods and services Imports of goods Imports of services	P.7 P.71 P.72
Taxes and subsidies on products Taxes on products, excluding VAT Subsidies on products VAT on products	D.212 and D.214 D.31 D.211
Consumption of fixed capital	K.1
Balancing items	
Value added	B.1
Gross domestic product	B.1*g

## Price and volume indices for other aggregates

10.10. In addition to the price and volume measures considered above, the following aggregates can also be decomposed into their own price and volume components. The objectives for these measures vary.

Inventories at the beginning and at the end respectively of each period may have to be calculated at constant prices in order to estimate the volume change in inventories during the period.

The stock of produced fixed assets has to be calculated at constant prices to estimate capital output ratios, as well as to obtain a basis for

estimating consumption of fixed capital at constant prices.

Compensation of employees has to be calculated at constant prices for purposes of measuring productivity and in some instances also when outputs have been estimated by using constant price data on inputs.

10.11. Compensation of employees is an element of income. For the purpose of measuring purchasing power it can be valued in real terms by deflating with an index reflecting the prices of products purchased by employees. Other income elements too, such as disposable income of households and national income, can be measured in real terms in the same general way.

Inventories	AN. 12
Stock of produced fixed assets	AN. 11
Compensation of employees	D.1



# GENERAL PRINCIPLES OF MEASURING PRICE AND VOLUME INDICES

# Definition of prices and volumes of market products

10.12. The creation of an integrated system of price and volume indices is based on the assumption that, at the level of a single homogeneous good or service, value (v) is equal to the price per unit of quantity (p), multiplied by the number of quantity units (q), that is

$$v \equiv p X q$$

#### 10.13. Definition:

Price is defined as the value of one unit of a product, for which the quantities are perfectly homogeneous not only in a physical sense but also in respect of a number of other characteristics described in paragraph 10.16. To be additive in an economic sense, quantities must be identical and have the same unit price. For each aggregate of transactions in goods and services shown in the accounts, price and quantity measures have to be constructed so that

value index = price index X volume index

This means that each and every change in the value of a given flow must be attributed either to a price change or to a change in volume or to a combination of the two.

10.14. For transactions in goods it is in many cases easy to define the physical unit involved in the transaction and hence the price per unit. In a number of cases, e.g. for unique capital goods, it is more difficult and special solutions have to be adopted.

For transactions in services it is frequently more difficult to specify the characteristics which determine the physical units and differences of opinion on the criteria to be used may arise. This may concern important industries such as financial intermediation services, wholesale and retail trade, services to enterprises, education, research and development, health or recreation. In view of the growing importance of the service industries, it is essential to find common solutions to the problem of the choice of physical units, even if they are only conventional ones.

## Differences in quality and differences in price

10.15. The physical and other characteristics to be taken into consideration when identifying products constitute differences in quality and play an important role, while at the same time raising difficult statistical problems.

The fact is that for many goods and services intended for a specific purpose there exist several varieties of differing qualities, each with its own price.

- 10.16. Differences in quality are reflected by the following factors:
  - a) physical characteristics;
  - b) deliveries in different locations;
  - deliveries at different times of the day or at different periods of the year;
  - d) differences in conditions of sale or the circumstances or environment in which goods or services are supplied.

With given physical characteristics, the differences in the other factors imply that the physical units are not identical in an economic sense, and that the value differs amongst the units. These differences in unit values are considered to be differences in volume and not as differences in price.

In reality, the payment made when a good is purchased covers not only the price of a good but also the price of the services associated with the supply of goods. This means that in principle identical goods sold at different prices and in different circumstances should be considered to be different products. This conclusion is explicitly acknowledged in the supply and use tables, where the value of trade and transport margins (which represent the main services associated with the provision of goods) is recorded separately.

10.17. Within a given market and in a single period, the coexistence of several unit values can, except in the cases described in paragraph 10.19. be considered as evidence of the existence of quality differences. Accordingly, the various models of cars and even different versions of the same model must be treated as different products similarly, a distinction must be made between first-class and second-class railway journeys.

For the purposes of calculating price and volume measures, it is necessary to use as a detailed product classification as possible so that each product identified has maximum homogeneity, regardless of the level of detail used in the presentation of results.



10.18. The dimension of quality has to be taken into account also when changes over time are to be recorded. The change in quality due, for example, to the modification of the physical characteristics of a product must be considered to be a change in volume and not in price. Also the effects of aggregation have to be considered. Variations in the composition of a flow which imply, for example, a shift in favour of higher average quality have to be recorded as a volume increase and not as a price increase. It follows that for outputs, the effect of shifts between markets with differing prices, e.g. domestic versus external, or industrial uses versus markets for consumer products, will be treated as changes in volume and not as changes in price. It also follows that a price change for a given flow can occur only as result of changes in prices at the level of individual transactions.

#### 10.19. Definition:

The existence of observed unit value differences is not to be considered as an indicator of differences in quality when the following circumstances apply, namely lack of information, price discrimination reflecting limitations in freedom of choice and the existence of parallel markets. In these cases, the unit value differences are considered as differences in price.

- 10.20. Lack of information means that purchasers may not always be properly informed about existing price differences and may therefore inadvertently buy at higher prices. This, or the opposite, may occur also in situations where individual buyers and sellers negotiate or bargain over the price. On the other hand, the difference between the average price of a good purchased in a market or a bazaar, where such bargaining often occurs, and the price of the same good sold in a different type of retail outlet, such as a department store, should normally be treated as reflecting differences in quality due to different sales conditions.
- 10.21. Price discrimination implies that sellers may be in a position to charge different prices to different categories of purchasers for identical goods and services sold under exactly the same circumstances. In these cases, there is no or limited freedom of choice on the part of a purchaser belonging to a special category. The principle adopted is that variations in price are to be regarded as price discrimination when different prices are charged for identical units sold under exactly the same circumstances in a clearly separable market. Price variations due to such discrimination do not constitute differences in volume.

The possibility of the retrading of goods in a given market implies that price discrimination for these types of products in most cases can be assumed to be insignificant. The price differences that may exist for goods can normally be interpreted as due to lack of information or to the existence of parallel markets.

In service industries, e.g. in transportation, producers may charge lower prices to groups of individuals with typically lower incomes, such as pensioners or students. If these are free to travel at whatever time they choose, this must be treated as a price discrimination. However, if they are charged lower fares on condition that they travel only at certain times, typically off-peak times, they are being offered lower-quality transportation.

- 10.22. Parallel markets may exist for several reasons. Buyers may be unable to buy as much as they would like at a lower price because there is insufficient supply available at that price, and a secondary, parallel market, where higher prices are quoted, may exist. There is also the possibility that a parallel market exists, where sellers can charge lower prices because they can avoid certain taxes. In these cases too, a price variation constitutes a difference in price and not in volume.
- 10.23. A change in the structure of a flow affecting its total value may occur when in the circumstances of lack of information, price discrimination and the existence of parallel markets identical products are sold at different prices.

Suppose that a certain quantity of a particular good or service is sold at a lower price to a particular category of purchasers without any difference whatever in the nature of the good or service offered, location, timing or conditions of sale, or other factors. A subsequent decrease in the proportion sold at the lower price raises the average price paid by purchasers of the good or service. This must be recorded as a price and not a volume increase.

#### Principles for non-market services

of price and volume indices covering all supply and uses of goods and services encounters a particular difficulty when measuring the output of non-market services. These services differ from market services in that they are not sold at a market price and their value at current prices is calculated by convention as the sum of the costs incurred. These costs are intermediate consumption, compensation of employees, other taxes less subsidies on production and consumption of fixed capital.



- 10.25. In the absence of a unit market price, the change in the 'unit cost' of a non-market service can be considered as an approximation of the change in the price. If non-market services are consumed on an individual basis, it is in principle possible to estimate quantities which are homogeneous and which reflect the utilisation of these services and apply the unit costs of a base year to obtain data in constant prices. By such type of outputmeasurement it will be possible to analyse changes in productivity for individual non-market services. For collective services it is generally not possible to establish unit costs and quantities reflecting their utilisation. If attempts are made to account for changes in productivity for collective services by indirect methods, users should be made aware of this.
- 10.26. In the context of the economic accounts, it is of prime importance to adopt the principle that the production and consumption of non-market services, like the production and consumption of goods and market services, must be defined in terms of the actual flows of these goods and services and not in terms of final results obtained from their use. As these results depend on several other factors as well, it is not possible to measure, for example, the volume of teaching services by the rise in the level of education, or the volume of health services by the improvement in the health of the population.

## Principles for value added and GDP

10.27. Value added, the balancing item in the production account, is the only balancing item to form part of the integrated system of price and volume indices. The very special characteristics of this item must, however, be emphasised, as must the significance of its related volume and price indices.

Unlike the various flows of goods and services, value added does not represent any single category of transactions. It cannot, therefore, be directly broken down into a price component and a volume component.

#### 10.28. Definition:

Value added at constant prices is defined as the difference between output at constant prices and intermediate consumption at constant prices.

$$VA = \sum P(0) Q(1) - \sum p(0) q(1)$$

where P and Q are prices and quantities for output and p and q are prices and quantities for intermediate consumption. The theoretically correct method to calculate value added at constant prices is by double deflation, i.e. deflating separately the two flows of the production account (output and intermediate consumption) and calculating the balance of these two revalued flows.

10.29. In some cases, where the statistical data remain incomplete or not sufficiently reliable, it may be necessary to use a single indicator. If there are good data on value added at current prices, one alternative to double deflation is to deflate current value added directly by a price index for output. This implies the assumption that prices for intermediate consumption change at the same rate as for output. Another possible procedure is to extrapolate value added in the base year by a volume index for output. This volume index can be calculated either directly from quantity data or by deflating the current value of output by an appropriate price index. This method in fact assumes that the volume changes are the same for outputs and for intermediate consumption.

For certain market and non-market service industries, such as finance, business services, education or defence, it may not be possible to obtain satisfactory estimates of price or volume changes for output. In these cases the movements of value added at constant prices can be estimated by means of changes in compensation of employees at constant wage rates and consumption of fixed capital at constant prices. Compilers of data may be forced to adopt such expedients, even when there is no good reason to assume that labour productivity remains unchanged in the short or long term.

10.30. By their very nature, therefore, the indices of volume and price for value added are different from the corresponding indices for the flows of goods and services.

The same applies to price and volume indices of aggregate balancing items such as gross domestic product. The latter is equivalent to the sum of all the values added minus FISIM, i.e. to an addition of balancing items, plus taxes less subsidies on products and from another point of view can be seen to represent the balancing item between total final uses and imports.

# PROBLEMS IN THE APPLICATION OF THE PRINCIPLES

10.31. To apply the principles of price and volume to the different flows in the system it is necessary to specify the solutions to be adopted for a number of problems which arise in this connection.



#### General application

- 10.32. The need to determine which of the various factors described in the previous section explain differences in price arises whenever one studies time series of value data and has to separate price changes and volume changes. It follows that, even at a fine level of detail, series of quantity data may give only crude measures of volume changes, as they do not properly reflect changes that may have occurred in the mix of different qualities. This means that, for example, a constant number of physical units, recorded for a certain flow, understates the volume change if the composition has changed in favour of units with higher quality. This shift implies a change in average quality and must be registered as an increase in the volume index. In general, the best method of estimating volume changes for flows of goods and services is deflating value data with price indices. Since all changes in average quality are correctly reflected in the value series, dividing by a representative price index, which is adjusted for quality changes, gives a correct volume index.
- 10.33. Deflation with price indices may not always be best in practice and other methods have to be adopted. Value series may, for example, have been established by multiplying price and quantity data and constant price data can then be obtained by using prices from the base year. Alternatively, some value series may be of an inferior quality or difficulties may exist in obtaining reliable price indices. Estimates can then be made on the basis of quantity indicators. In these cases care must be taken that the quantities refer to products that are as homogeneous as possible. If none of the methods described above are applicable, constant price data on outputs may have to be based on estimates of inputs at constant prices.
- 10.34. For non-market services the possibility of deflating values by using price indices does not exist and other solutions have to be applied. These are described in paragraphs 10.41. 10.46. below.

# Application to specific flows

#### Flows of goods and market services

- 10.35. Of all the flows in the economy, the changes in the value of the flows of goods and market services are the most readily broken down into price and volume changes. In this context a clear distinction should be made between:
  - a) flows representing transactions actually carried out on the market at a certain price;

- b) flows representing output for own final use (e.g. own-account production of agricultural products and services from owner-occupied dwellings);
- c) flows whose value is defined as a balance between transactions in goods and services (e.g. trade margins);
- d) flows whose value is defined as a difference between distributive and/or financial transactions (e.g. financial intermediation services indirectly measured and insurance services).
- 10.36. The flows in category a) are by far the most numerous and commonplace. Changes in the values of these flows can, by their very nature, be split into volume and price changes. The general method of deflating the current value of these flows by price indices is applicable in all cases where goods and services can be expressed in units, the majority of which are homogeneous from one year to the next.
- 10.37. The flows in category b), which are notional transactions, are typified by the absence of an actual price for the transaction. This is the case for such goods as agricultural products for own final use and goods for fixed capital formation on own-account. For services, the most important type refers to owner-occupied dwellings. Values for these imputed flows are to be obtained by applying prices of similar products when marketed and the deflator should therefore be the same. Since it is usually necessary to value output of own-account construction by costs of production rather than prices, the deflator has to be adjusted in this respect.
- 10.38. The most important flows in category c) are those whose value at current prices is obtained as a difference between the values of two flows of goods. This arises in the case of trade margins, whose value at current prices is defined as the difference between the actual or imputed price realised on a good purchased for resale by the wholesale and retail trades and the price that would have to be paid by the distributor to replace the good at the time it was sold or otherwise disposed of. By one method, estimates of trade margins at constant prices can therefore also be made by difference, by subtracting the constant-price value of goods bought for resale from the constant-price value of goods resold by these trades. An alternative method of measurement would be to extrapolate the trade margins of the base year either by the volume of sales or by the volume of purchases made by the wholesale and retail trades. To be correct, this alternative has to take into account the fact that trade margins vary amongst different products



- and uses. This is explicitly acknowledged in the supply and use tables.
- 10.39. Category c) also includes output of travel agency services measured as the value of service charges of agencies and (fees and commission charges). These services can also be measured as the difference between two flows the full payment made by the purchaser and the expenditure made for transport and accommodation by the producer. The volume measure can be obtained as the difference between these flows calculated at constant prices. Alternatively, the fee or commission can be defined as the price per unit of the type of transportation or accommodation arranged and the volume indicator for the service charge would therefore move in the same way as these flows.
- 10.40. The flows in category d) consist of financial intermediation services, service charges from insurance and pension funds are also included. Financial intermediation services are provided by banks and other financial corporations and consist of lending money to businesses or households, providing a safe and convenient means of saving, safeguarding money and other valuables, buying and selling foreign currencies, clearing cheques, providing general economic intelligence, dealing in stocks and bonds, and offering investment advice. In some cases these services are easily defined and specifically paid for, e.g. in the case of renting space in bank vaults, or when fees are charged in connection with issues of stocks, bonds or loans. The current value of transactions can then be defined, as well as prices and quantities necessary for price and volume measurement. However, a breakdown into price and volume components for financial intermediation services indirectly measured and for insurance services can usually only be made on arbitrary grounds and would have to be based on conventions.

#### Flows of non-market services

- 10.41. The non-market services produced by general government and non-profit institutions serving households (NPISH) cover a vast range of services both necessary and useful to society. They fall into two main categories:
  - a) services provided to individuals, i.e. whose consumers or beneficiaries are individually identifiable. Consumption of these services requires individual initiative on the part of those concerned;
  - b) pure collective services, i.e. services which are consumed jointly by the entire population.

10.42. The services provided to individuals can be given to single individuals (e.g. medical care) or to groups of individuals (e.g. teaching). By their nature, these services can be supplied on a market or a non-market basis; in many cases, the individual can obtain services of this type either by applying to a market unit (paying the price) or by turning to a non-market unit of general government or NPISH (getting the services free, or almost free).

For market units the method of deflating current values by price indices should be used, since the variations in the mix of products with differing prices are then correctly shown as influencing volumes rather than prices. For non-market services provided to individuals, output estimates can be based on quantity indicators. For education these may relate to numbers of hours spent by pupils in classes or in individual tutoring, and for non-market health services the indicators should reflect treatment in hospitals or visits to doctors or nurses. In both cases there is a quality dimension reflected in the amount of resources provided per pupil or patient. Care must be taken to use data with a detailed breakdown so that each indicator for which calculations are made is as homogeneous as possible in respect of costs. It is only then that changes in the mix of products are shown correctly as volume changes.

In the case of services provided to individuals, changes in the volume of their output and consumption should in principle be measured on the basis of the *use* which is made of these services; this will avoid using different criteria for the same services depending on whether they are market or non-market. Of course, any change in quality must be treated as a change in volume; but this applies as much to market services as to non-market services provided to individuals.

- 10.43. The pure collective services are produced by general government for the benefit of the entire population. In fact, they cover a vast range of activities such as general public services, national defence, foreign affairs, justice and the police, town planning and the environment, economic policy, etc. Since these services are consumed collectively, indirectly and continuously, the volume of their output cannot be measured by the extent to which they are utilised.
- 10.44. It may not be possible in practice to obtain reliable quantity indicators for non-market services provided for individuals and these may therefore have to be measured in terms of volume by the same methods as for pure collective services. It is then necessary to start from



- a valuation at constant prices of the different cost elements of this output, i.e.:
- a) intermediate consumption;
- b) compensation of employees;
- c) other taxes on production, less other subsidies on production;
- d) consumption of fixed capital.

The use of input-measures as proxies for output implies that analysis of productivity is not possible.

- 10.45. The calculation of intermediate consumption at constant prices poses no particular theoretical problems since intermediate consumption relates to goods and market services. It can be done either by deflating current values by a price index of intermediate consumption or on the basis of quantities revalued at base-year prices.
- 10.46. Calculation at constant prices of the compensation of employees and the consumption of fixed capital in non-market service industries is done by the general methods described in paragraphs 10.53. and 10.54. below. Other taxes on production are often of a type that can be related to a volume indicator, e.g. volume of employment, number of cars used.

#### Taxes and subsidies on products and imports

- 10.47. Although essentially limited to transactions involving goods and services, the integrated system of price and volume indices does not exclude the possibility of calculating measures of changes in price and volume for certain other transactions. This possibility exists, in particular, in the case of taxes and subsidies directly linked to the quantity or value of the goods and services which are the subject of certain transactions. In the supply and use tables, the values of these are shown explicitly. By applying the rules described below, it is possible to obtain price and volume measures for the categories of taxes and subsidies which are recorded in the goods and services accounts, namely:
  - a) taxes on products, excluding VAT (D.212 and D.214);
  - b) subsidies on products (D.31);
  - c) VAT on products (D.211).
- 10.48. The simplest case is that of taxes which represent a fixed amount per unit of quantity of the product which is the subject of the transaction. The value of the revenue from such a tax depends upon:

- a) the quantity of products involved in the transaction;
- b) the amount levied per unit, i.e. the taxation price.

The breakdown of the value change into its two components presents virtually no difficulties. The variation in volume is determined by the change in the quantities of products taxed; the price variation corresponds to the change in the amount levied per unit, i.e. to the change in the taxation price.

- 10.49. A more frequent case is that in which the tax represents a certain percentage of the value of the transaction. The value of the revenue from such a tax then depends upon:
  - a) the quantity of products involved in the transaction;
  - b) the price of the products involved in the transaction;
  - c) the tax rate (as a percentage).

The taxation price is then obtained by applying the rate to the price of the product. The change in value of the revenue from a tax of this type can also be divided into a volume change, determined by the change in the quantities of products taxed, and a price change corresponding to the change in the taxation price (b x c).

- 10.50. The amount of taxes on products, excluding VAT (D.212 and D.214) is measured in terms of volume by applying to the quantities of products produced or imported the taxation prices of the base year or by applying to the value of output or imports, revalued at the prices of the base year, the tax rates of the base year. Attention has to be paid to the fact that taxation prices may differ among different uses. This is taken into account in the supply and use tables.
- 10.51. Similarly, the amount of subsidies on products (D.31) is measured in terms of volume by applying to the quantities of products produced or imported the subsidy prices of the base-year or by applying to the value of output or imports, revalued at the prices of the base-year, the rates of subsidy of the base-year, taking into account different subsidy prices for different uses.
- 10.52. VAT on products (D.211) is, both for the whole economy and for individual industries and other users, calculated on a net basis and refers only to non-deductible VAT. This is defined as the difference between VAT invoiced on the products and VAT deductible by the users of these products. Alternatively, it is also possible to define VAT on products as the sum of all



non-deductible amounts which have to be paid by users.

Non-deductible VAT at constant prices can be calculated by applying the VAT rates in force in the base-year to the flows expressed in the prices of the base-year. Any change in the rate of VAT for the current year will therefore be reflected in the price index and not in the volume index of non-deductible VAT.

The fraction of deductible VAT in invoiced VAT and hence non-deductible VAT may change:

- a) either because of a change in the right to deduct VAT, resulting from a change in tax laws or regulations, taking effect with or without a time lag;
- b) or because of changes in the pattern of uses of the product (e.g. increase in the proportion of uses on which VAT may be deducted).

A change in the amount of deductible VAT resulting from a change in the right to deduct VAT will by the method described be treated as a change in the taxation price, as will a change in the rate of invoiced VAT.

On the other hand, a change in the amount of deductible VAT resulting from a change in the pattern of uses of the product constitutes a change in the volume of deductible VAT to be reflected in the index of the volume of VAT on products.

#### Consumption of fixed capital

10.53. The calculation of volume measures of the consumption of fixed capital poses few problems when good data on the composition of the stock of fixed capital goods are available. The perpetual inventory method, used by most countries, already implies, for the estimation of the consumption of fixed capital at current prices, the need to pass via a calculation of the stock of fixed capital goods at constant prices. To go from a valuation at historic cost to one at replacement cost, it is first necessary to value capital goods acquired over a number of different periods on a homogeneous basis, i.e. base-year prices. The price and volume indices derived in the process can therefore be used to calculate the value of the consumption of fixed capital at constant prices and the associated price index.

Where there is no perpetual inventory of the stock of fixed capital goods, the change in the consumption of fixed capital at constant prices can be obtained by deflating the current price data by price indices derived from data on gross fixed capital formation by product. Ac-

count has then to be taken of the age structure of the capital goods acquired.

#### Compensation of employees

10.54. For the purpose of measuring the volume of input from employee labour, the quantity unit for compensation of employees may be considered to be an hour's work of a given type and level of skill. As with goods and services, different qualities of work must be recognised and quantity relatives calculated for each separate type of work. The price associated with each type of work is the compensation paid per hour, which may vary, of course, between different types of work. A volume measure of work done may be calculated as a weighted average of the quantity relatives for different kinds of work, weighted by the values of compensation of employees in the previous year or fixed base year. Alternatively, a wage rate index may be calculated for work by calculating a weighted average of the proportionate changes in hourly rates of compensation for different types of work, again using compensation of employees as weights. If a Laspeyres-type of volume index is calculated indirectly by deflating the changes in compensation of employees at current values by an index of the average change in hourly compensation, the latter should be a Paasche-type index.

10.55. For the purpose of measuring the real purchasing power of compensation of employees, this flow can be deflated by an index reflecting the uses made of these earnings. The price index normally chosen for this purpose is the implicit deflator for individual consumption expenditure or the consumer price index.

#### Stocks of produced fixed assets and inventories

10.56. Constant-price data are needed both for stocks of produced fixed assets and for inventories. For the former, such data as are necessary for the calculation of capital output ratios are available if use is made of the perpetual inventory method. In other cases information on the values of stocks of assets may be collected from producers and deflation made by the price indices used for fixed capital formation, taking into account the age structure of stocks.

Changes in inventories are measured by the value of entries into inventories less the value of withdrawals from inventories, and the value of any recurrent losses of goods held in inventories during a given period. Constant-price estimates can be derived by the deflation of these components. When changes in the volume and the prices of inventories are fairly regular, estimates of changes in inventories can also be obtained by multiplying the volume



change of inventories by average prices for the current year or the base year. As a second alternative and as a cross-check, estimates of changes in inventories can also be obtained as the difference between stocks of inventories held at the end and the beginning of the period, respectively. For this purpose the value of inventories minus revaluation according to the accounts of producers has to be revalued and expressed at the average prices, either relating to the current year or to the base-year. If they refer to the current year, the value measures the volume changes in inventories at current prices. If the average prices refer to a base-year, the value corresponds to volume changes in inventories at base-year prices.

#### Measures of real income for the total economy

- 10.57. It is not possible to divide income flows into a price and a quantity component and for this reason price and volume measures cannot be defined in the same way as for the flows and stocks described earlier. Income flows can be measured in real terms only if one chooses some selected basket of goods and services on which the income is typically spent and uses the price index for this basket as a deflator of current incomes. The choice is always arbitrary in the sense that income is seldom spent specifically for purchases during the period in question. Some of it may be saved for purchases in later periods or, alternatively, the purchases during the period may be partly financed from savings made earlier.
- 10.58. Gross domestic product at constant prices measures the total production (less the intermediate consumption) in volume terms for the total economy. The total real income of residents is influenced not only by this volume of production but also by the rate at which exports can be traded against imports from the rest of the world. If the terms of trade improve, fewer exports are needed to pay for a given volume of imports, so that at a given level of domestic production goods and services can be reallocated from exports to consumption or capital formation.
- 10.59. The real gross domestic income can be derived by adding the so-called trading gain to volume figures on gross domestic product. The trading gain - or, as the case may be, loss - is defined

$$T = \frac{X - M}{P} - \left[ \frac{X}{PX} - \frac{M}{Pm} \right]$$

i.e. the current balance of exports less imports, deflated by a price index P, less the difference between the deflated value of exports and the deflated value of imports. The choice of an appropriate deflator P for the current trade balances should be left to the statistical authorities in a country, taking of the particular circumstances of that country. In the circumstances in which there is uncertainty about the choice of deflator an average of the import and the export price indices is likely to provide a suitable deflator.

10.60. Various real income aggregates are identified and defined in the way shown in the following table.

> Gross domestic product at constant prices

the trading gain or loss from changes plus in the terms of trade

equals real gross domestic income

real primary incomes receivable from plus abroad

real primary incomes payable to minus

eguals real gross national income

plus real current transfers receivable from

abroad

real current transfers payable to minus

abroad

real gross national disposable income eguals

consumption of fixed capital at conminus

stant prices

real net national disposable income. equals

To be able to express the various national income aggregates in real terms, it is recommended that receivables and payables of primary incomes and transfers from and to abroad should be deflated with an index of gross domestic final expenditure. Real national disposable income is to be expressed on a net basis by deducting from its gross value the consumption of fixed capital at constant prices.

## CHOICE OF INDEX NUMBER FORMULAE AND THE BASE YEAR

- 10.61. The construction of an integrated system of price and volume indices entails a deliberate choice as to the types of indices to be used.
- 10.62. The preferred measure of year to year changes in volume is a Fisher volume index which is defined as the geometric mean of the Laspeyres and the Paasche indices. Changes in volume over longer periods being obtained by



- chaining, i.e. by cumulating the year to year volume movements.
- 10.63. The preferred measure of year to year changes in prices is a Fisher price index. Price changes over long periods being obtained by chaining the year to year price movements.
- 10.64. Chain indices that use Laspeyres volume indices to measure changes in volume and Paasche price indices to measure year to year price movements provide acceptable alternatives to Fisher indices.
- 10.65. Although the preferred measure of volume and price is a chain index, it must be recognised that the lack of additive consistency can be a serious disadvantage for many types of analysis.

An aggregate is defined as the sum of its components. Additivity requires this identity to be preserved when the values of both an aggregate and its components in some reference period are extrapolated over time using a set of volume index numbers.

10.66. It is therefore recommended that disaggregated constant price data, i.e. direct valuation of current quantities at base-year prices, are compiled in addition to the chain indices for the main aggregates.

Estimating accounts data in constant prices has to be done at the finest level of detail possible if the data are to be consistent within the framework of an integrated system of price and volume measures. The supply and use tables form the central, conceptual and statistical framework for all the measures at constant prices. Additional data are found in supplementary tables.

Constant price series have nevertheless to be rebased in the course of time. The ESA has adopted the principle of changing the base year every five years as from 1995. When the base year is changed it is customary to link the data on the old base to the date on the new base rather than to carry the rebasing backwards. When the base year is updated additivity is lost as a result of linking.

10.67. When base year values are extrapolated by chain volume indices, it will have to be explained to users why there is no additivity in the tables.

The non-additive 'constant price' data is published without any adjustment. This method is transparent and indicates to users the extent of the problem.

This does not preclude the possibility that there may be circumstances in which compilers may judge it preferable to eliminate the discrepan-

cies in order to improve the overall consistency of the data.

# INTERSPATIAL PRICE AND VOLUME INDICES

- 10.68. Comparisons of prices and volumes between countries have to overcome the difficulty in comparing different national currencies. Since exchange rates are neither sufficiently stable for this purpose nor do they reflect differences in purchasing power in a correct way, it is necessary to use a methodology similar to the one used for intertemporal comparisons between different periods within a single country. Price and volume indices have therefore to be compiled between pairs of countries, applying the same kinds of index number formulae as when measuring changes between time periods. Either of the two countries A and B can be used to give the weights and, viewed from the angle of country A, a Laspeyres-type index with weights from country A can be calculated as well as a Paasche-type using weights from country B.
- 10.69. If the economies of the two countries differ much from one another, the spread between these two indices may be quite large and the results would depend too much on which one is chosen. For binary comparisons the ESA therefore requires an average between the two, in the form of a Fisher index.
- 10.70. Direct quantitative comparisons between economic situations that have little in common with each other are inherently difficult and the method of deflation of current values with price indices is therefore the best alternative. This applies even more in international than in intertemporal comparisons. By careful specification and identification of products, price relatives can be calculated from information collected in price surveys in each country. As prices are quoted in national currencies, the interpretation of the price relatives introduces the concept of Purchasing Power Parity (PPP). For a given product the PPP between two currencies of countries A and B is defined as the number of units of country B's currency that are needed in country B to purchase the same quantity of the product as one unit of country A's currency will purchase in country A. PPPs for groups of products and successively higher levels of aggregation up to GDP are obtained by weighting PPPs for products by their share in expenditure. In order to arrive at a price level index between the two countries, the PPP index has to be divided by the current



- exchange rate between the two currencies concerned.
- 10.71. For non-market services, international comparisons face the same problem as intertemporal comparisons. This means that outputs are measured as the sum of inputs. The method used at present in interspatial comparisons is to obtain PPPs on the basis of price relatives for important elements in these inputs. This method, which implies volume comparisons of inputs, fails to take into account differences in productivity in non-market service production in the countries compared. It is important, therefore, to develop methods which instead lead to comparisons of the volume of output of non-market services. This should in principle be feasible for individual non-market services, in the same general way as when intertemporal comparisons are concerned.
- 10.72. The need to make international comparisons of prices and volumes between countries is recognised in the ESA. The main objective is volume comparisons of GDP and its uses and the condition of transitivity must be met. Transitivity means that the direct index for country C based on country A is equal to the indirect index obtained by multiplying the direct index

- for country B based on country A by the direct index for country C based on country B.
- 10.73. The approach adopted in the ESA to the calculation of a set of multilateral volume measures and PPPs is to start from binary comparisons between all possible pairs of countries considered. The Fisher indices used for this purpose are not transitive, but it is possible to derive from them a set of transitive indices that resemble the original Fisher indices as closely as possible, using the traditional criterion of least squares for this purpose. Minimising the deviations between the original Fisher indices and the desired transitive indices leads to the so-called EKS formula.
- 10.74. The EKS index utilises all the indirect indices linking country i to country k as well as the direct index between them. Between countries i and k it is the geometric mean of the direct index between i and k and every possible indirect index connecting countries i and k. The direct index is given twice the weight of each indirect index. Transitivity is achieved by involving every other country in the EKS index for any given pair of countries.

# CHAPTER 11 POPULATION AND LABOUR INPUTS

- 11.01. Certain comparisons between countries, or between industries or sectors within the same economy, become meaningful only when the aggregates in the national accounts (for example, gross domestic product, the final consumption of households, the value added of an industry, compensation of employees) are considered in relation to the number of inhabitants and labour input variables. It is therefore necessary to have definitions of the total population, employment, jobs, total hours worked, full-time equivalence and employee labour input at constant compensation, which are closely linked to the concepts used in the national accounts.
- 11.02. These titles are defined in the system on the basis of the concepts of economic territory and centre of interest.
- 11.03. Labour inputs must be classified on the basis of the same statistical units as used for the analysis of production, namely the local kind-of-activity unit and the institutional unit.
- 11.04. The aggregates to which the figures for population and labour inputs are related are annual totals. Therefore, average population and labour inputs during the year should be used.

When inquiries are conducted at several times during the course of the year, the figure taken is the average of the results obtained on these various dates.

When a single inquiry is made, it is important to examine if the period used is fully representative; the last available information on variations throughout the year should be used in estimating data for the year as a whole. For example, when estimating the mean employment, some allowance should be made for the fact that certain people do not work throughout the whole year (casual and/or seasonal workers).

#### TOTAL POPULATION

#### 11.05. Definition:

On a given date, the total population of a country consists of all persons, national or foreign, who are permanently settled in the economic territory of the country, even if they are temporarily absent from it. For some purposes, an annual average of head counts will provide an appropriate basis for estimating national accounts variables or for use as a denominator in comparisons.

11.06. Total population is defined for national accounts according to the concept of residence (see units and grouping of units chapter).

A person who is staying, or intends to stay, on the economic territory of the country for a period of one year or more is regarded as permanently settled there.

A person is regarded as being temporarily absent if he or she is permanently settled in the country but is staying, or intends to stay, in the rest of the world for a period of less than one year.

All individuals who belong to the same household<sup>1</sup> are resident where the household has a centre of economic interest: this is where the household maintains a dwelling, or succession of dwellings, which members of the household treat, and use, as their principal residence. A member of a resident household continues to be a resident even if that individual makes frequent journeys outside the economic territory, because its centre of economic interest remains in the economy in which the household is resident.

- 11.07. The total population of a country includes:
  - a) nationals settled in the country;
  - b) national civilians who are staying abroad for a period of less than one year (frontier workers, seasonal workers, tourists, patients, etc.);
  - c) foreign civilians settled in the country for a period of one year or more (including the personnel<sup>2</sup> of the Institutions of the European Communities and of international ci-

<sup>1</sup> The concept of household is defined in the chapter 'Units and groupings of units'.

<sup>2</sup> Including accompanying members of their households.



- vilian organisations located within the geographic territory of the country);
- d) foreign military personnel<sup>3</sup> working with international military organisations located within the geographic territory of the country;
- e) foreign technical assistance personnel<sup>3</sup> on long-term assignments who work in the country and are deemed to be employed by their host government on behalf of the government, or international organisation, which is actually financing their work.

By convention, the total population also includes the following, irrespective of the length of their stay outside the country:

- a) national students however long they study abroad;
- b) members<sup>3</sup> of the country's armed forces stationed in the rest of the world;
- nationals<sup>3</sup> who are on the staff of national scientific bases established outside the geographic territory of the country;
- d) nationals<sup>3</sup> who are on the staff of diplomatic missions abroad;
- e) nationals<sup>3</sup> who are members of the crews of fishing boats, other ships, aircraft and floating platforms operating partly, or wholly, outside the economic territory.
- 11.08. Conversely, the total population of a country does not include:
  - a) foreign civilians staying on the territory for less than a year (frontier workers, seasonal workers, tourists, patients, etc.);
  - b) national civilians staying abroad for a period of one year or more;
  - national military personnel working with international organisations located in the rest of the world;
  - d) national technical assistance personnel on long-term assignments who work abroad and are deemed to be employed by their host government on behalf of the government, or international organisation, which is actually financing their work

and also, by convention:

- a) foreign students however long they study in the country;
- b) members of the armed forces of a foreign country who are stationed in the country;

- c) the foreign personnel of foreign scientific bases located on the geographic territory of the country;
- d) members of foreign diplomatic missions stationed in the country.
- 11.09. The definition given above differs from the present (or de facto) population, which consists of persons actually present on the geographic territory of a country at a given date.

# ECONOMICALLY ACTIVE POPULATION

#### 11.10. Definition:

The economically active population comprises all persons of either sex, and above a certain age, who furnish the supply of labour for the productive activities (falling in the production boundary of the system), during a specified time-reference period. It includes all persons who fulfil the requirements for inclusion among the employed (employees or self employed) or the unemployed.

The 'employees' and 'self-employed' are defined under the title 'employment'.

The 'unemployed' are defined under the title 'unemployment'.

#### **EMPLOYMENT**

#### 11.11. Definition:

Employment covers all persons – both employees and self-employed – engaged in some productive activity that falls within the production boundary of the system.

#### Employees<sup>4</sup>

#### 11.12. Definition:

Employees are defined as all persons who, by agreement, work for another resident institutional unit and receive a remuneration (recorded as D.1 compensation of employees).

The relationship of employer to employee exists when there is an agreement, which may be formal or informal, between an enterprise and a person, normally entered into voluntarily by both parties, whereby the person works for the enterprise in return for remuneration in cash or in kind.

<sup>3</sup> Including accompanying members of their households.

<sup>4 &#</sup>x27;Employees' corresponds to the International Labour Organisation definition of 'paid employment'.



Employees are classified here if they are not also in self-employment which constitutes their principal activity: in that case they are classified under self employed persons.

- 11.13. The following categories are included:
  - a) persons (manual and non-manual workers, management personnel, domestic staff, people carrying out remunerated productive activity under employment programs) engaged by an employer under a contract of employment;
  - b) civil servants and other government employees whose terms and conditions of employment are laid down by public law;
  - the armed forces, consisting of those who have enlisted for both long and short engagements and also conscripts (including conscripts working for civil purposes);
  - d) ministers of religion, if they are paid directly by general government or a non-profit institution;
  - e) owners of corporations and quasi-corporations if they work in these enterprises;
  - f) students who have a formal commitment whereby they contribute some of their own labour as an input into an enterprise's process of production in return for remuneration and (or) education services;
  - g) outworkers<sup>5</sup> if there is an explicit agreement that the outworker is remunerated on the basis of the work done that is, the amount of labour which is contributed as an input into some process of production;
  - h) disabled workers, provided the formal or informal relationship of employer to employee exists;
  - i) persons employed by temporary employment agencies, who are to be included in the industry of the agency which employs them, and not in the industry of the enterprise for which they actually work. But for input-output analysis, reclassifications of this people and of all the related costs can be considered (see paragraph 9.51.).
- 11.14. Persons temporarily not at work, are also considered as employees provided they have a formal job attachment. This formal attachment should be determined according to one or more of the following criteria:

- a) the continued receipt of wage or salary;
- an assurance of return to work following the end of the contingency, or an agreement as to the date of return;
- c) the elapsed duration of absence from the job which, wherever relevant, may be that duration for which workers can receive compensation benefits without obligations to accept other jobs.

This covers persons temporarily not at work because of illness or injury, holiday or vacation, strike or lock-out, educational or training leave, maternity or parental leave, reduction in economic activity, temporary disorganisation or suspension of work due to such reasons as bad weather, mechanical or electrical breakdown, or shortage of raw materials or fuels, or other temporary absence with or without leave.

## Self-employed persons

#### 11.15. Definition:

Self-employed persons are defined as persons who are the sole owners, or joint owners, of the unincorporated enterprises in which they work, excluding those unincorporated enterprises that are classified as quasi-corporations. Self-employed persons are classified here if they are not also in a paid employment which constitutes their principal activity: in that latter case they are classified under employees.

They may be temporarily not at work during the reference period for any specific reason. The compensation for self-employment is mixed income.

- 11.16. Self-employed persons also include the following categories:
  - a) unpaid family workers, including those working in unincorporated enterprises engaged wholly or partly in market production;
  - b) outworkers whose income is a function of the value of the outputs from some process of production for which they are responsible, however much or little work was put in;
  - c) workers engaged in production undertaken entirely for their own final consumption or own capital formation, either individually or collectively.

Unpaid voluntary workers are included in selfemployed persons if their volunteer activities result in goods, e.g. the construction of a dwell-

<sup>5</sup> An outworker is a person who agrees to work for a particular enterprise or to supply a certain quantity of goods or services to a particular enterprise by prior arrangement or contract with that enterprise, but whose place of work is not within it.



ing, church or other building. But if their volunteer activities result in services, e.g. care taking or cleaning without payment, they are not included in employment, because those volunteer services are excluded from production (see paragraph 3.08.).

There is no labour input into the production of the services of owner-occupied dwellings; the owner-occupiers of dwellings are not, as such, considered as self-employed persons.

## **Employment and residence**

- 11.17. The results of the activity of producer units can only be compared with employment if the latter includes both the residents and the nonresidents who work for resident producer units.
  - Employment therefore also includes the following categories:
  - a) non-resident frontier workers, i.e. persons who cross the border each day to work in the economic territory;
  - b) non-resident seasonal workers, i.e. persons who move into the economic territory and stay there for less than one year in order to work in industries which periodically require additional labour;
  - members of the country's armed forces stationed in the rest of the world;
  - d) nationals who are on the staff of national scientific bases established outside the geographic territory of the country;
  - e) nationals who are on the staff of diplomatic missions abroad;
  - f) members of the crews of fishing boats, other ships, aircraft and floating platforms operated by resident units;
  - g) local employees of general government bodies situated outside the economic territory.
- 11.18. On the other hand, the following are excluded from employment:
  - a) residents who are frontier workers or seasonal workers, i.e. who work in another economic territory;
  - b) nationals who are members of the crews of fishing boats, other ships, aircraft and floating platforms operated by non-resident units;
  - c) local employees of foreign government agencies located on the geographic territory of the country;
  - d) the personnel of the Institutions of the European Communities and international ci-

- vilian organisations located within the geographic territory of the country (including local employees directly recruited);
- e) members of the armed forces working with international military organisations located on the geographic territory of the country;
- f) nationals working in foreign scientific bases established in the economic territory.
- 11.19. In order to be able to make the transition to the concepts generally used in labour force statistics (employment on a national basis), the ESA especially provides for the following items to be shown separately:
  - a) the conscripted forces (not included in the labour force statistics, but included in the ESA under general government services);
  - b) residents working for non-resident producer units (included in labour force statistics but not included in employment as defined in the ESA);
  - c) non-residents working with resident producer units (not included in labour force statistics but included in employment as defined in the ESA);
  - d) resident workers living permanently in an institution;
  - e) resident workers under the age considered in labour force statistics.

#### UNEMPLOYMENT

#### 11.20. Definition:

In accordance with the norms established by the International Labour Organisation (thirteenth International Conference of Labour Statisticians), the 'unemployed' comprise all persons above a specified age who during the reference period were:

- a) 'without work', i.e. not in paid employment or self-employment;
- b) 'currently available for work', i.e. were available for paid employment or self-employment during the reference period; and
- c) 'seeking work', i.e. had taken specific steps in a specified recent period to seek paid employment or self-employment.

The specific steps may include registration at a public or private employment exchange; application to employers; checking at worksites, farms, factory gates, market or other assembly places; placing or answering newspaper advertisements; seeking assistance of friends or relatives; looking for land, building, machinery or



equipment to establish own enterprise; arranging for financial resources; applying for permits and licences, etc.

#### 11.21. Definition:

Unemployment rates represent unemployed persons as a percentage of the economically active population.

They are usually calculated for sex-age groups and sometimes further cross-classified by other demographic variables such as marital status, qualifications or nationality.

## **JOBS**

#### 11.22. Definition:

A job is defined as an explicit or implicit contract<sup>6</sup> between a person and a resident institutional unit to perform work<sup>7</sup> in return for compensation<sup>8</sup> for a defined period or until further notice.

In that definition, both employee and self-employment jobs are covered: that is, an employee job if the person belongs to another institutional unit than the employer and a self-employment job if the person belongs to the same institutional unit as the employer.

- 11.23. The concept of jobs differs from the concept of employment as defined above:
  - a) it includes second, third, etc. jobs of the same person. Those second, third, etc. jobs of a person may either successively follow one another within the reference period (usually, a week) or, as when someone has an evening job as well as a daytime job, run in parallel;
  - b) on the other hand, it excludes persons temporarily not at work but who have a 'formal attachment to their job' in the form, for instance, of 'an assurance of return to work or an agreement as to the date of return'. Such an understanding between an employer and a person on lay-off or away on training is not counted as a job in the system.

#### Jobs and residence

11.24. A job in the economic territory of the country is an explicit or implicit contract between a person (who may be resident in another economic territory) and an institutional unit resident in the country.

For measuring labour input into economic activity, only the residence of the producer institutional unit is relevant, because resident producers alone contribute to gross domestic product.

#### 11.25. Moreover:

- a) jobs are included in the count of jobs in the economic territory when the employees of a resident producer are working temporarily in another economic territory and when the nature and duration of the activity do not warrant its treatment as a notional resident unit of that other territory;
- b) jobs are excluded from the count of jobs in the economic territory when performed for non-resident institutional units, that is, for units with a centre of interest in another country which have no intention of being active on the domestic territory for a year or more;
- c) the jobs of the staff of international organisations and those of locally recruited staff engaged by foreign embassies are excluded from the count, since the employing units are not resident.

#### **TOTAL HOURS WORKED**

#### 11.26. Definition:

Total hours worked represent the aggregate number of hours actually worked as an employee or self-employed during the accounting period, when their output is within the production boundary.

Because of the broad definition of employees which covers persons temporarily not at work but with a formal attachment, and part-time workers, the ESA recommends that the appropriate measure for productivity calculation is not a head count but total hours worked.

Total hours worked is the preferred measure of labour inputs for the system.

11.27. In accordance with the norms established by the International Labour Organisation (Tenth International Conference of Labour Statisticians), total hours actually worked cover:

<sup>6</sup> The explicit or implicit contract relates to the provision of labour input, not to supplying output of a good or service.

<sup>7</sup> Work means any activity which contributes to the production of goods or services within the production boundary. The legality of the work and the age the worker are, in principle, irrelevant.

<sup>8</sup> Compensation must be interpreted here a wide sense including mixed income of self-employed persons.



- a) hours actually worked during normal working hours;
- b) hours worked in addition to those worked during normal working hours, and generally paid at higher rates than normal rate (overtime);
- c) time which is spent at the place of work on tasks such as preparing the site, repair and maintenance work, the preparation and cleaning of tools, and the making-out of receipts, invoices, records of the length of time worked and other reports;
- d) idle time spent at the place of work waiting or standing by because, for example, of temporary lack of work, the breakdown of machinery or accidents, or time spent at the place of work during which no work is done but for which payment is made under a guaranteed employment contract;
- e) time corresponding to short periods of rest at the work place, including refreshment breaks.
- 11.28. On the other hand, hours actually worked do not include:
  - a) hours which are paid but not worked, such as paid annual holidays, public holidays, or sick-leave;
  - b) breaks for meals;
  - c) time spent travelling between home and the place of work, even when paid (construction workers). However, such travel organised in employers' time is included in hours of work.
- 11.29. Total hours worked is the aggregate number of hours actually worked during the accounting period in employee and self-employment jobs within the economic territory:
  - a) including work outside the economic territory for resident employer institutional units who have no centre of economic interest there;
  - excluding work for foreign employer institutional units who have no centre of economic interest within the economic territory.
- 11.30. Many surveys of enterprises record hours paid not hours worked.
  - In those cases, hours worked have to be estimated for each job group, using whatever information is available about paid leave, etc.
- 11.31. For business cycle analysis, it may be useful to adjust total hours worked by adopting a standard number of working days per year.

## **FULL-TIME EQUIVALENCE**

#### 11.32. Definition:

Full-time equivalent employment, which equals the number of full-time equivalent jobs, is defined as total hours worked divided by the average annual number of hours worked in full-time jobs within the economic territory.

- 11.33. This definition does not necessarily describe how the concept is estimated: since the length of a full-time job has changed through time and differs between industries, methods which establish the average proportion and average hours of less than full-time jobs in each job group have to be used. A normal full time week must first be estimated in each job group. If possible, a job group can be defined, inside an industry, according to sex and (or) kind of work of people. Hours contractually agreed upon constitute, for employee jobs, the appropriate criteria for determining those figures. Full-time equivalent is calculated separately in each job group, then summed.
- 11.34. In spite of the fact that total hours worked are the best measure of labour inputs, there are some advantages in the full-time equivalence: it can be estimated more easily and this facilitates international comparisons with countries which can only estimate full-time equivalent employment.

# EMPLOYEE LABOUR INPUT AT CONSTANT COMPENSATION

#### 11.35. Definition:

Employee labour input at constant compensation measures current labour inputs valued at the levels of compensation of employee jobs ruling during a selected base period.

- 11.36. Compensation of employees at current prices divided by employee labour input at constant prices yields an implicit compensation price index comparable with the implicit price index of final uses.
- 11.37. The purpose of the concept of employee labour input at constant compensation is to express the changes in the composition of the work force, e.g. from lower paid to higher paid workers. To be effective, the analysis should be undertaken on an industry basis.

## **CHAPTER 12**

# **QUARTERLY ECONOMIC ACCOUNTS**

- 12.01. The quarterly economic accounts form an integral part of the system of national accounts and amongst other uses, are very important for the analysis of the current year and calculation of provisional estimates for the last year. The quarterly economic accounts constitute a coherent set of transactions, accounts and balancing items, defined in both non-financial and financial domain, recorded on a quarterly basis. They adopt the same principles, definitions and structure as the annual accounts, subject to certain modifications, due to the period of time covered.
- 12.02. The importance of quarterly economic accounts derives essentially from the consideration that they are the only coherent set of indicators, available with a short time-lag, able to provide a short term overall picture of both non-financial and financial economic activity.
- 12.03. The period of time to which the quarterly accounts relate and the need to have reliable information as quickly as possible determine certain typical features. These features include statistical methods of compiling accounts, seasonality and the treatment thereof, consistency of quarterly and annual accounts and some account particularities related to the reference period. These typical features will be extensively analysed in a handbook of quarterly account that Eurostat intends to publish before the application of this methodology.
- 12.04. The statistical methods used for compiling quarterly accounts may differ quite considerably from those used for the annual accounts. They can be classified in two major categories: direct procedures and indirect procedures. Direct procedures are based on the availability at quarterly intervals, with appropriate simplifications, of the similar sources as used to compile the annual accounts. On the other hand, indirect procedures are based on time disaggregation of the annual accounts data in accordance with mathematical or statistical methods using reference indicators which permit the extrapolation for the current year. The choice between the different indirect procedures must above all take into account the minimisation of the forecast error for the current year, in order that the provisional annual estimates correspond as closely as possible to the final figures. The choice between these approaches depends, among other things, on the information available at quarterly level.
- 12.05. The quarterly accounts series quite often show very short-term variations due to weather, habits,

- legislation, etc., usually defined as seasonal fluctuations. Although seasonality is an integral part of quarterly data, it is often an impediment to the correct identification and analysis of the cycle-trend component. From this consideration follows the need to compile both raw and seasonally adjusted accounts. The accounting consistency of seasonally adjusted figures should be ensured. A closely related problem to seasonal adjustment, is that of the working days correction, which needs further consideration to be taken up in the Eurostat handbook.
- 12.06. Since quarterly accounts adopt the same framework of annual accounts they have to be consistent over time with them. This implies, in the case of flow variables, that the sum of the quarterly data is equal to the annual figures for each year. In principle there are no obstacles to this condition being met for previous years. However, for the current year there is a problem of time priority between quarterly and annual data as quarterly data are normally available earlier than the annual figures. This problem may be solved by agreeing that the provisional estimates of annual figures are obtained by the aggregation of quarterly figures. When new annual information becomes available resulting in a revision of the provisional figures, the quarterly data have to be modified accordingly. Within same systems, the annual accounts are a by-product of the quarter system and there is no separate annual calculation.
- 12.07. The time consistency must be ensured for raw data and, compatibly with the seasonally adjustment procedures, for adjusted figures to.
- 12.08. If, in principle, most of the operations and balancing items are distributed with a certain regularity on all the quarters, there are anyway some operations that appear concentrated in one or two quarters of the year. This is the case for taxes on income, dividends, interests, etc. The treatment of these cases depends essentially on the underlying generation process.
- 12.09. From a theoretical point of view there are not obstacles to the layout used for the quarterly accounts being the same as that used for the annual accounts. However, in practice, it is useful to simplify and aggregate this scheme in order to obtain reliable quarterly figures as quickly as possible (see program of tables and data to be supplied in the framework of the 1995 ESA).

## **CHAPTER 13**

# **REGIONAL ACCOUNTS**

- 13.01. Regional accounts are a regional specification of the corresponding accounts of the total economy. The regional accounts make use of the concepts used for the accounts of the total economy unless indicated otherwise in this section.
- 13.02. A full set of accounts at the regional level implies treating each region as a separate economic entity. In this context, transactions with other regions become a kind of external transactions. External transactions of the region should of course, be distinguished according to transactions with other regions of the country and transactions with the rest of the world.
- 13.03. Conceptual difficulties (see paragraphs 13.10. 13.14.) partly explain why regional accounts are limited to recording production activities by industry and to accounts for some institutional sectors like households.

#### **REGIONAL TERRITORY**

- 13.04. The regional economy of a country is part of the total economy o that country. The total economy is defined in terms of institutional units. It consists of all the institutional units which have a centre of interest in the economic territory of a country (see paragraph 2.04.). The economic territory, although consisting essentially of the geographic territory, does not coincide exactly (see paragraph 2.05.). The economic territory of a country can be divided into regional territories and the extraregio territory.
- 13.05. The regional territory includes:
  - a) the region that is part of the geographic territory of a country;
  - b) any free zones, including bonded warehouses and factories under customs control in the region.
- 13.06. The extraregio territory is made up of parts of the economic territory of a country which cannot be attached directly to a single region. It consists of:
  - a) the national air-space, territorial waters and the continental shelf lying in international waters over which the country enjoys exclusive rights;
  - b) territorial enclaves {i.e. geographic territories situated in the rest of the world and used, under international treaties or agreements

- between States, by general government agencies of the country (embassies, consulates, military bases, scientific bases etc.)};
- deposits of oil, natural gas etc. in international waters, outside the continental shelf of the country, worked by resident units.
- 13.07. The nomenclature of territorial units for statistics (NUTS) provides a single, uniform breakdown of the economic territory of the European Union. The NUTS is the territorial classification for the compilation of regional accounts.

#### UNITS AND RESIDENCE

- 13.08. Two types of units are distinguished. First of all the local KAU for the analysis of flows occurring in the process of production and in the use of goods and services. Secondly the institutional unit to analyse flows affecting income, capital and financial transactions, other flows and balance sheets.
- 13.09. The local KAU is the part of a KAU which corresponds to a local unit. The local unit is an institutional unit producing goods and services or a part thereof situated in a geographically identified place (see paragraph 2.106.). Therefore, in principle the regional residence of a local KAU can be unambiguously determinated.
  - Regarding the transactions in relation to the production activities, it is necessary to record flows between local KAUs, which belong to the same institutional unit and are located in different regions. The ESA recommends including deliveries between local KAUs in the definition of output and this is especially important in regional accounts.
- 13.10. In case of institutional units two types of institutional units have to be considered in the context of regional accounts. First of all, there are uniregional units, the centre of economic interest of which is in one region and most of their activities take place in this region. Among uniregional units are households, corporations whose local KAUs are all located in the same region, local and state governments, at least part of social security and many NPIs serving households.

Secondly, there are multiregional units, the centre of economic interest of which is in more than one region. Many corporations and a number of NPIs are in this situation. To a greater extent, this is also the case for institu-



tional units whose activities span the whole country such as central government and a small number of corporations, generally in a monopolistic or quasi-monopolistic situation, like the national railway corporation or the national electricity corporation.

- 13.11. All transactions of the uniregional institutional units are allocated to the region in which they have their centre of economic interest. Regarding households, the centre of economic interest is the region where they live, not the region where they work. Other uniregional units have their centre of economic interest in the region where they are located.
- 13.12. Some of the transactions of multiregional units cannot, strictly speaking, be regionalisabled. This is the case for most distributive and financial transactions. Consequently, balancing items of multiregional units may not be unambiguously defined at the regional level for multiregional units
- 13.13. One may think of allocating all transactions of multiregional units between regions according to some rules of thumb. However, this should not be considered simply as a practical approximation. It implies a conceptual adaptation of the ESA, since the reasons which prevent including a full sequence of accounts for local KAUs/industries in the central framework also forbid, in principle, completely distributing all institutional units and their accounts between regions; for this would mean, in principle, building up a full set of accounts for local KAUs.
- 13.14. Due to the above-mentioned considerations, the system of regional accounts is limited to:
  - a) regional industry aggregates on production activities:
    - (1) gross value added;
    - (2) compensation of employees;
    - (3) employment;
    - (4) employees;
    - (5) gross fixed capital formation.
  - b) gross domestic product per region (GDPR);
  - c) regional household accounts.

#### **METHODS OF REGIONALISATION**

13.15. Regional accounts are based on the transactions of units that are resident in a regional territory. In general the regionalisation can be done by using bottom-up methods, top-down

methods or mixed methods. The methods may be described as follows:

a) bottom-up methods:

the bottom-up methods of estimation involve the use of information on units that are resident in the region, and ascending by addition until the regional value of the aggregate is established. The regional values must add up to the corresponding national value;

b) top-down methods:

the top-down methods involve the distribution of a national figure among regions, without attempting to single out resident units, by means of a distribution key which reflects as closely as possible the feature to be estimated. The methods are called top-down because the aggregate is allocated to a region and not to a single unit. However, the notion of a resident unit is needed in order to have a correct regional coverage of the key to be used;

c) mixed methods:

the bottom-up methods are rarely encountered in their pure form. Therefore mixed methods may also be considered. For example, can occur that a variable or an aggregate of variables can only be regionalised with the help of the bottom-up method at level NUTS-1. For a further regionalisation at level NUTS-2 or NUTS-3 a top-down method has to be used.

- 13.16. In principle, the advantage of bottom-up methods is that they directly employ relevant sources at the regional level. An advantage of top-down methods is the guaranteed numerical consistency between national and regional accounts. A disadvantage is that the estimates are not produced with direct data but with a key that is supposedly correlated with the phenomenon to be measured.
- 13.17. Whenever possible regional values which directly correspond in concept with the national values should be estimated directly by means of the bottom-up methods. The top-down procedures do not lead to a solid, reliable data basis for judging the accuracy of the estimated values, whereas in the bottom-up methods attention is drawn to a possible divergence with the national totals.

#### AGGREGATES BY INDUSTRY

13.18. An industry for a region consists of a group of local KAUs engaged in the same, or similar,



- kind-of-activity (see paragraph 2.108.). The local KAU is the unit on which the data related to production activities (output, intermediate consumption, etc.) are based.
- 13.19. As a general principle, aggregates on production activities should be allocated to the region where the unit carrying out the relevant transactions is resident. The residence of the local KAU is an essential criterion for the allocation of these aggregates to a particular region.
- 13.20. The general principle of allocating gross fixed capital formation by region is ownership just as in the accounts of the total economy {see paragraph 2.05., footnote (1)}. Fixed assets owned by a multiregional unit are allocated to the local KAUs where they are used. As in national accounts fixed assets obtained through operational leasing are recorded in the region of the owner and those obtained through financial leasing, in the region of the user.
- 13.21. In practice, it may be that information is only available at the level of units which contain several local KAUs engaged in different activities and/or regions. In this case, available indicators (e.g. compensation of employees or employment per region) have to be used to regionalise the figures by industry.
- 13.22. When defining a local KAU three situations can be distinguished:
  - a) a production activity with significant<sup>1</sup> labour input at a fixed location raises no problems. However, in some cases further clarification is needed (see paragraphs 13.24. 13.27.);
  - a production activity without significant labour input at a fixed location is not considered as a separate local KAU and the production should be attributed to the local unit that is responsible for managing this production;
  - c) for a production activity without a fixed location the concept of residence at the national level should be applied.
- 13.23. Ancillary activities are not isolated to form distinct entities or separated from the principal or secondary activities or entities they serve (see paragraph 2.104.). Accordingly, ancillary activities should be integrated with the local KAUs they serve.

Ancillary activities may be carried out in separate locations, located in another region than the local KAUs they serve. The strict application of the above-mentioned rule for the geographical allocation of the ancillary activities would

- result in the underestimation of the aggregates in the regions where ancillary activities are concentrated. Therefore according to the principle of residence, they have to be allocated to the region where the ancillary activities are situated; they remain in the same industry as the local KAUs they serve.
- 13.24. For some industries, the methods for regionalisation need some further clarification. The industries are:
  - a) construction;
  - b) transport storage and communication;
  - c) financial intermediation.
- 13.25. For the construction industry, building sites should be treated as independent local KAUs when the activity is significant {see paragraph 2.09., footnote (4)}. Given the mobility of some equipment, e.g. pile-drivers and cranes, between local units of the same KAU and the absence of information at site level, it is recommended to allocate gross fixed capital formation of such equipment to the headquarters of the KAU.
- 13.26. For transport industries including pipeline transport it is essential to define the local KAUs to which the production and capital formation should be attached. For land transport industries (excluding railways) the production and capital formation should be attached to depots or similar local KAUs where the equipment is based. For water transport industries the production and mobile equipment should be allocated to the home base of the unit. Pipeline networks should be attached to the local KAU that exploits it.

For rail and air transport industries top-down methods, breaking down the national aggregates into regions according to suitable indicators, should be used. Compensation of employees should be allocated to the region where the people are employed. The gross operating surplus should be allocated to the regions according to indicators relating to the activity of the train or air routes.

Regarding communication industries, telephone boxes, telephone sets, telecommunication lines, etc. perform only a supporting role. Therefore, they do not form distinct entities and should be attributed to the local KAU responsible for managing them. The investment in infrastructure should also be allocated to these local units.

13.27. For financial intermediation industries, value added should be allocated according to the

Significant labour input, in this context, has to be considered as a minimum of the yearly equivalent of one person working half-day.



- income approach. Compensation of employees should be allocated to the local KAUs where the people are employed. Gross operating surplus of credit institutions should be distributed between local KAUs in proportion to the sum of loans and deposits, and gross operating surplus of insurance institutions in proportion to the premiums received. Gross fixed capital formation mainly consists of buildings; therefore, it should be allocated to the region where they are situated.
- 13.28. Output is to be valued at basic prices (see paragraph 3.47.). Products used for intermediate consumption are to be valued at purchasers' prices at the time they enter the process of production (see paragraph 3.72.). As a consequence gross value added per industry is valued at basic prices.
  - Gross fixed capital formation is valued at purchasers' prices including installation charges and other costs of ownership transfer. When produced on own-account it is valued at basic prices of similar fixed assets or at costs of production if such prices are not available (see paragraph 3.113.).
- 13.29. The regional equivalent of GDP is GDPR (gross domestic product per region). GDPR is valued at marked prices by adding the regionalised taxes less subsidies on products and imports to values added per region at basic prices. The sum of GDPR at market prices per region, including GDPR of the extraregio territory, equals GDP at market prices.

#### HOUSEHOLD ACCOUNTS

- of the productive activities of the local KAUs resident in a region. The processes of distribution and redistribution of income result in other meaningful balancing items, namely primary income and disposable income. Due to the considerations mentioned in paragraphs 13.10. 13.14., in regional accounts these income concepts are limited to households.
- 13.31. Regional accounts of households are a regional specification of the corresponding accounts at the national level. For practical reasons the accounts are limited to:
  - a) allocation of primary income account;
  - b) secondary distribution of income account.
  - In general terms, they aim at measuring primary income and disposable income of households which are resident in a region.

- 13.32. The regional household accounts are based on the households that are resident in a regional territory. For the definition of households as institutional units and for the definition of the institutional sector households, is referred to paragraphs 2.13., 2.16., 2.75. and 2.76.. The number of persons that are member of the resident households add up to the total resident population of the region.
- 13.33. In general the rules for determining the residence of households at the national level also apply to the regional accounts of households. However, concerning the residence of students and long-term patients an exception is made when the host region is in the same country. In regional accounts, they are treated as resident of the host region if they stay there more than one year.
- 13.34. In the regional accounts of households, two considerations have to be made regarding households owning an unincorporated enterprise, land and/or a second dwelling in another region:
  - a) a household owning an unincorporated enterprise (not viewed as a quasi-corporation at the national level) in another region: the unincorporated enterprise is considered to be a resident (notional unit) in the host region. As a consequence, mixed income resulting from the compilation of aggregates by industry is part of the mixed income of the host region. However mixed income as registered in the allocation of primary income account of households per region is to be equal to total mixed income received by households resident in a region, irrespective of the region in which this income is generated;
  - b) a household owning land and/or a second dwelling in another region: here, the land and/or the second dwelling are also considered to be notional units resident in the host region. Consequently, the rents and rentals payable by the tenants of the land and/or the dwelling are paid to the notional unit. If the second dwelling is used by the owner for own final consumption, the rental value should be registered as an inter-regional export from the region where the dwelling is located to the region where the owner resides. The latter region thus imports this service and uses it for final consumption expenditure of households. As in the case of mixed income, the operating surplus resulting from this production process will differ from the operating surplus in the allocation of primary income accounts of households; for the total economy, both are equal.

# **ANNEXES**

# ANNEX I FINANCIAL INTERMEDIATION SERVICES INDIRECTLY MEASURED (FISIM)

# CHANGES TO BE MADE IN THE ESA CHAPTERS IF FISIM IS TO BE ALLOCATED

1.13. d)	Delete after 'The ESA also contains many specific conventions, e.g.:'	Replace by:
	'recording the use of financial services indirectly measured as the intermediate consumption of a nominal sector or a nominal industry.'	'allocating the use of financial intermediation services indirectly measured (FISIM) to user sectors/industries.'
1.25.		Add after 'Some of the major differences in concepts are:'
		the use of financial intermediation services indirectly measured (FISIM) is now allocated to user sectors/industries instead of to a nominal sector (industry). As a consequence, the use of FISIM is not anymore by convention recorded entirely as intermediate consumption, but can also be final consumption and exports. This implies then that imports of FISIM can also occur.'
Chapter	3.	
3.70. j)	Delete:	Replace by:
	'only for the total economy: all financial intermediation services indirectly measured (FISIM) provided by resident producers.'	'the use of financial intermediation services indirectly measured by resident producers.'
3.76. e)		Add to 'financial services directly charged;':
		'and the part of financial intermediation services indirectly measured used for final consumption purposes by households;'
3.142. h)		Add immediately after 'financial services by the amount of the explicit commissions and fees;':
		'h') the part of financial intermediation services indirectly measured used by non-residents;'
Chapter	4.	
4.51.	Delete:	Replace by:
	'The value of the services provided by financial intermediaries not being allocated among different customers, the actual payments or receipts of interest to or from financial intermediaries are not adjusted to eliminate the margins that represent the implicit charges made by financial intermediaries. An adjustment item is needed in the allocation of primary income account of financial intermediaries and of a nominal industry to which, by convention, the whole output of financial intermediaries is allocated as intermediate consumption.'	'The value of the services provided by financial intermediaries being allocated among different customers, the actual payments or receipts of interest to or from financial intermediaries need to be adjusted to eliminate the margins that represent the implicit charges made by financial intermediaries. The amounts of interest paid by borrowers to financial intermediaries must be reduced by the estimated values of the charges payable, while the amounts of interest receivable by depositors must be similarly increased. The values of the charges are treated as payments for services rendered by financial intermediaries to their customers and not as payments of interest.'



#### Chapter 8.

8.09.

Add on figures presented:

Tables A.I.1 and A.I.2, to show the consequences of allocation of FISIM on figures presented in the chapter 8., 'Sequence of accounts and balancing items' (numerical example).

Replace by:

8.14. Delete:

As financial intermediation services indirectly measured (FISIM) are not allocated to user sectors, the whole of the value of the output of FISIM is treated as the intermediate consumption of a nominal sector with zero output and negative value added equal in size but opposite in sign to intermediate consumption. In this way, the value added of all sectors and industries together is reduced in total by this amount. To lighten the presentation of accounts, it is possible not to insert a supplementary column for the nominal sector, but instead to take into account the corresponding figure in the column total economy.'

'As financial intermediation services indirectly measured (FISIM) are allocated to user sectors, certain parts of interest payments are reclassified as payments of services. This reclassification has consequences for the values of output and intermediate consumption (as well as for the values of imports, exports and final consumption).'

8.24. Delete:

Replace by:

'As financial intermediation services indirectly measured (FISIM) are not allocated to user sectors, the entries shown for interest are those for actual interest payable and receivable. An adjustment is made to resources in the column financial corporations (with a negative sign) and in the column nominal sector (with a positive sign). To lighten the presentation of accounts, it is possible not to insert a supplementary column for the nominal sector, but instead to present the corresponding figure in the column total economy.'

'As financial intermediation services (FISIM) are allocated to user sectors, the item 'interest' in the allocation of primary income account corresponds to interest payable and receivable after FISIM has been deducted from actual payables by borrowers and added to actual receivables by lenders

#### Chapter 9.

9.25. a)

Delete:

'the intermediate consumption by industry includes the use of financial intermediation services indirectly measured that are recorded in a nominal industry (see paragraph 9.33.)'

9.25. b)

Delete:

'minus the use of financial intermediation services indirectly measured (recorded in a nominal industry, see paragraph 9.33.)'



9.33 Delete:

'Throughout the supply and use tables, the NACE rev. 1 industry classification is extended with a nominal industry for the use of financial intermediation services indirectly measured. In the supply table, no transactions are recorded at all for this industry. In the use table, the total use of financial intermediation services indirectly measured is recorded as the intermediate consumption of this nominal industry. As this nominal industry does not have any other transactions, its net operating surplus is negative by the amount of its intermediate consumption; all other components of its value added are zero. As a consequence, its total gross value added is equal to its (negative) net operating surplus.'

Table A.I.1 Effect of allocating FISIM to institutional sectors, including changes for non-market producers

				Uses								Resources									
			S.2	5.1	S.15	5.14	5.13	5.12	Non-			S.11 Non-	5.12 Finan-	5.13	S.14	S.15	5.1	S.2 Rest	Goods		
		Goods and	Rest of	Total			General	Finan- cial	tinan			finan- cial	cial	General			Total	of	and		
		services	the	eco-		House-	govern-	corpo-	corpo	-		corpo-	corpo-	govern-			eco-	the	services		
ccounts	Total	(res.)	world	nomy	NPISHS	holds	ment	rations	ration		Transactions and balancing items	rations	rations	ment	holds	NPISH <sub>5</sub>	nomy	world	(uses)	Total	Accounts
	2	2								P.72	Imports of services							2			I. Product
roduction	4		4							P.62	Exports of services								4		
ccount/										P.1	Output		48	6		3	57			57	external
xternal	27			27		0	6				Intermediate consumption										account
ccount	30		- 2	30				48	- 11	B.1	Value added/external balance	- 18	48	1			30			30	0.1.1.
.1.1.																					Generation of incom
Generation																					
f income												4.0					20			20	II.1.2.
ccount	30			30				48	- 11	B.2	Operating surplus	- 18	48	,			30			30	Allocation
1,1.2,																					of primar
Mocation												2.0				) 7	209	21		220	income
of primary	230		13	217	. 6	14	35	106	5	5 D.4	Interest	33	106	14	49	, ,	209	21		230	account
ncome											Bullion of minor income	- 41	48	- 21	35	. 1	22			22	II.2.
ccount	22			22	: 1	35	- 21	48	3 -4	B.5	Balance of primary incomes	-41	40	21	3.	, ,	22			22	Secondar
1.2 .																					distribution
econdary																					of incom
listribution																					account
f																					II.4. Use
ncome	22			22		35	- 21	4	2 - 4	1 B.6	Disposable income	- 41	1 48	3 - 21	35	5 1	22			22	of incom
account	22			2.		30	21	40	, -4	0.0	Disposable income	- 41	, ,,,		5.						account
I.4. Use	20			28		3 19	9 6			P.3	Final consumption expenditure										
of income	28								2 4		Saving, net/external balance										
ccount			ь	- (	)	. 10	- 2/	- 40	, -4	0.00	Javing, negenterial dalance										

Table A.I.2 Effect of allocating FISIM to nominal sector only

				Use	es													Reso	urces				
			5.2	S.1	5.15	5.14	5.13	5.12	5.11 Non-					5.11 Non-	5.12	5.13	5.14	S.15	5.1	5.2			
		Goods	Rest	Total			Ceneral	Finan-	finan- cial					finan- cial	Finan- cial	General			Total	Rest of	Goods		
		services	the	eco-		House.	govern-									govern-			eco-	the	services		
Accounts	Total	(res.)	world		NPISH	holds				ominal		Transactions and balancing items	Nominal					NPISHs		world	(uses)	Total	Account
Production	10101	114411	110110									-											I. Produc
ccount											P.1	Output			48				48			48	account
	48			48						48	P.2	Intermediate consumption									48	48	
								48		- 48	B.1	Value added/external balance	- 48		48								0.1.1.
1.1.1.																							Generati
Generation																							of incom
of income																							account
account								48		- 48	B.2	Operating surplus	- 48		48								11.1.2.
11.1.2.	222		16	206	7	17	39	77	66		D.41	Interest		25	125	12	33	5	200	22		222	Allocatio
Allocation																							of primar
of primary											P.119	Adjustment for FISIM	48		- 48								income
income																							account
account				- 6	- 2	16	- 27	48	- 41		B.5	Balance of primary incomes		- 41	48	- 27	16	- 2	- 6				11.2.
1.2.																							Secondar
Secondary																							distribution
distribution																							of incom
of income																							account
account				- 6	- 2	16	27	48	- 41		B.6	Disposable income		- 41	48	- 27	16	- 2	- 6				II.4. Use
II.4. Use											-												of incom
of income			6	- 6	- 2	16	- 27	48	- 41		B.8n	Saving, net/external balance											account
account																							

# **ANNEX II**

# LEASING AND HIRE PURCHASE OF DURABLE GOODS

#### **DEFINITIONS**

In addition to purchasing durable goods outright, institutional units can obtain the use of them in the following ways: operating leasing, financial leasing and hire purchase. In all three cases the institutional unit in question acquires the right to use a durable good, although the good legally remains the property of another unit.

#### Leasing

When one institutional unit A owns a durable good and transfers the right to use this good to another unit B, A is said to be the 'lessor' and B the 'lessee'. Payments from B to A in exchange for the transfer of user rights are called 'rental payments'. The lessor may be identical with, or a subsidiary of, the producer or seller of the durable good, but the lessor may also be a completely independent unit with no ties to the producer or seller. All sorts of produced durable goods, from buildings and structures to consumer durables, may be the subject of leasing, and any kind of institutional unit may use leasing to obtain user rights over durable goods. The two types of leasing, operating and financial leasing, are treated quite differently in the system.

# Operating leasing

3. The lessee acquires the right to use a durable good for a certain period of time, which may be long or short and not necessarily settled in advance. When the leasing period expires, the lessor expects to receive his good back in more or less the same condition as when he hired it out, apart from normal wear and tear. The lessor is then likely to hire out the good to another lessee or to use it otherwise. Thus, the leasing period does not cover all, or a predominant part of, the good's economic lifetime.

Units engaged in operating leasing possess expert knowledge about the kinds of durable goods they hire out. They keep stocks of these goods to be able to hire them out on demand or at short notice. Usually they offer a variety of models to choose from. In order to keep their durable goods in good working order, lessors must carry out maintenance and repair services on goods awaiting hire. Lessors also normally assume responsibility for repairs and

maintenance of a good, as well as replacement in case of a breakdown, while the good is hired out to a lessee.

Operating leasing does not cover situations where the owner of equipment also provides staff to operate the equipment, or the hiring of non-produced assets, as these activities are classified elsewhere (see paragraph 7.).

#### Financial leasing

4. The lessee acquires the right to use a durable good in exchange for rental payments over a predetermined and protracted term. If all risks and rewards of ownership are, de facto though not de jure, transferred from lessor to lessee, the lease is a financial one. In financial leasing, the leasing period covers all, or most of, the economic lifetime of the durable good. At the end of the leasing period the lessee often has the option to buy the good at a nominal price. The lessor does not need to possess any expertise about the good in question. He offers no repair, maintenance or replacement services to the lessee. Normally, the good is chosen by the lessee and delivered directly to him by the producer or seller. The lessor's role is thus purely financial.

The ESA recognises the economic reality behind financial leasing by recording it as follows: the lessor provides the lessee with a loan enabling the lessee to purchase a durable good, of which the lessee becomes the *de facto* owner. Thus, the system treats the durable good as if owned by the lessee from the beginning of the leasing period. Rentals actually paid by the lessee to the lessor have to be subdivided into repayments of principal and interest payments related to the imputed loan.

# Hire purchase

5. A durable good is sold to a purchaser in return for agreed future payments. The buyer takes possession of the good immediately, though in law it remains the property of the seller or financier as collateral/guarantee until all agreed payments have been made. Hire purchase is usually restricted to consumer durables, and most purchasers are households. Financiers of hire purchase contracts typically are separate institutional units operating in close cooperation with sellers of durable goods.



#### TREATMENT IN THE ACCOUNTS

#### Operating leasing

A durable good purchased by a lessor for the purpose of leasing is part of the lessor's gross fixed capital formation (P.51) and is shown as a tangible fixed asset (AN.III) in the lessor's balance sheet during its entire economic life. Subsequent capital consumption (K.1) in respect of the durable good is recorded in the lessor's accounts.

Rental payments received by a lessor are shown in his production account as output (P.1) of leasing services. If the lessee is a producer, rental payments are part of his intermediate consumption (P.2). When the lessee is a household acting as a final consumer, rental payments are part of his final consumption expenditure (P.3).

In NACE rev. 1, operating leasing of real estate 7. is classified in class 70.20 'Letting of own property'. Operating leasing of other durable goods is classified in division 71 'Renting of machinery and equipment without operator and of personal and household goods'. Operating leasing does not comprise the renting of machinery or equipment with operating staff, which is classified according to the services provided by the equipment and staff. For example, the hiring out of a lorry with driver is classified in class 60.24 'Freight transport by road'. Institutionally, operating leasing corporations are classified in sector \$.11 'Non-financial corporations', but operating lessors may also be found in sector S.14 'Households'.

If the lessor is resident while the lessee is non-resident, rental payments are shown as exports of services (P.62). As the leased good remains on the balance sheet of a resident unit (the lessor), the good does not appear in any of the rest of the world accounts. If the lessor is non-resident while the lessee is resident, rental payments are recorded as imports of services (P.72). In this case the good itself is not considered to enter the economic territory (only its services are). Thus the leased good appears neither in the rest of the world accounts nor in any other account.

#### Financial leasing

8. If the lessee is a producer, the durable good is shown as gross fixed capital formation (P.51) for the lessee at the beginning of the leasing period. Throughout the leasing period (unless the lessee defaults on the rental payments) the good is shown as a tangible fixed asset (AN.III) in the balance sheet of the lessee. Subsequent

capital consumption (K.1) is shown in the accounts of the lessee. At the end of the leasing period, either (a) the lessee buys the good at its residual value when it remains on his balance sheet, or (b) the good reverts to the lessor, when it is shown as negative gross fixed capital formation for the lessee and thus leaves the lessee's balance sheet, and may enter the balance sheet of the lessor or that of a third party, to whom the lessor has sold on.

9. If the lessee is a household acting as a final consumer, the durable good is treated as if bought by the lessee for the purpose of final consumption at the beginning of the leasing period. This means that the purchaser's price of the leased good is part of the lessee's final consumption expenditure (P.3) at the beginning of the leasing period and that the good appears only as a consumer durable in the memorandum item to his balance sheet.

A loan (E.4) is imputed from lessor to lessee. The principal of this loan is the purchaser's price of the leased good plus transfer costs (if any). The outstanding imputed loan (AE.4) is shown in the lessor's and lessee's balance sheets as a financial asset and liability, respectively. Payments of rental are considered to comprise two elements, repayment of principal (E.4) and interest (D.41), with the final repayment coinciding with the termination of the financial lease.

- The interest rate on the imputed loan is impli-10. citly determined so that accumulated repayments over the leasing period exactly equal the principal. When rental remains constant from period to period, the interest part of rental will decline over time, while the repayment part will increase correspondingly, as for a loan payable in equal instalments. When principal, rental and length of the leasing period are known for each contract, the interest rate, the interest payments and the repayments can easily be calculated using standard formulae. When detailed data on each leasing contract are not available, which is often the case in practice, reasonable assumptions must be made in order to carry out these calculations. In many countries business accounting treats financial leasing in a similar way as described here, which facilitates the data situation.
- 11. Financial lessors' productive activity is financial intermediation. Usually lessors do not charge explicitly for their intermediation services. Their output is therefore mainly or exclusively financial intermediation services indirectly measured (FISIM), calculated similarly to other financial intermediaries: property income receivable less interest payable, excluding any property income receivable from the invest-



ment of their own funds<sup>1</sup>. Some financial lessors incur liabilities to other independent units when interest payable is observable and the calculation of FISIM is straightforward. Other financial lessors incur liabilities only to their parent companies when interest payable may be difficult to observe. In the latter case it may be necessary to estimate the amount of interest payable by using an appropriate interest rate.

Financial leasing corporations are classified in the institutional sub-sector S.123 'Other financial intermediaries except insurance corporations and pension funds'. The activity classification is NACE rev. 1 class 65.21 'Financial leasing'.

The ESA's treatment of financial leasing implies that the leased good does not appear in any of the lessor's accounts. Whether or not the lessor is resident or non-resident is thus of no consequence to the treatment of the good itself. If the producer or seller of the good is resident while the lessee is non-resident, the leased good is treated as if exported (P.61) when the lessee takes possession of it, i. e. at the beginning of the leasing period. If the producer/seller is non-resident while the lessee is resident, the good is considered to be imported (P.71) when the leasing period begins.

If the lessor is resident while the lessee is not, a loan (E.4/AE.4) is imputed from a resident unit (the lessor) to a non-resident unit (the lessee). If the lessor is non-resident and the lessee is resident, a loan is imputed from a non-resident unit (the lessor) to a resident unit (the lessee). As in the case of leasing transactions between residents, rental payments are broken down into interest (D.41) and repayments of principal (E.4).

#### Hire purchase

13. The durable good is recorded as if bought by the purchaser the day he takes possession of it at the price the purchaser would have paid in a cash transaction. The purchaser receives an imputed loan (F.4/AF.4) of equivalent value. The ESA splits the payments from purchaser to financier into repayments of principal (F.4) and interest payments (D.41), using the same method as the one applied for financial leasing.

The productive activity carried out by financiers of hire purchase contracts is financial intermediation. As they do not usually charge explicitly for their services, their entire output is financial intermediation services indirectly measured (FISIM), calculated as property income receivable less interest payable, excluding any property income receivable from own funds. As the case of financial leasing, the amount of interest payable may be difficult to observe and must therefore be estimated.

14. In NACE rev. 1, financiers of hire purchase contracts are classified in class 65.22 'Other credit granting'. Hire purchase corporations are classified in institutional sub-sector S.123 'Other financial intermediaries except insurance corporations and pension funds', but financiers of hire purchase contracts may also be encountered in sector S.14 'Households'.

If the purchaser is non-resident while the financier is resident, the good is treated as if exported (P.61) when the purchaser takes possession of it. In this case, the financier provides a non-resident unit (the purchaser) with a loan (F.4/AF.4). If the purchaser is a resident unit while the financier is not, the good is recorded as imported ((P.71) when delivered to the purchaser, who at the same time obtains a loan (F.4/AF.4) from the non-resident financier. Repayments of principal (F.4) and interest payments (D.41) are treated in the same way as for financial leasing involving non-resident units.

For further detail see chapter 3., paragraph 3.63.

# ANNEX III INSURANCE

#### INTRODUCTION

1. There are two main types of insurance: social insurance and other insurance.

Social insurance may be subdivided into

- a) social security schemes of government,
- b) private funded social insurance schemes, and
- c) unfunded social insurance schemes operated by employers.

Other insurance may be subdivided into

- a) other life insurance, and
- b) other non-life insurance.

Reinsurance and insurance auxiliaries are treated in separate sections of this annex. These topics relate mainly to other insurance, but they may also relate to social insurance.

#### **DEFINITIONS**

#### Social insurance

- 2. Social insurance schemes are schemes in which social contributions are paid by employees or other individuals, or by employers on behalf of their employees, in order to secure entitlement to social insurance benefits for the employees or other contributors, their dependents or survivors. Social insurance schemes cover social risks or needs<sup>1</sup>. Unlike social assistance benefits, social insurance benefits are conditional on participation in a scheme.
- 3. Social insurance schemes are often organised collectively so that those participating do not have to take out individual insurance policies in their own names. However, some social insurance schemes may permit, or even require, participants to take out policies in their own names. Individual policies are treated as part of a social insurance scheme if they cover social risks or needs and if at least one of the following three conditions is satisfied:

- a) participation in the scheme is compulsory either by law or by the conditions of employment,
- b) the scheme is operated on behalf of a group and restricted to group members, or
- c) an employer makes a contribution to the scheme on behalf of an employee.

#### Social security schemes of government

These schemes are imposed, controlled and financed by government units and cover the entire community, or large sections of the community. Social security schemes of government may be funded or unfunded. When separate funds can be identified, they remain the property of the government and not of the beneficiaries of the schemes. Social security schemes' receipts consist mainly of contributions paid by individuals and by employers on behalf of their employees, but they may also include transfers from other government units. Participation in social security schemes is usually, though not always, compulsory. The benefits paid to individuals are not necessarily determined by the amounts previously paid in contributions.

It should be noted that social insurance schemes organised by government units for their own employees are not classified as social security schemes, but as private funded or unfunded social insurance schemes.

#### Private funded social insurance schemes

There are two categories of such schemes. The first consists of schemes in which the social contributions are paid to insurance enterprises or autonomous pension funds that are separate institutional units from both the employers and the employees. The insurance enterprises or autonomous pension funds are responsible for managing the resulting funds and paying the social benefits. The second category consists of schemes in which employers maintain special reserves to defray social benefits. These reserves are segregated from their other reserves, but they do not constitute separate institutional units from the employers and are referred to as non-autonomous pension funds.

<sup>1</sup> See chapter 4., paragraphs 4.83. - 4.86., for a definition of social risks or needs.



# Unfunded social insurance schemes operated by employers

6. These are schemes in which employers pay social benefits to their employees, former employees or their dependents out of their own resources without creating special reserves for the purpose.

#### Other insurance

7. Other insurance provides individual institutional units exposed to certain risks with financial protection against the consequences of the occurrence of specified events. It is also a form of financial intermediation in which funds are collected from policy holders and invested in financial or other assets which are held as technical reserves to meet future claims arising from the occurrence of the events specified in the insurance policies.

Other insurance policies held by households may cover the same risks or needs as those covered by social insurance schemes. However, other insurance policies held by households are distinguished from social insurance policies by the fact that they are taken out on the individual households' own initiative and for their own benefit, independently of their employers or government.

#### Other life insurance

Holders of other life insurance policies are exclusively households, resident or non-resident. The policy holder makes regular payments to an insurer in return for which the insurer guarantees to provide a benefit at a given date or earlier if the policy holder dies beforehand. If the policy holder cancels the policy before the agreed expiration date, the policy holder is entitled to a partial benefit from the insurer. A benefit is thus always paid to the policy holder or his survivors. Policies that provide a benefit in the case of death within a given period but in no other circumstances, usually called term insurance, are not regarded as other life insurance, but as other non-life insurance. In practice, because of the way in which insurance corporations keep their accounts, it may not always be possible to separate term insurance from other life insurance. In these circumstances, term insurance may have to be treated in the same way as life insurance for purely practical reasons.

A life insurance claim may be paid as a lump sum or as an annuity. The claim may be fixed or may vary to reflect the income earned from the investment of premiums during the period for which the policy operates ('with-profit' policies). A special kind of with-profit policy is

a unit-linked policy, where the claim varies according to the value of a segregated fund.

#### Other non-life insurance

All kinds of institutional units may be holders of other non-life insurance policies. Other non-life insurance includes term insurance and insurance against every risk other than death, e.g. accidents, sickness or fire. Claims are usually paid as lump sums, but may also be paid as annuities. A claim is not always paid in respect of an other non-life insurance policy. Typically the number of claimants is much smaller than the number of policy holders. For an individual policy holder there is no relationship between the premiums paid and the claims received, even in the long run.

#### Reinsurance

 An insurance enterprise undertaking insurance with policy holders often transfers some of the risks incurred to other insurance enterprises. These transactions between insurance enterprises are called reinsurance.

> Both life and non-life insurers are involved in reinsurance transactions. Insurance enterprises that accept reinsurance may engage in both reinsurance and insurance with policy holders, or they may be specialist reinsurers.

#### Insurance auxiliaries

- 11. Insurance auxiliaries are units that engage primarily in activities closely related to insurance but which do not themselves incur risks. Insurance auxiliaries include in particular:
  - a) insurance brokers;
  - b) private non-profit institutions serving insurance enterprises and pension funds;
  - units whose main activity is to act as supervisory authorities of insurance enterprises and pension funds and of insurance markets.

#### TREATMENT IN THE ACCOUNTS

12. For ease of exposition, the following description of the different types of insurance concentrates on cases where only resident units are involved. At the end of each section, special features for cases involving non-resident units are considered.



#### Social insurance

#### Social security schemes of government

13. The output produced by those employed in managing these schemes is part of government output, valued at the cost of production. Consequently, no service charge is calculated for social security schemes of government.

> Employers' contributions to social security schemes of government (D.121) are treated as part of compensation of employees, shown as payable by the employer's sector in the generation of income account and receivable by the household sector in the allocation of primary income account. Employers' contributions reappear in the secondary distribution of income account as part of employers' actual social contributions (D.6111), payable by the household sector and receivable by government. Employees' contributions (D.6112) and contributions by self-employed and non-employed persons (D.6113) are also recorded in the secondary distribution of income account as payable by the household sector and receivable by government. Social security benefits in cash (D.621) are shown in the secondary distribution of income account as payable by government and receivable by households, while social security benefits in kind are shown as item D.6311 and D.6312, payable by government and receivable by households in the redistribution of income in kind account.

14. The units managing social security schemes of government are classified in sub-sector S.1314 'Social security funds'. The activity classification according to NACE rev. 1 is class 75.30 'Compulsory social security activities'.

When a resident works for a non-resident employer, the employer's contributions are shown as payable by the rest of the world in the external account of primary incomes and current transfers. If the employee also participates in a social security scheme run by a non-resident government, all receivables and payables normally concerning the government sector are receivable or payable by the rest of the world, recorded in the external account of primary incomes and current transfers. However, in the ESA social transfers in kind occur only between resident units. Any benefits from non-resident social security schemes to residents are therefore by definition social benefits other than social transfers in kind (D.62).

When a non-resident works for a resident employer, the employer's contributions are recorded as receivable by the rest of the world in the external account of primary incomes and current transfers. If the non-resident employee is covered by a resident social security scheme, the transactions between the employee and

the government sector are recorded in the external account of primary incomes and current transfers. By definition, any benefits to non-resident employees are social benefits other than social transfers in kind (D.62).

An example of the flows recorded for social security schemes of government is shown in Table A.III.1.

#### Private funded social insurance schemes

15. Schemes financed by autonomous funds are treated differently from schemes financed by non-autonomous funds. For autonomous funds, a service charge is calculated as

total actual contributions earned total contribution supplements

(A)

less benefits due

plus

less increases (plus decreases) in pension fund reserves.

16. All four items are recorded exclusive of holding gains or losses. Total contribution supplements are identical to property income attributed to policy holders, which is income earned by private social insurance funds by investing their technical and pension reserves. The ESA regards these reserves as owned by the policy holders, who therefore receive the income generated by these reserves. The service charge is recorded as output (P.1) for the autonomous funds and as final consumption expenditure (P.3) for the household sector.

For non-autonomous funds no service charge is calculated. The costs of managing these funds are included with the other elements of costs in the employers' production account.

The remaining transactions apply to both au-17. tonomous and non-autonomous funds. Employers' actual contributions (D.121) are shown as part of compensation of employees, payable by the employer's sector in the generation of income account and receivable by employee households in the allocation of primary income account. The employer's sector may be any institutional sector, including general government and households (as employers). Property income attributed to policy holders (part of D.4) is shown in the allocation of primary income account as payable by the fund's sector and receivable by the household sector. Resident autonomous funds are located in the insurance enterprises and pension funds sub-sector (S.125). Non-autonomous funds obviously belong to the same sector as the employer in question. NACE rev. 1 classifies the activity of pension funds in class 66.02 'Pension funding'.



- 18. Employers' actual contributions are recorded again in the secondary distribution of income account as part of D.6111; payable by households and receivable by the fund's sector. Employees' contributions (D.6112) and contributions by self-employed and non-employed persons (D.6113) are also recorded in the secondary distribution of income account as payable by the household sector and receivable by the fund's sector. The contributions made by employees and by self-employed and non-employed persons equal the direct payments made plus property income attributed to policy holders less service charge (this last being zero for non-autonomous funds). Private funded social benefits, including pensions, are shown in the secondary distribution of income account as payable by funds and receivable by households. By definition, all private funded social benefits are part of D.62, social benefits other than social transfers in kind.
- 19. The entry in the financial account contains two elements:
  - a) prepayments of insurance premiums and reserves for outstanding claims (F.62), which comprise any difference between contributions payable and contributions earned and between benefits due and benefits payable<sup>2</sup>. By convention this element is shown as a change (negative if necessary) in funds' liabilities and households' assets.
  - b) net equity of households in pension funds reserves (F.612), also shown as a change (negative if necessary) in funds' liabilities and households' reserves. This element equals employers' and employees' contributions in respect of pensions, as recorded in the secondary distribution of income account, less pensions payable.
- 20. As a consequence of the entry in the financial account, F.612 and F.62 appear in the balance sheets of the household sector (as an asset) and the fund's sector (as a liability).

In the use of disposable income account, an adjustment for change in net equity of households in pension funds reserves (D.8) is recorded as receivable by households and payable by funds. This entry equals the second element of the entry in the financial account.

Employers and general government occasionally make extraordinary payments to private social insurance funds in order to increase the reserves of these funds. Such payments are

- recorded in the capital account as other capital transfers (D.99), payable by the employer's sector or the government sector and receivable by the fund's sector. As social insurance funds' reserves are treated as if owned by the household sector, an accompanying adjustment between the fund's sector and the household sector is required. This adjustment is recorded as other capital transfers (D.99), payable by the fund's sector and receivable by the household sector.
- If a resident employee works for a non-resident 21. employer, the employer's actual contributions (D.121) are recorded as part of compensation of employees, payable by the rest of the world and receivable by households. When the employer is non-resident, any non-autonomous social insurance fund will also be non-resident, while an autonomous fund may be resident or non-resident. If the employee is covered by a non-resident fund, all flows between the household sector and the fund's sector are shown as transactions between the household sector and the rest of the world. The service charge (in the case of autonomous, non-resident funds) is shown as imports of services (P.72). The change in net equity of insurance technical reserves (F.6) is shown in the financial account of the rest of the world, while the remaining flows are shown in the external account of primary incomes and current transfers.
- 22. If a non-resident employee works for a resident employer, the employer's actual contributions (D.121) are part of compensation of employees, payable by the employer's sector and receivable by the rest of the world. If the non-resident employee is covered by a resident social insurance fund, any service charge is recorded as exports of services (P.62). All other flows between fund and employee are shown as between the fund's sector and the rest of the world.

Especially when non-resident units are involved, all the requisite data are not always available. The calculations of some of the items to be recorded sometimes have to be based on assumptions.

An example of the flows recorded for private funded social insurance schemes is shown in Table A.III.2.

Actual contributions earned, which cover risks incurred during the current period, usually differ from actual contributions payable. The latter often cover risks in both the current and subsequent periods. Similarly, benefits due are not always equal to benefits payable. Benefits due to an even occurring in one accounting period may not become payable until a later period.



# Unfunded social insurance schemes operated by employers

23. Similarly to schemes financed by non-autonomous funds, the costs of managing unfunded social insurance schemes are included with the other elements of costs on the employer's production account. Thus, no service charge is calculated.

As unfunded social insurance schemes do not form separate institutional units from the employers operating them, all transactions are between the employer's sector and the household sector.

- 24. The ESA regards an employer operating an unfunded scheme as making an imputed contribution to the scheme on behalf of his employees. This imputed social contribution (D.122) is part of compensation of employees and is shown as payable by the employer in the generation of income account and receivable by households in the allocation of primary income account. The employer's imputed contribution is shown again in the secondary distribution of income account as item D.612, payable by households and receivable by the employer. The amount of this contribution should be determined by reference to the employer's future obligations to provide benefits. In practice, however, the contribution is usually set equal to benefits payable in the current period (less employees' social contributions).
- 25. Actual contributions by employees, if any, are shown as part of D.6112, payable by households and receivable by the employer's sector. The secondary distribution of income account also shows pensions and other benefits as part of D.62, receivable by households and payable by the employer.

Unfunded social insurance schemes obviously belong to the same institutional sector as the employer in question. NACE rev. 1 regards them as an ancillary activity.

26. If a resident works for a non-resident employer operating an unfunded social insurance scheme, all transactions are between the household sector and the rest of the world, recorded in the external account of primary incomes and current transfers. If a non-resident works for a resident employer operating such a scheme, all transactions are between the rest of the world and the employer's sector, shown in the external account of primary incomes and current transfers.

An example of the flows recorded for unfunded social insurance schemes operated by employers is shown in Table A.III.3.

#### Other insurance

27. The output of other insurance services, both life and non-life, is calculated as:

actual premiums earned

plus premium supplements

(B)

less claims due

less increases (plus decreases) in technical provisions against outstanding risks and technical provisions for withprofits insurance

28. Actual premiums earned are the actual premiums that cover the risks incurred during the current period. Actual premiums earned are usually not equal to actual premiums receivable, as the latter often cover risks incurring in both the current and subsequent periods.

Premium supplements are identical to property income attributed to policy holders, which is the entire income earned by insurance enterprises by investing their insurance technical reserves, excluding any income from insurance enterprises' own funds. Insurance technical reserves contain two elements: (a) prepayments of insurance premiums and reserves for outstanding claims, arising from the difference between premiums earned and premiums receivable and between claims payable and claims due, and (b) technical provisions against outstanding risks and technical provisions for with-profits insurance. The latter element applies only to life insurance. Insurance technical reserves are usually invested in financial assets which yield income in the form of interest or dividends. However, these reserves may also be invested in real estate, for example, in which case income is earned as operating surplus.

29. Claims due cover events that occur within the current period. Frequently, claims do not become payable until a later period than when the event giving rise to them occurred. Claims due are therefore not equal to claims payable.

Changes in technical provisions against outstanding risks and technical provisions for with-profits insurance consist of allocations to technical provisions against outstanding risks and provisions for with-profits insurance policies to build up the capital sums guaranteed under these policies. These provisions relate to life insurance only.

All four items in equation (B) should be measured excluding holding gains and losses.



#### Other life insurance

- Total output of other life insurance is calculated according to equation (B) and shown as item P.1 in the production account of the insurance enterprises and pension funds sub-sector. Unless consumed by non-resident households, the output of other life insurance is entirely used as final consumption by resident households. The output of life insurance services should be distributed between the household sector and the rest of the world in proportion to premiums payable by resident and non-resident households. Life insurance services consumed by residents are shown as part of households' final consumption expenditure (P.3), while services consumed by non-residents are part of exports of services (P.62).
- Two further transactions are recorded for other 31. life insurance. In the allocation of primary income account, property income attributed to policy holders (part of D.4) is shown as payable by the insurance enterprises' sector and receivable by households. In the financial account, the item net equity of households in life insurance reserves is shown as a change (negative if necessary) in households' assets and life insurance enterprises' liabilities. The change in the net equity of households is due to changes in life insurance reserves that is technical provisions against outstanding risks and technical provisions for with-profits insurance (F.611). The change in net equity therefore equals actual premiums payable (not earned) plus premium supplements less claims receivable (not due) and less service charge.
- 32. Because of this entry in the financial account, E.611 is also shown in the balance sheets of the household sector (as an asset) and the insurer's sector (as a liability).

As with the service charge, property income attributed to policy holders (= premium supplements) should be distributed between the household sector and the rest of the world in proportion to premiums.

Institutionally, life insurance enterprises are classified in S.125 'Insurance corporations and pension funds'. The activity classification according to NACE rev. 1 is class 66.01 'Life insurance'.

When a resident life insurance enterprise provides services to non-resident households, the service charge is recorded as exports of services (P.62). Property income attributed to policy holders is shown as payable by the insurance sector and receivable by the rest of the world in the external account of primary incomes and current transfers. The change in net equity of non-resident households on life insurance

reserves is shown in the financial account of the rest of the world as a change in the rest of the world's assets and the insurance sector's liabilities.

When resident households purchase cover from non-resident life insurers, the procedure is in principle straightforward: the service charge is recorded as imports of services (P.72), attributed property income is shown in the external account of primary incomes and current transfers as payable by the rest of the world and receivable by households, and change in net equity is shown as a change in households' assets and the rest of the world's liabilities. However, the data required to calculate these items are normally not available; usually only premiums payable are known. Assumptions are therefore necessary, e.g. applying the ratios of service charge to premiums and attributed property income to premiums for resident life insurers to the premiums paid by resident households to non-resident life insurers.

An example of the flows recorded for other life insurance is shown in Table A.III.4.

#### Other non-life insurance

34. The output (P.1) of other non-life insurance enterprises is calculated according to equation (B) and shown in the production account of the insurance enterprises and pension funds subsector. Non-life insurance services may be used as intermediate consumption (P.2) by any resident sector, as final consumption by the household sector when they are part of households' final consumption expenditure (P.3), or as exports (P.62). Non-life insurance services used as intermediate consumption should be broken down by industry.

Equation (B) should be used to estimate the total value of non-life insurance output. The output should then be distributed among user sectors and industries in proportion to actual premiums payable by each sector. Whereas all resident sectors except households use non-life insurance services for intermediate consumption only, the household sector uses them for both final and intermediate consumption. Households' use of non-life insurance services should be broken down into intermediate and final consumption in proportion to actual premiums payable. Premiums clearly associated with the productive activity of unincorporated enterprises should be regarded as related to intermediate consumption, while the remaining premiums paid by households should be considered as being related to final consumption.



- In the allocation of primary income account, property income attributed to policy holders is recorded as part of D.4, payable by the insurance sector and receivable by the policy holder sectors. Ideally, property income attributed to policy holders should be distributed among sectors in proportion to the reserves attributed to each policy holder sector, but this is hardly feasible in practice. Property income attributed to policy holders should therefore be distributed in proportion to actual premiums paid by each policy holder sector.
- In the secondary distribution of income account net premiums earned are shown as payable by all policy holder sectors and receivable by the insurance sector. Net premiums earned are calculated as actual premiums earned plus property income attributed to policy holders less the value of services consumed. By equation (B), net premiums earned equal claims due<sup>3</sup>. The secondary distribution of income account also shows claims due as payable by the insurance sector and receivable by all policy holder sectors. Both net premiums earned and claims due are part of item D.7, Other current transfers.

Some claims arise because of damage or injuries that the policy holder causes to the property or persons of third parties. In such cases, valid claims are recorded as being payable directly by the insurance enterprise to the injured parties and not indirectly via the policy holder.

37. In the financial account, net equity of policy holders on non-life insurance reserves is shown as a change in assets of policy holder sectors and a change in liabilities of the insurance sector. The change in net equity, classified as F.62, is due to prepayments of premiums and reserves for outstanding claims. F.62 also appears as a liability in the non-life insurer's balance sheet and an asset in policy holders' balance sheets.

Non-life insurance enterprises belong to NACE rev. 1 class 66.03, 'Non-life insurance'. Their institutional sector is S.125, 'Insurance corporations and pension funds'.

38. When non-resident units purchase cover from resident non-life insurers, the service charge is shown as exports of services ((P.62). Property income attributed to policy holders, net premiums earned and claims due are all recorded in the external account of primary incomes and

current transfers, while net equity of policy holders on non-life insurance reserves is shown in the financial account of the rest of the world. In this case, the calculations for the rest of the world are no more difficult than those for any resident policy holder sector.

When resident units are insured by non-resident non-life insurers, the data situation is far more difficult; only data on premiums payable and claims receivable are normally available. A simplified method, ignoring non-life insurance reserves and their subsequent property income, is therefore used: The service charge, which is recorded as imports of services (P.72), is calculated as premiums payable less claims receivable<sup>4</sup>. Net premiums payable are calculated as premiums payable less service charge, thus equalling claims receivable. Both net premiums payable and claims receivable are shown in the external account of primary incomes and current transfers.

An example of the flows recorded for other non-life insurance is shown in Table A.III.5.

#### Reinsurance

39. The ESA records reinsurance transactions in a simpler way than direct insurance transactions (the latter meaning transactions between insurance enterprises and ordinary policy holders). Instead of showing the flows involved (premiums earned, claims due, commissions, etc.) separately, reinsurance transactions are simply shown as a service delivered from reinsurer to direct insurer. The value of this service is measured as the balance of all flows occurring between reinsurer and direct insurer.

For resident life and non-life insurance enterprises, reinsurance services produced are shown as output (P.1), while reinsurance services received are shown as intermediate consumption (P.2). Reinsurance services delivered from resident reinsurers to non-resident insurers are shown as exports of services (P.62), while services delivered from non-resident reinsurers to resident insurers are recorded as imports of services (P.72).

40. For resident insurance enterprises data on output and intermediate consumption of reinsurance services can be obtained from insurance statistics. Calculating imports and exports of reinsurance services may be more difficult, depending mainly on the availability and quality of balance of payments statistics. How-

<sup>3</sup> Claims due mean the amounts due to be transferred to claimants. Claims due are thus not the same as "claims incurred" in insurance enterprises' accounts, as the latter also include claims management expenses, which in the national accounts are part of either intermediate consumption or compensation of employees.

<sup>4</sup> If available, premiums earned and claims due should be used rather than premiums payable and claims receivable.



ever, the external balance of reinsurance services can easily be derived from insurance statistics.

Reinsurance transactions between resident insurance enterprises are often consolidated. However, in order to be in accordance with the EC insurance directives, the ESA recommends reinsurance services to be recorded without consolidation. Whether or not reinsurance services between residents are consolidated affects the level of output of insurance services, but balancing items such as value added, operating surplus and saving are not affected.

#### Insurance auxiliaries

41. The output of auxiliary insurance services is valued on the basis of the fees or commissions charged. In the case of non-profit institutions operating as business associations for insurance enterprises and pension funds, their output is valued by the amounts of subscriptions paid by the members of the associations. This output is used as intermediate consumption by the members of the associations.

Institutional units principally engaged in auxiliary insurance activities are classified in S.124, 'Financial auxiliaries'. The activity classification according to NACE rev. 1 is class 67.20, 'Activities auxiliary to insurance and pension funding'.



# INSURANCE: NUMERICAL EXAMPLE

# A.III.1 Social security schemes of Government

				Uses											Resour	ces		
	Correspo	onding	5.1	5.15	S.14	5.13	5.12	5.11			5.11	5.12	5.13	5.14	S.15	5.1	Corresponding	
	entries							Non-			Non-						Corresponding entries of the	
	Goods	Rest					Finan	- finan			finan-	Finan-					Rest Goods	
	and	of the	Total			General	cial	cial			cial	cial	Genera	1		Total	of the and	
	services	world	eco-		House-	govern-	corpo	- corpo	-		corpo-	corpo-	govern-	House	-	eco-	world services	
Total	account a	ccount	nomy	NPISHS	holds	ment	ration	s ration	5	Transactions and balancing items	rations	rations	ment	holds	NPISH	nomy	account account	Total
										Generation of income account								
155		0	155	8	0	45		4 98	D.121	Employers' actual social contributions								
										Distribution of primary income account								
									D.121	Employers' actual social contributions				155		155	0	155
										Secondary distribution of income account								
155		0	155		155					Employers' actual social contributions			155	i		155	0	155
76		0	76		76				D.6112	Employees' social contributions			76	i .		76	0	76
32			32		32				D.6113	Social contributions by self-employed and non-employed persons			32	2		32	0	32
232		0	232			232			D.621	Social security benefits in cash				232		232	0	232
										Redistribution of income in kind account								
78			78			78			D.6311	Social security benefits in kind, reimbursements				78		78		78
65			65			65			D.6312	Other social security benefits in kind				65		65		65

# A.III.2 Private funded social insurance schemes

			Uses											Resour	ces			
	Corresponding entries of the Goods Rest	S.1	S.15	5.14	S.13	S.12 Finan-	Non- finan-			S.11 Non- finan-	S.12 Finan-	5.13	S.14	S.15	S.1	entries Rest	oonding s of the Goods	
	and of the	Total			Genera		cial			cial	cial	General			Total	of the	and	
Total	services world account account	eco- nomy	NPISH	House- s holds	govern- ment	corpo- rations			Transactions and balancing items			govern- ment		NPISHs	eco- nomy	world account		Tota
									External account									
0	0							P.6	Exports of goods and services								0	
0	0							P.7	Imports of goods and services							0		
									Production account									
3	3							P.1	Output		3				3			
									Generation of income account									
19	0	19	) 2		) 3	0	14	D.121	Employers' actual social contributions to private funded schemes									
									Allocation of primary income account									
								D,121	Employers' actual social contributions to private funded schemes				19		19	0		3
12	0	12	2			12		D.44	Property income attributable to insurance policy holders				12		12	0		1
									Secondary distribution of income account									
19	0	19	)	19	)			D.121	Employers' actual social contributions to private funded schemes	1	18	0	0	0	19	0		1
21	0	21		21				D.6112	Employees' net social contributions	1	20	0	0	0	21	0		2
29	0	29	) (	) (	) (	28	1	D.622	Private funded benefits				29		29	0		2
									Use of disposable income account									
3		.3	}	3	1			P.3	Final consumption expenditure								3	
11	0	11	C	)	(	) 10	1	D.8	Adjustment for the change in net equity of households in pension funds reserves				11		11	0		1
									Financial account									
11		11		11				F.612	Net equity of households in pension funds reserves	1	10	0		0	11	0		1
1		1		1				F.62	Prepayments of insurance premiums and reserves for outstanding claims		1				1			



# A.III.3 Unfunded schemes operated by employers

			Uses											Resour	ces		
		5.1	S.15	5.14	5.13	5.12	S.11			5.11	S.12	5.13	5.14	S.15	S.1		
	Corresponding															Correspond	ing
	entries of the						Non-			Non-						entries of th	1C
	Goods Rest					Finan-	finan-			finan-	Finan-					Rest Goo	ods
	and of the	Total			General	cial	cial			cial	cial	General			Total	of the an	d
	services world	eco-		House-	govern-	corpo-	corpo-			corpo-	corpo-	govern-	House-		eco-	world servi	ces
otal	account account	nomy	NPISH:	holds	ment	rations	rations		Transactions and balancing items	rations	rations	ment	holds	NPISHs	nomy	account acco	unt Total
									Generation of income account								
19	0	19	1	()	5	1	12	D.122	Employers, imputed social contributions								
									Distribution of primary income account								
								D.122	Employers, imputed social contributions				19		19	0	19
									Secondary distribution of income account								
19	0	19		19				D.612	Imputed social contributions	12	1	5	0	1	19	0	19
19	0	19	1	0	5	1	12	D.623	Unfunded employee social benefits				19		19	0	10

# A.III.4 Other life insurance

				Uses											Resourc	es			
	Corres	oonding	S.1	S.15	S.14	S.13	5.12	5.11			5,11	S.12	5.13	5.14	S.15	5.1	Corres	ponding	
		of the						Non-			Non-							s of the	
	Goods	Rest					Finan-	finan-			finan-	Finan-					Rest	Goods	
	and	of the	Total			General	cial	cial			cial	cial	General			Total	of the	and	
	services	world	eco-		House-	govern-	corpo-	corpo-			corpo-	corpo-	govern-	House-		eco-	world	services	
otal	account	account	nomy	NPISH5			rations			Transactions and balancing items	rations	rations	ment	holds	NPISHs	nomy	account	account	Tota
										External account									
0		0							P.6	Exports of goods and services								0	
0	0								P.7	Imports of goods and services							0		
										Production account									
4	4								P.1	Output		4				4			
										Distribution of primary income account									
7			7	,			7		D.44	Property income attributable to insurance				7		7	0		
										policyholders									
										Use of disposable income account									
4		0	- 4	1	-	1			P.3	Final consumption expenditure								4	
										Financial account									
		0	22	2	22	2			F.611	Net equity of households in life insurance		22				22	0		2
22										reserves									

# A.III.5 Other non-life insurance

				Uses											Resour	ces			
	Corres	ponding	5.1	5.15	5.14	5.13	5.12	S.11			S.11	5.12	S.13	S.14	S.15	5.1	Corres	ponding	
		s of the						Non-			Non-							s of the	
	Goods	Rest					Finan	- finan-			finan-	Finan-					Rest	Goods	
	and	of the	Total			General	cial	cial			cial	cial	General			Total	of the	and	
	services	world	eco-			govern-	corpo	- corpo			corpo-	corpo-	govern-	House-		eco-	world	services	
Total	account	account	nomy	NPISH	holds	ment	ration	s rations		Transactions and balancing items	rations	rations	ment	holds	NPISHs	nomy	account	account	Total
										External account									
0		0							P.6	Exports of goods and services								0	(
0	0								P.7	Imports of goods and services							0		(
										Production account									
6	6								P.1	Output		6				6			(
4		0	4	0	3	3 0	) (	0 1	P.2	Intermediate consumption								4	4
										Distribution of primary income account									
									D.44	Property income attributable to insurance									
6			6					5		policy holders	5	0	0	1	0	6	0		(
										Secondary distribution of income account									
45		2	43	0	31	1 4		8 0	D.71	Net non-life insurance premiums		45				45			4
45		0	45	i -			4	5	D.72	Non-life insurance claims	6	0	1	35	0	42	3		45
										Use of disposable income account									
2			2	!	2	2			P.3	Final consumption expenditure								2	2
										Financial account									
2		0	2	. 0	2	2 0	)	0 0	F.62	Prepayments of insurance premiums and		2				2			2
										reserves for outstanding claims									

# ANNEX IV CLASSIFICATIONS AND ACCOUNTS

# **CLASSIFICATIONS**

S.1	Total economy
5.11	Nonfinancial corporations
S.11001 S.11002 S.11003	Public non-financial corporations  National private non-financial corporations  Foreign controlled non-financial corporations
5.12	Financial corporations
S.121 S.122 S.12201 S.12202 S.12203 S.12303 S.12302 S.12303 S.124 S.12401 S.12402 S.12403 S.125 S.12501 S.12502 S.12503	The central bank Other monetary financial institutions Public National private Foreign controlled Other financial intermediaries, except insurance corporations and pension funds Public National private Foreign controlled Financial auxiliaries Public National private Foreign controlled Insurance corporations and pension funds Public National private Foreign controlled Insurance corporations and pension funds Public National private Foreign controlled
S.13	General government
S.1311 S.1312 S.1313 S.1314	Central government State government Local government Social security funds
S.14	Households
S.141 + S.142 S.143 S.1441 S.1442 S.1443 S.145	Employers (including own-account workers) Employees Recipients of property income Recipients of pensions Recipients of other transfer incomes Other households
S.15	Nonprofit institutions serving households
S.2	Rest of the world
S.21 S.211 S.212 S.22	The European Union The Member states of the EU The institutions of the EU Non-member countries and international organisations



# Classification of transactions and other flows

# Transactions in products (goods and services) (P)

P.1	Output
P.11	Market output
P.119	Financial intermediation services indirectly measured (FISIM)
P.12 P.13	Output for own final use Other non-market output
P.2	Intermediate consumption
P.3	Final consumption expenditure
P.31 P.32	Individual consumption expenditure Collective consumption expenditure
P.4	Actual final consumption
P.41 P.42	Actual individual consumption Actual collective consumption
P.5	Gross capital formation
R51 R511 R5111 R5112 R5113 R512 R5121 R5122 R5123 R5133 R5131 R5132 R52 R53	Gross fixed capital formation Acquisitions less disposals of tangible fixed assets Acquisitions of new tangible fixed assets Acquisitions of existing tangible fixed assets Disposals of existing tangible fixed assets Acquisitions less disposals of intangible fixed assets Acquisitions of new intangible fixed assets Acquisitions of existing intangible fixed assets Disposals of existing intangible fixed assets Addition to the value of non-produced non-financial assets Major improvements to non-produced non-financial assets Costs of ownership transfer on non-produced non-financial assets Changes in inventories Acquisitions less disposals of valuables
P.6	Exports of goods and services
P.61 P.62	Exports of goods Exports of services
P.7	Imports of goods and services
P.71 P.72	Imports of goods Imports of services

# Distributive transactions (D)

D.1	Compensation of employees
D.11 D.12 D.121 D.122	Wages and salaries Employers' social contributions Employers' actual social contributions Employers' imputed social contributions
D.2	Taxes on production and imports
D.21 D.211 D.212 D.2121	Taxes on products Value added type taxes (VAT) Taxes and duties on imports excluding VAT Import duties



D.2122 D.214 D.29	Taxes on imports excluding VAT and import duties Taxes on products, except VAT and import taxes Other taxes on production
D.3	Subsidies
D.31	Subsidies on products
D.311	Import subsidies
D.319	Other subsidies on products
D.39	Other subsidies on production
D.4	Property income
D.41	Interest
D.42	Distributed income of corporations
D.421	Dividends
D.422	Withdrawals from income of quasi-corporations
D.43	Reinvested earnings on direct foreign investment
D.44	Property income attributed to insurance policy holders
D.45	Rents
D.5	Current taxes on income, wealth, etc.
D.51	Taxes on income
D.59	Other current taxes
D.6	Social contributions and benefits
D.61	Social contributions
D.611	Actual social contributions
D.6111	Employers' actual social contributions
D.61111	Compulsory employers' actual social contributions
D.61112	Voluntary employers' actual social contributions
D.6112	Employees' social contributions
D.61121	Compulsory employees' social contributions
D.61122 D.6113	Voluntary employees' social contributions Social contributions by self- and non-employed persons
D.61131	Compulsory social contributions by self- and non-employed persons
D.61132	Voluntary social contributions by self- and non-employed persons
D.612	Imputed social contributions
D.62	Social benefits other than social transfers in kind
D.621	Social security benefits in cash
D.622	Private funded social benefits
D.623	Unfunded employee social benefits
D.624	Social assistance benefits in cash
D.63	Social transfers in kind
D.631	Social benefits in kind
D.6311	Social security benefits, reimbursements
D.6312	Other social security benefits in kind
D.6313 D.632	Social assistance benefits in kind Transfers of individual non-market goods and services
D.7	Other current transfers
D.71	Net non-life insurance premiums
D.72	Non-life insurance claims
D.73 D.74	Current transfers within general government
D.74 D.75	Current international cooperation  Miscellaneous current transfers
0,73	Miscellaneous current transfers



D.8	Adjustment for the change in net equity of households in pension funds reserves
D.9	Capital transfers
D.91	Capital taxes
D.92	Investment grants
D.99	Other capital transfers

#### Transactions in financial instruments (F)

(Net acquisition of financial assets/net incurrence of liabilities)

F.1	Monetary gold and special drawing rights (SDRs)
F.11 F.12	Monetary gold Special drawing rights (SDRs)
F.2	Currency and deposits
F.21 F.22 F.29	Currency Transferable deposits Other deposits
F.3	Securities other than shares
F.33 F.331 F.332 F.34	Securities other than shares, excluding financial derivatives Short-term - Securities other than shares, excluding financial derivatives Long-term - Securities other than shares, excluding financial derivatives Financial derivatives
F.4	Loansa
F.41 F.42	Short-term - Loans Long-term - Loans
F.5	Shares and other equity <sup>a</sup>
E.51 E.511 E.512 E.513 E.52	Shares and other equity, excluding mutual funds shares Quoted shares Unquoted shares Other equity Mutual funds shares
F.6	Insurance technical reserves
F.61 F.611 F.612 F.62	Net equity of households in life insurance reserves and in pension funds reserves Net equity of households in life insurance reserves Net equity of households in pension funds reserves Prepayments of insurance premiums and reserves for outstanding claims
F.7	Other accounts receivable/payablea
F.71 F.79	Trade credits and advances Other accounts receivable/payable, except trade credits and advances

# Other accumulation entries (K)

K.1	Consumption of fixed capital	
K.2	Acquisitions less disposals of non-financial non-produced assets	
K.21	Acquisitions less disposals of land and other tangible non-produced assets	
K.211	Acquisitions of land and other tangible non-produced assets	
K.212	Disposals of land and other tangible non-produced assets	
K.22	Acquisitions less disposals of intangible non-produced assets	

a Memo item: F.m Direct foreign investment



K.221	Acquisitions of intangible non-produced assets	
K.222	Disposals of intangible non-produced assets	
K.3	Economic appearance of non-produced assets	
K.4	Economic appearance of produced assets	
K.5	Natural growth of non-cultivated biological resources	
K.6	Economic disappearance of non-produced assets	
K.61 K.62	Depletion of natural economic assets Other economic disappearance of non-produced assets	
K.7	Catastrophic losses	
K.8	Uncompensated seizures	
K.9	Other volume changes in non-financial assets n.e.c.	
K.10	Other volume changes in financial assets and liabilities n.e.c.	
K.11	Nominal holding gains/losses	
K.11.1 K.11.2	Neutral holding gains/losses Real holding gains/losses	
K.12	Changes in classifications and structure	
K.12.1 K.12.2 K.12.21 K.12.22	Changes in sector classification and structure Changes in classification of assets and liabilities Monetisation/demonetisation of gold Changes in classification of assets or liabilities other than monetisation/demonetisation of gold	



B.8

B.90

# B.1 Value added / B.1\* Domestic product B.2 Operating surplus B.3 Mixed income B.4 Entrepreneurial income B.5 Balance of primary incomes/ B.5\* National income B.6 Disposable income B.7 Adjusted disposable income

Net lending/net borrowing
Changes in net worth
Changes in net worth due to saving and capital transfers <sup>c d</sup>

B.10.2 Changes in net worth due to other changes in volume of assets
B.10.3 Changes in net worth due to nominal holding gains/losses
B.10.31 Changes in net worth due to neutral holding gains/losses
B.10.32 Changes in net worth due to real holding gains/losses

B.11 External balance of goods and services

B.12 Current external balance

Net worth

BF.90 Net financial assets

Classification of balancing items<sup>b</sup> (B)

Saving

b All balancing items can be measured gross or net of consumption of fixed capital. The code for gross balancing item is constituted of the code of the item plus the letter 'g'. Similarly, the letter 'n' attached to a code indicates net value.

c 'Changes in net worth due to saving and capital transfers' is not a balancing item in the structure of the system. It is the total of the right-and side of the capital account. However, as a significant component of changes in net worth, it is coded with the other components of the latter

d 'Changes in net worth due to saving and capital transfers' for the rest of the world refers to changes in net worth due to current external balance and capital transfers



# Classification of assets (A)

# Non-financial assets (AN)

AN.1.	Produced assets
AN.11	Fixed assets
AN.111	Tangible fixed assets
AN.1111	Dwellings
AN.1112	Other buildings and structures
AN.11121	Non-residential buildings
AN.11122	Other structures
AN.1113	Machinery and equipment
AN.11131	Transport equipment
AN.11132	Other machinery and equipment
AN.1114	Cultivated assets
AN.11141	Livestock for breeding, dairy, draught, etc.
AN.11142	Vineyards, orchards and other plantations of trees yielding repeat products
AN.112	Intangible fixed assets
AN.1121	Mineral exploration
AN.1122	Computer software
AN.1123	Entertainment, literary or artistic originals
AN.1129	Other intangible fixed assets
AN.12	Inventories
AN.121	Materials and supplies
AN.122	Work in progress
AN.1221	Work in progress on cultivated assets
AN.1222	Other work in progress
AN.123	Finished goods
AN.124	Goods for resale
AN.13	Valuables
AN.131	Precious metals and stones
AN.131	Antiques and other art objects
AN.132	Other valuables
AN.2.	Non-produced assets
AN.21	Tangible non-produced assets
AN.211	Land
AN.2111	Land underlying buildings and structures
AN.2111	
	Land under cultivation
AN.2113	Recreational land and associated surface water
AN.2119	Other land and associated surface water
AN.212	Subsoil assets
AN.2121	Coal, oil and natural gas reserves
AN.2122	Metallic mineral reserves
AN.2123	Nonmetallic mineral reserves
AN.213	Non-cultivated biological resources
AN.214	Water resources
AN.22	Intangible non-produced assets
AN.221	Patented entities
AN.222	Leases and other transferable contracts
AN.223	Purchased goodwill
AN.229	Other intangible non-produced assets



# Financial assets/liabilities (AF)

AF.1	Monetary gold and drawing rights (SDRs)
AE11 AE12	Monetary gold Special drawing rights (SDRs)
AF.2	Currency and deposits
AF.21 AF.22 AF.29	Currency Transferable deposits Other deposits
AF.3	Securities other than shares
AE33 AE331 AE332 AE34	Securities other than shares, excluding financial derivatives Short-term - Securities other than shares, excluding financial derivatives Long-term - Securities other than shares, excluding financial derivatives Financial derivatives
AF.4	Loanse
AF.41 AF.42	Short-term - Loans Long-term - Loans
AF.5	Shares and other equity <sup>e</sup>
AE.51 AE.511 AE.512 AE.513 AE.52	Shares and other equity, excluding mutual funds shares Quoted shares Unquoted shares Other equity Mutual funds shares
AF.6	Insurance technical reserves
AF.61 AF.611 AF.612 AF.62	Net equity of households in life insurance reserves and in pension funds reserves Net equity of households in life insurance reserves Net equity of households in pension funds reserves Prepayments of insurance premiums and reserves for outstanding claims
AF.7	Other accounts receivable/payable
AE.71 AE.79	Trade credits and advances Other accounts receivable/payable, except trade credits and advances

e Memorandum item AF.m: direct foreign investment

automotive fuel



# Regrouping and coding of Industries (A), Products (P) and investments (Fixed capital formation) (Pi)

#### A60 Code Description Reference NACE rev. 1 Agriculture, hunting and related service activities Forestry, logging and related service activities Fishing, operation of fish hatcheries and fish farms; service activities incidental to fishing Mining of coal and lignite; extraction of peat Extraction of crude petroleum and natural gas; service activities incidental to oil and gas extraction excluding surveying Mining of uranium and thorium ores Mining of metal ores Other mining and quarrying Manufacture of food products and beverages Manufacture of tobacco products Manufacture of textiles Manufacture of wearing apparel; dressing and dyeing of fur Tanning and dressing of leather; manufacture of luggage, handbags, saddlery, harness and footwear Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials Manufacture of pulp, paper and paper products Publishing, printing and reproduction of recorded media Manufacture of coke, refined petroleum products and nuclear fuel Manufacture of chemicals and chemical products Manufacture of rubber and plastic products Manufacture of other non-metallic mineral products Manufacture of basic metals Manufacture of fabricated metal products, except machinery and equipment Manufacture of machinery and equipment n.e.c. Manufacture of office machinery and computers Manufacture of electrical machinery and apparatus n.e.c. Manufacture of radio, television and communication equipment and apparatus Manufacture of medical, precision and optical instruments, watches and clocks Manufacture of motor vehicles, trailers and semi-trailers Manufacture of other transport equipment Manufacture of furniture; manufacturing n.e.c. Recycling Electricity, gas, steam and hot water supply Collection, purification and distribution of water Construction

Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of



#### A60

Code	Description	Reference CPA
51	Wholesale trade and commission trade services, except of motor vehicles and motorcycles	51
52	Retail trade services, except of motor vehicles and motorcycles; repair services of personal and	52
	household goods	
55	Hotel and restaurant services	55
60	Land transport and transport via pipeline services	60
61	Water transport services	61
62	Air transport services	62
63	Supporting and auxiliary transport services; travel agency services	63
64	Post and telecommunication services	64
65	Financial intermediation services, except insurance and pension funding services	65
66	Insurance and pension funding services, except compulsory social security services	66
67	Services auxiliary to financial intermediation	67
70	Real estate services	70
71	Renting services of machinery and equipment without operator and of personal and household goods	71
72	Computer and related services	72
73	Research and development services	73
74	Other business services	74
75	Public administration and defence services; compulsory social security services	75
80	Education services	80
85	Health and social work services	85
90	Sewage and refuse disposal services, sanitation and similar services	90
91	Membership organisation services n.e.c.	91
92	Recreational, cultural and sporting services	92
93	Other services	93
95	Private households with employed persons	95
99	Services provided by extra-territorial organisations and bodies	99



#### A31

Code	Description	Reference NACE rev. 1
AA	Agriculture, hunting and forestry	A
BB	Fishing	В
CA	Mining and quarrying of energy producing materials	CA
CB	Mining and quarrying except energy producing materials	CB
DA	Manufacture of food products; beverages and tobacco	DA
DB	Manufacture of textiles and textile products	DB
DC	Manufacture of leather and leather products	DC
DD	Manufacture of wood and wood products	DD
DE	Manufacture of pulp, paper and paper products; publishing and printing	DE
DF	Manufacture of coke, refined petroleum products and nuclear fuel	DF
DG	Manufacture of chemicals, chemical products and man-made fibres	DG
DH	Manufacture of rubber and plastic products	DH
DI	Manufacture of other non-metallic mineral products	DI
DJ	Manufacture of basic metals and fabricated metal products	DJ
DK	Manufacture of machinery and equipment n.e.c.	DK
DL	Manufacture of electrical and optical equipment	DL
DM	Manufacture of transport equipment	DM
DN	Manufacturing n.e.c.	DN
EE	Electricity, gas and water supply	E
FF	Construction	F
GG	Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods	G
HH	Hotels and restaurants	H
П	Transport, storage and communication	1
JJ	Financial intermediation	J
KK	Real estate, renting and business activities	K
LL	Public administration and defence; compulsory social security	L
MM	Education	M
NN	Health and social work	N
00	Other community, social and personal service activities	O
PP	Private households with employed persons	P
QQ	Extra-territorial organisations and bodies	Q



#### A17

Code	Description	Reference NACE rev. 1
Α	Agriculture, hunting and forestry	A
В	Fishing	В
C	Mining and quarrying	C
D	Manufacturing	D
E	Electricity, gas and water supply	E
F	Construction	F
G	Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household	G
	goods	
Н	Hotels and restaurants	Н
1	Transport, storage and communication	ı
J	Financial intermediation	J
K	Real estate, renting and business activities	K
L	Public administration and defence; compulsory social security	L
M	Education	M
Ν	Health and social work	Ν
0	Other community, social and personal service activities	O
Р	Private households with employed persons	Р
Q	Extra-territorial organisations and bodies	Q



Code	Description	Reference CPA
01	Products of agriculture, hunting and related services	01
02	Products of forestry, logging and related services	02
05	Fish and other fishing products, services incidental to fishing	05
10	Coal and lignite; peat	10
11	Crude petroleum and natural gas; services incidental to oil and gas extraction excluding surveying	11
12	Uranium and thorium ores	12
13	Metal ores	13
14	Other mining and quarrying products	14
15	Food products and beverages	15
16	Tobacco products	16
17	Textiles	17
18	Wearing apparel; furs	18
19	Leather and leather products	19
20	Wood and products of wood and cork (except furniture), articles of straw and plaiting materials	20
21	Pulp, paper and paper products	21
22	Printed matter and recorded media	22
23	Coke, refined petroleum products and nuclear fuel	23
24	Chemicals, chemical products and man-made fibres	24
25	Rubber and plastic products	25
26	Other non-metallic mineral products	26
27	Basic metals	27
28	Fabricated metal products, except machinery and equipment	28
29	Machinery and equipment n.e.c.	29
30	Office machinery and computers	30
31	Electrical machinery and apparatus n.e.c.	31
32	Radio, television and communication equipment and apparatus	32
33	Medical, precision and optical instruments, watches and clocks	33
34	Motor vehicles, trailers and semi-trailers	34
35	Other transport equipment	35
36	Furniture; other manufactured goods n.e.c.	36
37	Recovered secondary raw materials	37
40	Electrical energy, gas, steam and hot water	40
41	Collected and purified water, distribution services of water	41
45	Construction work	45
50	Trade, maintenance and repair services of motor vehicles and motorcycles; retail trade services of automotive fuel	50



Code	Description	Reference CPA
51	Wholesale trade and commission trade services, except of motor vehicles and motorcycles	51
52	Retail trade services, except of motor vehicles and motorcycles; repair services of personal and household goods	52
55	Hotel and restaurant services	55
60	Land transport and transport via pipeline services	60
61	Water transport services	61
62	Air transport services	62
63	Supporting and auxiliary transport services; travel agency services	63
64	Post and telecommunication services	64
65	Financial intermediation services, except insurance and pension funding services	65
66	Insurance and pension funding services, except compulsory social security services	66
67	Services auxiliary to financial intermediation	67
70	Real estate services	70
71	Renting services of machinery and equipment without operator and of personal and household goods	71
72	Computer and related services	72
73	Research and development services	73
74	Other business services	74
75	Public administration and defence services; compulsory social security services	7.5
80	Education services	80
85	Health and social work services	85
90	Sewage and refuse disposal services, sanitation and similar services	90
91	Membership organisation services n.e.c.	91
92	Recreational, cultural and sporting services	92
93	Other services	93
95	Private households with employed persons	95
99	Services provided by extra-territorial organisations and bodies	99



Code	Description	Reference CPA
AA BB CA CB DA DB DC DD DE DF DG DH DI DJ DK	Products of agriculture, hunting and forestry Fish Coal and lignite; peat; crude petroleum and natural gas; uranium and thorium Metal ores and other mining and quarrying products Food products, beverages and tobacco Textiles and textile products Leather and leather products Wood and wood products Pulp, paper and paper products; recorded media; printing services Coke, refined petroleum products and nuclear fuel Chemicals, chemical products and man-made fibres Rubber and plastic products Other non metallic mineral products Basic metals and fabricated metal products Machinery and equipment n.e.c.	A B CA CB DA DB DC DD DE DF DG DH DI DJ DK
DL DM	Electrical and optical equipment Transport equipment	DL DM
DN EE	Other manufactured goods n.e.c. Electrical energy, gas, steam and hot water	DN E
FF	Construction work	F
GG	Wholesale and retail trade services; repair services of motor vehicles, motorcycles and persona and household goods	l G
HH	Hotel and restaurant services	Н
II	Transport, storage and communication services	!
JJ	Financial intermediation services	J
KK LL	Real estate, renting and business services	K
MM	Public administration and defence services, compulsory social security services Education services	L
NN	Health and social services	M
00	Other community, social and personal services	O
PP	Private households with employed persons	P
QQ	Services provided by extra-territorial organisations and bodies	Q



Code	Description	Reference CPA
Α	Products of agriculture, hunting and forestry	A
В	Fish	В
C	Products from mining and quarrying	C
D	Manufactured products	D
Ε	Electrical energy, gas, steam and hot water	E
F	Construction work	F
G	Wholesale and retail trade services; repair services of motor vehicles, motorcycles and personal	G
	and household goods	
Н	Hotel and restaurant services	Н
1	Transport, storage and communication services	1
J	Financial intermediation services	J.
K	Real estate, renting and business services	K
L	Public administration and defence services, compulsory social security services	L
M	Education services	M
N	Health and social services	N
0	Other community, social and personal services	O
Р	Private households with employed persons	Р
Q	Services provided by extra-territorial organisations and bodies	Q



#### A6

Code	Description	Reference NACE rev. 1
1	Agriculture, hunting and forestry; fishing and operation of fish hatcheries and fish farms	A + B
2	Industry, including energy	C + D + E
3	Construction	F
4	Wholesale and retail trade, repair of motor vehicles and household goods, hotels and restaurants; transport and communications	G + H + I
5	Financial, real-estate, renting and business activities	J + K
6	Other service activities	L to P

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	w

ode	Description	Reference NACE rev. 1
1	Agriculture, hunting and forestry; fishing and operation of fish hatcheries and fish farms	A + B
2	Industry, including energy and construction	C + D + E + F
3	Service activities	G to P



P6

Code	Description	Reference CPA
1	Products of agriculture, forestry, fisheries and aquaculture	A + B
2	Products from mining and quarrying, manufactured products and energy products	C + D + E
3	Construction work	F
4	Wholesale and retail trade, repair services, hotel and restaurant services, transport and communication services	G+H+I
5	Financial intermediation services, real estate, renting and business services	J + K
6	Other services	L to P

P3

Code	Description	Reference CPA
1	Products of agriculture, forestry, fisheries and aquaculture	A + B
2	Products from mining and quarrying, manufactured products, energy products and construction work	C + D + E + F
3	Services	G to P



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-		n

Code	Description	Reference CPA
1	Products of agriculture, forestry, fisheries and aquaculture	01 + 02 + 05
	Equipment:	
2	Metal products and machinery	28  to  33 + 36
3	Transport equipment	34 + 35
	Construction:	45
4	of which housing	
5	of which other constructions	
6	Other products	Remaining
		divisions

#### Pi3

Code	Description	Reference CPA
1	Metal products and machinery, transport equipment	28 to 36
2	Construction	45
3	Other products	Remaining divisions



# Classification of individual consumption by purpose (COICOP) \*

(One- and two-digit levels)

1.	Food, beverages and tobacco
	Beverages Tobacco
2.	Clothing and footwear
	Clothing Footwear
3.	Housing, water, electricity, gas and other fuels
	Gross rents Regular maintenance and repair of dwelling Other services relating to the dwelling Electricity, gas and other fuels
4.	Furnishings, household equipment and routine maintenance of the house
	Furniture, furnishings and decorations, carpets and other floor coverings and repairs Household textiles Heating and cooking appliances; refrigerators, washing machines similar major household appliances, including fittings and repairs Glassware, tableware and household utensils Tools and equipment for the house and garden Goods and services for routine household maintenance
5.	Health
	Medical and pharmaceutical products and therapeutic appliances and equipment Non-hospital medical and paramedical services Hospital services Sickness and accident insurance services
6.	Transport
	Purchase of vehicles Operation of personal transport equipment Transports services
7.	Leisure, entertainment and culture
	Equipment and accessories, including repairs Recreational and cultural services Newspapers, books and stationery
8.	Education
	Educational services Educational materials Ancillary educational services
9.	Hotels, cafes and restaurants
	Catering Accommodation services
10.	Miscellaneous goods and services
10.6	Personal care Personal effects n.e.c. Communications Social services Financial services n.e.c. Other services n.e.c.

This classification is presently under revision



# Classification of the functions of the government (COFOG)\*

01.	General public services		
01.1	Executive and legislative organs, financial and fiscal affairs, external affairs other than foreign aid.		
01.2	Foreign economic aid		
01.3	Fundamental research affairs and services		
01.4 01.5	General services General public services n.e.c		
02.	Defence affairs and services		
02.1	Military and civil defence administration and operation		
02.2	Foreign military aid		
02.3	Defence-related applied research and experimental development		
02.4	Defence affairs n.e.c.		
03.	Public order and safety affairs		
03.1 03.2	Police and fire protection  Law courts		
03.3	Prison administration and operation		
03.4	Public order and safety affairs n.e.c.		
04.	Education affairs and services		
04.1	Pre-primary and primary education affairs and services (ISCED Levels 0 and 1)		
04.2	Secondary education affairs and services (ISCED Levels 2 and 3)		
04.3 04.4	Tertiary education affairs and services (ISCED Levels 5, 6 and 7)		
04.5	Education services not definable by level (ISCED Level 9) Subsidiary services to education		
04.6	Education affairs and services n.e.c.		
05.	Health affairs and services		
05.1	Hospital affairs and services		
05.2 05.3	Clinics, and medical, dental and para-medical practitioners Public health affairs and services		
05.4	Medicaments, prosthesis, medical equipment and appliances or other prescribed health-re		
	lated products		
05.5	Applied research and experimental development related to the health and medical delivery		
05.6	system Health affairs and services n.e.c.		
06.	Social security and welfare affairs and services		
06.1	Social security affairs and services		
06.2	Welfare affairs and services		
06.3	Social security and welfare affairs n.e.c.		
07.	Housing and community amenity affairs and services		
07.1	Housing and community development		
07.2	Water supply affairs and services		
07.3 07.4	Sanitary affairs and services including pollution abatement and control Street lighting affairs and services		
07.4	Housing and community amenity affairs and services n.e.c.		
08.	Recreational, cultural and religious affairs and services		
00.0	Recreational, cultural and religious affairs and services		
0.80			
09.	Fuel and energy affairs and services		
	Fuel and energy affairs and services  Fuel affairs and services		

This classification is presently under revision



THE EUROPEAN SYSTEM OF ACCOUNTS
Electricity and other energy sources Fuel and energy affairs and services n.e.c.
Agriculture, forestry, fishing and hunting affairs and services
Agriculture affairs and services Forestry affairs and services Fishing and hunting affairs and services Agricultural research and experimental development n.e.c. Agriculture, forestry, fishing and hunting affairs and services n.e.c.
Mining and mineral resource affairs and services, other than fuels; manufacturing affairs and services; and construction affairs and services
Mining and mineral resource affairs and services, other than fuels Manufacturing affairs and services Construction affairs and services Mining and mineral resource affairs and services n.e.c.; manufacturing affairs and services n.e.c.; and construction affairs and services n.e.c.
Transportation and communication affairs and services
Road transport affairs and services Water transport affairs and services Railway affairs and services Air transport affairs and services Pipeline transport and other transport system affairs and services Transportation system affairs and services n.e.c. Communication affairs and services Transportation and communication affairs and services n.e.c
Other economic affairs and services
Distribution trade affairs and services including storage and warehousing; hotel and restaurant affairs and services  Tourism affairs and services
Multipurpose development project affairs and services
General economic and commercial affairs other than general labour affairs
General labour affairs and services Other economic affairs and services n.e.c.
Expenditures not classified by major group
Expenditure not classified by major group



# **ACCOUNTS**



# Table A.IV.1 Account 0: Goods and services account

	Resources	
P.1	Output	3 595
P.11	Market output	3 048
P.12	Output for own use	171
P.13	Other non-market output	376
D.21	Taxes on products	141
D.31	Subsidies on products	- 8
P.7	Imports of goods and services	497
P.71	Imports of goods	392
P.72	Imports of services	105

	Uses	
P.2	Intermediate consumption	1 904
D 2/D 4	Final consumption auronditure/Actual	
P.3/P.4	Final consumption expenditure/Actual	1 271
P.31/P.	final consumption	1 371
P.31/P.		1 215
P.32/P.	individual consumption  Collective consumption expenditure/Actual	1 215
F.32/F.	collective consumption experialitate/Actual	156
P.51	Gross fixed capital formation	376
P.511	Acquisitions less disposals of tangible fixed assets	303
P.5111	Acquisitions of new tangible fixed assets	305
P.5112	Acquisitions of existing tangible fixed assets	11
P.5113	Disposals of existing tangible fixed assets	- 13
P.512	Acquisitions less disposals of intangible fixed assets	51
P.5121	Acquisitions of new intangible fixed assets	53
P.5122	Acquisitions of existing intangible fixed assets	6
P.5123	Disposals of existing intangible fixed assets	- 8
P.513	Additions to the value of non-produced	
	non-financial assets	22
P.5131	Major improvements to non-produced	
	non-financial assets	5
P.5132	Costs of ownership transfer on non-produced	
	non-financial assets	17
P.52	Changes in inventories	28
P.53	Acquisitions less disposals of valuables	10
P.6	Exports of goods and services	536
P.61	Exports of goods	462
P.62	Exports of services	74



#### I: Production account

Uses		Resources	
P.2 Intermediate consumption	1 904	P.1 Output	3 595
		P.11 Market output	3 048
		P.12 Output for own final use	171
		P.13 Other non-market output	376
		D.21-D.31 Taxes less subsidies on products	133
B.1*g Gross domestic product	1 824		
K.1 Consumption of fixed capital	222		
B.1*n Net domestic product	1 602		

#### 1: Distribution and use of income accounts

#### II.1: Primary distribution of income account

#### II.1.1: Generation of income account

Uses			Resources	
D.1 Compensation of employees	762	B.1*	Domestic product	1 60
D.11 Wages and salaries	569			
D.12 Employers' social contributions	193			
D.121 Employers' actual social contributions	174			
D,122 Employers' imputed social contributions	19			
D.2 Taxes on production and imports	235			
D.21 Taxes on products	141			
D.211 Value added type taxes (VAT)	121			
D.212 Taxes and duties on imports excluding VAT	17			
D.2121 Import duties	17			
D.2122 Taxes on imports excluding VAT and duties	0			
D.214 Taxes on products except VAT and import taxes	3			
D.29 Other taxes on production	94			
D.3 Subsidies	-44			
D.31 Subsidies on products	-8			
D.311 Import subsidies	0			
D.319 Other subsidies on products	-8			
D.39 Other subsidies on production	-36			
B.2 Operating surplus	217			
B.3 Mixed income	432			



#### II.1.2: Allocation of primary income account

	Uses			Resources	
D.4 1	Property income	380	B.2	Operating surplus	217
D.41	Interest	206	B.3	Mixed income	432
D.42	Distributed income of corporations	84			
D.421	Dividends	60	D.1	Compensation of employees	766
D.422	Withdrawals from income of quasi-corporations	24	D.11	Wages and salaries	573
D.43	Reinvested earnings on direct foreign investment	0	D.12	Employers' social contributions	193
D.44	Property income attributed to insurance policyholders	25	D.121	Employers' actual social contributions	174
D.45	Rent	65	D.122	Employers' imputed social contributions	19
			D.2	Taxes on production and imports	235
			D.21	Taxes on products	141
			D.211	Value added type taxes (VAT)	121
			D.212	Taxes and duties on imports excluding VAT	17
			D.2121	Import duties	17
			D.2122	Taxes on imports excluding VAT and duties	0 3 94
			D.214	Taxes on products except VAT and import taxes	
			D.29	Other taxes on production	
			D,3	Subsidies	-44
			D.31	Subsidies on products	-8 0
			D.311	Import subsidies	
			D.319	Other subsidies on products	-8
			D.39	Other subsidies on production	-36
			D.4	Property income	407
			D.41	Interest	200
			P.119	Adjustment for FISIM	0
			D.42	Distributed income of corporations	103
			D.421	Dividends	46
			D.422	Withdrawals from income of quasi-corporations	57
			D.43	Reinvested earnings on direct foreign investment	14
			D.44	Property income attributed to insurance policyholders	25
			D.45	Rent	65
B.5* /	National income	1 633			

#### II.1.2.1: Entrepreneurial income account

Uses		Resources			
D.4 Property income	217	B.2	Operating surplus	217	
D.41 Interest	147	B.3	Mixed income	432	
D.44 Property income attributed to insurance policyholders	25				
D.45 Rent	45	D.4	Property income	247	
		D.41	Interest	150	
		P.119	Adjustment for FISIM	0	
		D.42	Distributed income of corporations	37	
		D.421	Dividends	37	
		D.422	Withdrawals from income of quasi-corporations	0	
		D.43	Reinvested earnings on direct foreign investment	11	
		D.44	Property income attributed to insurance policyholders	5	
		D.45	Rent	44	
B.4 Entrepreneurial Income	679				



#### II.1.2.2: Allocation of other primary income account

Uses			Resources	
D.4 Property income	163	B.4	Entrepreneurial income	679
D.41 Interest	59			
D.42 Distributed income of corporations	84	D.1	Compensation of employees	766
D.421 Dividends	60	D.11	Wages and salaries	573
D.422 Withdrawals from income of quasi-corporations	24	D.12	Employers' social contributions	193
D.43 Reinvested earnings on direct foreign investment	0	D.121	Employers' actual social contributions	174
D.45 Rent	20	D.122	Employers' imputed social contributions	19
		D.2	Taxes on production and imports	235
		D.21	Taxes on products	141
		D.211	Value added type taxes (VAT)	121
		D.212	Taxes and duties on imports excluding VAT	17
		D.2121	Import duties	17
		D.2122	Taxes on imports excluding VAT and duties	(
		D.214	Taxes on products except VAT and import taxes	3
		D.29	Other taxes on production	94
		D.3	Subsidies	-44
		D.31	Subsidies on products	-8
		D.311	Import subsidies	C
		D.319	Other subsidies on products	-8
		D.39	Other subsidies on production	-36
		D.4	Property income	160
		D.41	Interest	50
		D.42	Distributed income of corporations	66
		D.421	Dividends	9
		D.422	Withdrawals from income of quasi-corporations	57
		D.43	Reinvested earnings on direct foreign investment	3
		D.44	Property income attributed to insurance policyholders	20
		D.45	Rent	21
B.5* National income	1633			



#### II.2: Secondary distribution of income account

Uses			Resources	
D.5 Current taxes on income, wealth, etc.	212	B.5*	National income	1 633
D.51 Taxes on income	203			
D.59 Other current taxes	9	D.5	Current taxes on income, wealth, etc.	213
		D.51	Taxes on income	204
D.61 Social contributions	322	D.59	Other current taxes	9
D.611 Actual social contributions	303	D.61	Social contributions	322
D.6111 Employers' actual social contributions	174	D.611	Actual social contributions	303
D.61111 Compulsory employers' actual social contributions	160	D.6111	Employers' actual social contributions	174
D.61112 Voluntary employers' actual social contributions	14	D.61111	Compulsory employers' actual social contributions	160
D.6112 Employees' social contributions	97	D.61112	Voluntary employers' actual social contributions	14
D.61121 Compulsory employees' social contributions	85	D.6112	Employees' social contributions	97
D.61122 Voluntary employees' social contributions	12	D.61121	Compulsory employers' actual social contributions	85
D.6113 Social contributions by self-and		D.61122	Voluntary employers' actual	
non-employed persons	32		social contributions	12
D.61131 Compulsory social contributions by self-and		D.6113	Social contributions by self-and	
non-employed persons	22		non-employed persons	32
D.61132 Voluntary social contributions by self-and		D.61131	Compulsory social contributions by self-and	
non-employed persons	10		non-employed persons	22
D.612 Imputed social contributions	19	D.61132	Voluntary social contributions by self-and	
			non-employed persons	10
D.62 Social benefits other than		D.612	Imputed social contributions	19
social transfers in kind	332			
D.621 Social security benefits in cash	232	D.62	Social benefits other than social transfers in kind	332
D.622 Private funded social benefits	29	D.621	Social security benefits in cash	232
D.623 Unfunded employee social benefits	19	D.622	Private funded social benefits	29
D.624 Social assistance benefits in cash	52	D.623	Unfunded employee social benefits	19
		D.624	Social assistance benefits in cash	52
D.7 Other current transfers	269			
D.71 Net non-life insurance premiums	43	D.7	Other current transfers	239
D.72 Non-life insurance claims	45	D.71	Net non-life insurance premiums	45
D.73 Current transfers within general government	96	D.72	Non-life insurance claims	42
D.74 Current international cooperation	31	D.73	Current transfers within general government	96
D.75 Miscellaneous current transfers	54	D.74	Current international cooperation	1
		D.75	Miscellaneous current transfers	55
B.6 Disposable income	1 604			

#### II.3: Redistribution of income in kind account

Uses			Resources			
D.63	Social transfers in kind	219	B.6	Disposable income	1 604	
D.631	Social benefits in kind	162				
D.6311	Social security benefits, reimbursements	78	D.63	Social transfers in kind	219	
D.6312	Other social security benefits in kind	65	D.631	Social benefits in kind	162	
D.6313	Social assistance benefits in kind	19	D.6311	Social security benefits, reimbursements	78	
D.632	Transfers of individual non-market goods and services	57	D.6312	Other social security benefits in kind	65	
			D.6313	Social assistance benefits in kind	19	
			D.632	Transfers of individual non-market goods and services	.57	
B.7 A	djusted disposable income	1 604				



#### II.4: Use of income account

#### II.4.1: Use of disposable income account

	Uses		_	Resources	
P.3	Final consumption expenditure	1 371	B.6	Disposable income	1 604
P.31	Individual consumption expenditure	1 215			
P.32	Collective consumption expenditure	156	D.8	Adjustment for the change in net equity of households	
				on pension funds	11
D.8	Adjustment for the change in net equity				
_	of households in pension funds reserves	11			
B.8	Saving	233			

#### II.4.2: Use of adjusted disposable income account

	Uses		_	Resources	
P.4	Actual final consumption	1 371	B.7	Adjusted disposable income	1 604
P.41	Actual individual consumption	1 215			
P.42	Actual collective consumption	156	D.8	Adjustment for the change in net equity	
				of households on pension funds	11
D.8	Adjustment for the change in net equity				
_	of households in pension funds reserves	11			
B.8	Saving	233			

#### III: Accumulation accounts

#### III.1: Capital account

#### III.1.1: Change in net worth due to saving and capital transfers account

Changes in assets			Changes in liabilities and net wo	rth
B.10.1 Changes in net worth due to saving and capital transfers	230	B.8n	Saving, net	233
		D.9	Capital transfers, receivable	62
		D.91	Capital taxes	2
		D.92	Investment grants	23
		D.99	Other capital transfers	37
		D.9	Capital transfers, payable	-65
		D.91	Capital taxes	-2
		D.92	Investment grants	-27
		D.99	Other capital transfers	-36



### III.1.2: Acquisition of non-financial assets account

Changes in assets			Changes in liabilities and net worth			
P.51	Gross fixed capital formation	376	B.10.1	Changes in net worth due to saving and capital transfers	230	
P.511	Acquisitions less disposals of tangible fixed assets	303				
P.5111	Acquisitions of new tangible fixed assets	305				
P.5112	Acquisitions of existing tangible fixed assets	11				
P.5113	Disposals of existing tangible fixed assets	-13				
P.512	Acquisitions less disposals of intangible fixed assets	51				
P.5121	Acquisitions of new intangible fixed assets	53				
P.5122	Acquisitions of existing intangible fixed assets	6				
P.5123	Disposals of existing intangible fixed assets	-8				
P.513	Additions to the value of non-produced non-financial assets	22				
P.5131	Major improvements to non-produced non-financial assets	5				
P.5132	Costs of ownership transfer on non-produced non-financial assets	17				
K.1 (	Consumption of fixed capital	-222				
P.52 C	Changes in inventories	28				
P.53 A	acquisitions less disposals of valuables	10				
	acquisitions less disposals of non-produced con-financial assets	0				
K.21	Acquisitions less disposals of land and other tangible non-produced assets	0				
K.22	Acquisitions less disposals of intangible non-produced assets	0				
B.9 N	let lending (+) / Net borrowing (-)	38				



#### III.2: Financial account

	Changes in assets			Changes in liabilities and net worth	
F	Net acquisition of financial assets	641	F	Net incurrence of liabilities	603
F.1	Monetary gold and SDRs	-1			
F.2	Currency and deposits	119	F.2	Currency and deposits	132
F.21	Currency	34	F.21	Currency	35
F.22	Transferable deposits	62	F.22	Transferable deposits	65
F.29	Other deposits	23	F.29	Other deposits	32
F.3	Securities other than shares	138	F.3	Securities other than shares	123
F.4	Loans	244	F.4	Loans	217
F.41	Short-term	83	F.41	Short-term	76
F.42	Long-term	161	F.42	Long-term	141
F.5	Shares and other equity	44	F.5	Shares and other equity	43
F.6	Insurance technical reserves	36	F.6	Insurance technical reserves	36
F.61	Net equity of households in life insurance		F.61	Net equity of households in life insurance	
	reserves and in pension funds reserves	33		reserves and in pension funds reserves	33
F.611	Net equity of households in life insurance reserves	22	F.611	Net equity of households in life insurance reserves	22
F.612	Net equity of households in pension funds reserves	11	F.612	Net equity of households in pension funds reserves	11
F.62	Prepayments of insurance premiums and reserves for outstanding claims	3	F.62	Prepayments of insurance premiums and reserves for outstanding claims	3
F.7	Other accounts receivable	61	F.7	Other accounts payable	52
F.71	Trade credits and advances	18	F.71	Trade credits and advances	18
F.79	Other accounts receivable, except trade credits and		F.79	Other accounts payable, except trade credits and	
	advances	43		advances	34
			B.9	Net lending(+)/net borrowing(-)	38



#### III.3: Other changes in assets accounts

#### III.3.1: Other changes in volume of assets account

Changes in assets			Changes in liabilities and net worth	
AN Non-financial assets	10	AF I	Liabilities	-2
AN,1 Produced assets	-7	K.7	Catastrophic losses	(
K.4 Economic appearance of produced assets	3	K.8	Uncompensated seizures	(
K.7 Catastrophic losses	-9	K.10	Other volume changes in financial assets and net	
K.8 Uncompensated seizures	0		liabilities n.e.c.	-
K.9 Other volume changes in non-financial assets n.e.c.	1	K.12	Changes in classifications and structure	(
K.12 Changes in classifications and structure	-2	K.12.1	Changes in sector classification and structure	(
K.12.1 Changes in sector classification and structure	0	K.12.2	Changes in classification of assets and liabilities	(
K.12,2 Changes in classification of assets and liabilities	-2	K.12.22	Changes in classification of assets or liabilities	
K.12.21 Monetisation/demonetisation of gold	-2		other than monetisation/demonetisation of gold	(
K.12.22 Changes in classification of assets or liabilities		of which:		
other than monetisation/demonetisation of gold	0	AF.2	Currency and deposits	(
of which :		AF.3	Securities other than shares	(
AN.11 Fixed assets	-4	AF.4	Loans	-4
AN.12 Inventories	-1	AF.5	Shares and other equity	(
AN.13 Valuables	-2	AF.6	Insurance technical reserves	
AN.2 Non-produced assets	17	AF.7	Other accounts payable	(
K.3 Economic appearance of non-produced assets	24			
K.5 Natural growth of non-cultivated biological resources	4			
K.6 Economic disappearance of non-produced assets	-9			
K.61 Depletion of natural assets	-8			
K.62 Other economic disappearance of non-produced assets	-1			
K.7 Catastrophic losses	-2			
K.8 Uncompensated seizures	0			
K.9 Other volume changes in non-financial assets n.e.c.	0			
K.12 Changes in classifications and structure	0			
K.12.1 Changes in sector classification and structure	0			
K.12.2 Changes in classification of assets and liabilities	0			
K.12.22 Changes in classification of assets or liabilities				
other than monetisation/demonetisation of gold	0			
of which:				
AN.21 Tangible non-produced assets	17			
AN.22 Intangible non-produced assets	0			
AF Financial assets	5			
K.7 Catastrophic losses	0			
K.8 Uncompensated seizures	0			
K.10 Other volume changes in financial assets and				
liabilities n.e.c.	3			
K.12 Changes in classifications and structure	2			
K.12.1 Changes in sector classification and structure	0			
K.12.2 Changes in classification of assets and liabilities	2			
K.12.21 Monetisation/demonetisation of gold	2			
K.12.22 Changes in classification of assets or liabilities				
other than monetisation/demonetisation of gold	0			
of which:	_			
AF.1 Monetary gold and SDRs	7			
AF.2 Currency and deposits	0			
AF.3 Securities other than shares	0			
AF.4 Loans	-4			
AF.5 Shares and other equity	0			
AF.6 Insurance technical reserves	2			
AF,7 Other accounts receivable	0	Dac o	~!	
			Changes in net worth due to other	
		(	changes in volume of assets	17



#### III.3.2: Revaluation account

Changes in assets			Changes in liabilities and net worth			
K.11	Nominal holding gains(+)/losses(-):		K.11	Nominal holding gains(-)/losses(+):		
	on-financial assets	280	AF	Liabilities	76	
AN.1	Produced assets	126	AF.2	Currency and deposits	0	
AN.11	Fixed assets	111	AF.3	Securities other than shares	42	
AN.12	Inventories	7	AF.4	Loans	0	
AN.13	Valuables	8	AF.5	Shares and other equity	34	
AN.2	Non-produced assets	154	AF.6	Insurance technical reserves	0	
AN.21	Tangible non-produced assets	152	AF.7	Other accounts payable	0	
AN.22	Intangible non-produced assets	2				
AF F	inancial assets	84				
AF.1	Monetary gold and SDRs	12				
AF.2	Currency and deposits	0				
AF.3	Securities other than shares	40				
AF.4	Loans	0				
AF.5	Shares and other equity	31				
AF.6	Insurance technical reserves	0				
AF.7	Other accounts receivable	0				
			B.10.3	Changes in net worth due to nominal holding gains/losses	288	

### III.3.2.1: Neutral holding gains/losses account

Changes in assets		Changes in liabilities and net worth		
K.11.1 Neutral holding gains (+)/losses (-):		K.11.1	Neutral holding gains (-)/losses (+):	
AN Non-financial assets	198	AF	Liabilities	126
AN.1 Produced assets	121	AF.2	Currency and deposits	29
AN.11 Fixed assets	111	AF.3	Securities other than shares	26
AN.12 Inventories	5	AF.4	Loans	29
AN.13 Valuables	5	AF.5	Shares and other equity	28
AN.2 Non-produced assets	78	AF₊6	Insurance technical reserves	7
AN.21 Tangible non-produced assets	76	AF.7	Other accounts payable	6
AN.22 Intangible non-produced assets	1			
AF Financial assets	136			
AF.1 Monetary gold and SDRs	15			
AF.2 Currency and deposits	30			
AF.3 Securities other than shares	25			
AF.4 Loans	28			
AF.5 Shares and other equity	26			
AF.6 Insurance technical reserves	7			
AF.7 Other accounts receivable	5			
		B.10.31	Changes in net worth due to neutral holding gains/losses	208



#### III.3.2.2: Real holding gains/losses account

Changes in assets		Changes in liabilities and net worth			
K.11.2	Real holding gains(+)/losses(-):		K,11.2	Real holding gains(-)/losses(+):	
AN N	on-financial assets	81	AF	Liabilities	-50
AN.1	Produced assets	5	AF.2	Currency and deposits	-29
AN.11	Fixed assets	0	AF.3	Securities other than shares	16
AN.12	Inventories	3	AF.4	Loans	-29
AN.13	Valuables	2	AF.5	Shares and other equity	6
AN.2	Non-produced assets	77	AF.6	Insurance technical reserves	-7
AN.21	Tangible non-produced assets	76	AF.7	Other accounts payable	-6
AN.22	Intangible non-produced assets	1			
AF Fi	nancial assets	-52			
AF.1	Monetary gold and SDRs	-3			
AF.2	Currency and deposits	-30			
AF.3	Securities other than shares	15			
AF.4	Loans	-28			
AF.5	Shares and other equity	5			
AF.6	Insurance technical reserves	-7			
AF.7	Other accounts receivable	-5			
			B.10.32	Changes in net worth due to real holding gains/losses	80

#### IV: Balance sheets

#### IV.1: Opening balance sheet

Assets			Liabilities and net worth			
AN Non-financial assets	9 922	AF	Liabilities	6 298		
AN.1 Produced assets	6 047	AF.2	Currency and deposits	1 471		
AN.11 Fixed assets	5 544	AF.3	Securities other than shares	1 311		
AN.12 Inventories	231	AF.4	Loans	1 437		
AN.13 Valuables	272	AF,5	Shares and other equity	1 406		
AN.2 Non-produced assets	3 875	AF.6	Insurance technical reserves	371		
AN.21 Tangible non-produced assets	3 809	AF.7	Other accounts payable	302		
AN.22 Intangible non-produced assets	66					
AF Financial assets	6 792					
AF.1 Monetary gold and SDRs	770					
AF.2 Currency and deposits	1 482					
AF.3 Securities other than shares	1 263					
AF.4 Loans	1 384					
AF.5 Shares and other equity	1 296					
AF.6 Insurance technical reserves	370					
AF.7 Other accounts receivable	227					
		B.90	Net worth	10 416		



### IV.2: Changes in balance sheet

Assets			Liabilities and net worth	
Total changes in assets			Total changes in liabilities	
AN Non-financial assets	482	AF	Līabilities	677
AN.1 Produced assets	289	AF.2	Currency and deposits	132
AN.11 Fixed assets	239	AF.3	Securities other than shares	165
AN.12 Inventories	34	AF.4	Loans	213
AN.13 Valuables	16	AF.5	Shares and other equity	77
AN.2 Non-produced assets	193	AF.6	Insurance technical reserves	38
AN.21 Tangible non-produced assets	191	AF.7	Other accounts payable	52
AN.22 Intangible non-produced assets	2			
AF Financial assets	730			
AF.1 Monetary gold and SDRs	18			
AF.2 Currency and deposits	119			
AF.3 Securities other than shares	178			
AF.4 Loans	240			
AF.5 Shares and other equity	75			
AF.6 Insurance technical reserves	38			
AF.7 Other accounts receivable	61			
		B.10	Changes in net worth, total	535
			due to:	
		B.10.1	Saving and capital transfers	230
		B.10.2	Other changes in volume of assets	17
		B.10.3	Nominal holding gains/losses	288
		B.10.31	Neutral holding gains/losses	208
		B.10.32	Real holding gains/losses	80

### IV.3: Closing balance sheet

	Assets			Liabilities and net worth	
AN N	on-financial assets	10 404	AF	Líabilities	6 975
AN.1	Produced assets	6 336	AF.2	Currency and deposits	1 603
AN.11	Fixed assets	5 783	AF.3	Securities other than shares	1 476
AN.12	Inventories	265	AF.4	Loans	1 650
AN.13	Valuables	288	AF.5	Shares and other equity	1 483
AN.2	Non-produced assets	4 068	AF.6	Insurance technical reserves	409
AN.21	Tangible non-produced assets	4 000	AF.7	Other accounts payable	354
AN.22	Intangible non-produced assets	68			
AF Fi	nancial assets	7 522			
AF.1	Monetary gold and SDRs	788			
AF.2	Currency and deposits	1 601			
AF.3	Securities other than shares	1 441			
AF.4	Loans	1 624			
AF.5	Shares and other equity	1 371			
AF.6	Insurance technical reserves	408			
AF.7	Other accounts receivable	288			
			B.90	Net worth	10 951



#### I: Production account

	Uses			Resources		
P.2	Intermediate consumption	881	P.1 P.11 P.12	Output  Market output  Output for own final use	1 753 1 722 31	
B.1g	Value added, gross	872		Culput tel Offit min use		
K.1	Consumption of fixed capital	137				
B.1n	Value added, net	735				

#### II: Distribution and use of income accounts

#### II.1: Primary distribution of income account

#### II.1.1: Generation of income account

Uses		Resources			
D.1 Compensation of employees	545	B.1n Value added, net	735		
D.11 Wages and salaries	421				
D.12 Employers' social contributions	124				
D.121 Employers' actual social contributions	112				
D.122 Employers' imputed social contributions	12				
D.29 Other taxes on production	86				
D.39 Other subsidies on production	-35				
B.2 Operating surplus	139				

#### II.1.2: Allocation of primary income account

Uses			Resources			
D.4 Property income	145	B.2	Operating surplus	139		
D.41 Interest	66					
D.42 Distributed income of corporations	48	D.4	Property income	78		
D.421 Dividends	24	D.41	Interest	25		
D.422 Withdrawals from income of quasi-corporations	24	D.42	Distributed income of corporations	3		
D.43 Reinvested earnings on direct foreign investment	0	D.421	Dividends	3		
D.45 Rent	31	D.422	Withdrawals from income of quasi-corporations	0		
		D.43	Reinvested earnings on direct foreign investment	4		
		D.44	Property income attributed to insurance policyholders	5		
		D.45	Rent	41		
B.5 Balance of primary incomes	72					

#### II.1.2.1: Entrepreneurial income account

Uses		Resources			
D.4 Property income	97	B.2	Operating surplus	139	
D.41 Interest	66				
D.45 Rent	31 D	D.4	Property income	78	
		D.41	Interest	25	
		D.42	Distributed income of corporations	3	
		D.421	Dividends	3	
		D.422	Withdrawals from income of quasi-corporations	0	
		D.43	Reinvested earnings on direct foreign investment	4	
		D.44	Property income attributed to insurance policyholders	5	
		D.45	Rent	41	
B.4 Entrepreneurial income	120				



### II.1.2.2: Allocation of other primary income account

Uses			Resources	
D.4 Property income	48	B.4	Entrepreneurial income	120
D.42 Distributed income of corporations	48			
D.421 Dividends	24			
D.422 Withdrawals from income of quasi-corporations	24			
D.43 Reinvested earnings on direct foreign investment	0			
B.5 Balance of primary incomes	72			

#### II.2: Secondary distribution of income account

Uses		Resources	
D.5 Current taxes on income, wealth, etc.	24	B.5 Balance of primary incomes	72
D.51 Taxes on income	20		
D.59 Other current taxes	4	D.61 Social contributions	14
		D.611 Actual social contributions	2
D.62 Social benefits other than social transfers in kind	13	D.6111 Employers' actual social contributions	1
D.622 Private funded social benefits	1	D.61111 Compulsory employers' actual social contributions	1
D.623 Unfunded employee social benefits	12	D.61112 Voluntary employers' actual social contributions	0
		D.6112 Employees social contributions	1
D.7 Other current transfers	11	D.61121 Compulsory employees' social contributions	1
D.71 Net non-life insurance premiums	8	D.61122 Voluntary employees' social contributions	0
D.75 Miscellaneous current transfers	3	D.612 Imputed social contributions	12
		D.7 Other current transfers	10
		D.72 Non-life insurance claims	6
		D.75 Miscellaneous current transfers	4
B.6 Disposable income	48		

#### II.4: Use of income account

#### II.4.1: Use of disposable income account

	Uses			Resources	
D.8	Adjustment for the change in net equity of households in pension funds reserves	0	B.6	Disposable income	48
B.8	Saving	48			

#### III: Accumulation accounts

### III.1: Capital account

#### III.1.1: Change in net worth due to saving and capital transfers account

Changes in assets	Changes in liabilities and net worth				
B.10.1 Changes in net worth due to saving	B.8n Saving, net	48			
and capital transfers 65					
	D.9 Capital transfers, receivable	.33			
	D.92 Investment grants	23			
	D,99 Other capital transfers	10			
	D.9 Capital transfers, payable	-16			
	D.91 Capital taxes	0			
	D.99 Other capital transfers	-16			



### III.1.2: Acquisition of non-financial assets account

	Changes in assets		Changes in liabilities and net worth			
P.51	Gross fixed capital formation	250	B.10.1	Changes in net worth due to saving		
P.511	Acquisitions less disposals of tangible fixed assets	209		and capital transfers	65	
P.5111		211				
P.5112		4				
P.5113		-6				
P.512	Acquisitions less disposals of intangible fixed assets	21				
P.5121		21				
P.5122		1				
P.5123	B Disposals of existing intangible fixed assets	-1				
P.513	Additions to the value of non-produced non-financial assets	20				
P.5131	Major improvements to non-produced non-financial assets	3				
P.5132	2 Costs of ownership transfer on non-produced non-financial assets	17				
K.1	Consumption of fixed capital	-137				
P.52	Changes in inventories	26				
P.53	Acquisitions less disposals of valuables	2				
K.2	Acquisitions less disposals of non-produced non-financial assets	-7				
K.21	Acquisitions less disposals of land and other tangible non-produced assets	-6				
K.22	Acquisitions less disposals of intangible non-produced assets	-1				
B.9	Net lending (+) / net borrowing (-)	-69				

#### III.2: Financial account

	Changes in assets			Changes in liabilities and net worth	
F	Net acquisition of financial assets	71	F	Net incurrence of liabilities	140
F.2	Currency and deposits	17	F.2	Currency and deposits	0
F.21	Currency	5	F.22	Transferable deposits	0
F.22	Transferable deposits	10	F.29	Other deposits	0
F.29	Other deposits	2			
			F.3	Securities other than shares	6
F.3	Securities other than shares	18			
			F.4	Loans	71
F.4	Loans	27	F.41	Short-term	16
F.41	Short-term	16	F.42	Long-term	55
F.42	Long-term	11			
			F.5	Shares and other equity	26
F.5	Shares and other equity	2			
			F.6	Insurance technical reserves	0
F.6	Insurance technical reserves	0	F.61	Net equity of households in life insurance	
				reserves and in pension funds reserves	0
F.62	Prepayments of insurance premiums and reserves for		F.612	Net equity of households in pension funds reserves	0
	outstanding claims	0			
F.7	Other accounts receivable	7	F.7	Other accounts payable	37
F.71	Trade credits and advances	6	F.71	Trade credits and advances	8
F.79	Other accounts receivable, except trade credits and		F.79	Other accounts payable, except trade credits and	
	advances	1		advances	29
			B.9	Net lending(+)/net borowing(-)	-69



#### III.3: Other changes in assets accounts

#### III.3.1: Other changes in volume of assets account

Changes in assets			Changes in liabilities and net worth	
AN Non-financial assets	12	AF Lia	abilities	
AN.1 Produced assets	-2		Catastrophic losses	(
K.4 Economic appearance of produced assets	0		Uncompensated seizures	(
K.7 Catastrophic losses	-5	K.10	Other volume changes in financial assets	
			and liabilities n.e.c.	-4
K.8 Uncompensated seizures	-1	K.12	Changes in classifications and structure	
K.9 Other volume changes in non-financial assets n.e.c.	1	K.12.1	Changes in sector classification and structure	
K.12 Changes in classifications and structure	3	K.12.2	Changes in classification of assets and liabilities	(
K.12.1 Changes in sector classification and structure	3	K.12.22	Changes in classification of assets or liabilities	
			other than monetisation/demonetisation of gold	(
K.12.2 Changes in classification of assets and liabilities	0	of which:		
K.12.22 Changes in classification of assets or liabilities		AF.2	Currency and deposits	(
other than monetisation/demonetisation of gold	0	AF.3	Securities other than shares	
of which:		AF.4	Loans	-:
AN.11 Fixed assets	-1	AF.5	Shares and other equity	(
AN.12 Inventories	-1	AF.6	Insurance technical reserves	- (
AN.13 Valuables	0	AF.7	Other accounts payable	
AN.2 Non-produced assets	14			
K.3 Economic appearance of non-produced assets	24			
K.5 Natural growth of non-cultivated biological resources	0			
K.6 Economic disappearance of non-produced assets	-7			
K.61 Depletion of natural assets	-6			
K.62 Other economic disappearance of non-produced assets	-1			
K.7 Catastrophic losses	0			
K.8 Uncompensated seizures	-4			
K.9 Other volume changes in non-financial assets n.e.c.	0			
K.12 Changes in classifications and structure	1			
K.12.1 Changes in sector classification and structure K.12.2 Changes in classification of assets and liabilities	0			
0	0			
K.12.22 Changes in classification of assets or liabilities other than monetisation/demonetisation of gold	0			
of which;	0			
AN.21 Tangible non-produced assets	14			
AN.22 Intangible non-produced assets	0			
AF Financial assets	2			
K.7 Catastrophic losses	0			
K.8 Uncompensated seizures	0			
K.10 Other volume changes in financial assets and				
liabilities n.e.c.	0			
K.12 Changes in classifications and structure	2			
K.12.1 Changes in sector classification and structure	2			
K.12.2 Changes in classification of assets and liabilities	O			
K.12.22 Changes in classification of assets or liabilities				
other than monetisation/demonetisation of gold	0			
of which:				
AF.2 Currency and deposits	0			
AF,3 Securities other than shares	0			
AF.4 Loans	0			
AF.5 Shares and other equity	2			
AF.6 Insurance technical reserves	0			
AF.7 Other accounts receivable	0			
			nanges in net worth due to other anges in volume of assets	1
		CI:	anges in volume of assets	



#### III.3.2: Revaluation account

Changes in assets			Changes in liabilities and net worth			
K.11 Nominal holding gains(+)/losses(-):		K.11	Nominal holding gains(-)/losses(+):			
AN Non-financial assets	144	AF	Liabilities	18		
AN.1 Produced assets	63	AF.2	Currency and deposits	0		
AN.11 Fixed assets	58	AF.3	Securities other than shares	1		
AN.12 Inventories	4	AF.4	Loans	0		
AN.13 Valuables	1	AF.5	Shares and other equity	16		
AN.2 Non-produced assets	81	AF.6	Insurance technical reserves	0		
AN.21 Tangible non-produced assets	80	AF.7	Other accounts payable	0		
AN.22 Intangible non-produced assets	1_					
AF Financial assets	8					
AF.2 Currency and deposits	0					
AF-3 Securities other than shares	3					
AF.4 Loans	0					
AF.5 Shares and other equity	5					
AF.6 Insurance technical reserves	0					
AF.7 Other accounts receivable	0					
		B.10.3	Changes in net worth due to nominal holding gains/losses	134		

### III.3.2.1: Neutral holding gains/losses account

Changes in assets		Changes in liabilities and net worth				
K.11.1 Neutral holding gains (+)/losses (-):		K.11.1	Neutral holding gains (-)/losses (+):			
AN Non-financial assets		AF	Liabilities	36		
AN.1 Produced assets	60	AF.2	Currency and deposits	1		
AN.11 Fixed assets	58	AF.3	Securities other than shares	. 1		
AN.12 Inventories	2	AF.4	Loans	18		
AN.13 Valuables	1	AF.5	Shares and other equity	14		
AN.2 Non-produced assets	41	AF.6	Insurance technical reserves	0		
AN.21 Tangible non-produced assets	40	AF.7	Other accounts payable	3		
AN.22 Intangible non-produced assets	1					
AF Financial assets	18					
AF.2 Currency and deposits	8					
AF.3 Securities other than shares	2					
AF.4 Loans	1					
AF.5 Shares and other equity	4					
AF.6 Insurance technical reserves	1					
AF.7 Other accounts receivable	3					
		B.10.3	1 Changes in net worth due to neutral holding gains/losses	82		



#### III.3.2.2: Real holding gains/losses account

Changes in assets		Changes in liabilities and net worth			
K.11.2 Real holding gains(+)/losses(-):		K.11.2	Real holding gains(-)/losses(+):		
AN Non-financial assets	43	AF	Liabilities	-18	
AN.1 Produced assets	3	AF.2	Currency and deposits	-1	
AN.11 Fixed assets	0	AF.3	Securities other than shares	1	
AN.12 Inventories	3	AF.4	Loans	-18	
AN.13 Valuables	0	AF.5	Shares and other equity	3	
AN.2 Non-produced assets	40	AF.6	Insurance technical reserves	0	
AN.21 Tangible non-produced assets	40	AF.7	Other accounts payable	-3	
AN.22 Intangible non-produced assets	0				
AF Financial assets	-10				
AF.2 Currency and deposits	-8				
AF.3 Securities other than shares	1				
AF.4 Loans	-1				
AF.5 Shares and other equity	1				
AF.6 Insurance technical reserves	-1				
AF.7 Other accounts receivable	-3				
		B.10.32	! Changes in net worth due to real holding gains/losses	51	

#### IV: Balance sheets

#### IV.1: Opening balance sheet

Assets			Liabilities and net worth	
AN Non-financial assets	5 041	AF	Liabilities	1 817
AN.1 Produced assets	3 001	AF.2	Currency and deposits	40
AN.11 Fixed assets	2 878	AF.3	Securities other than shares	44
AN.12 Inventories	85	AF.4	Loans	897
AN.13 Valuables	38	AF.5	Shares and other equity	687
AN.2 Non-produced assets	2 040	AF.6	Insurance technical reserves	12
AN.21 Tangible non-produced assets	1 989	AF.7	Other accounts payable	137
AN.22 Intangible non-produced assets	51			
AF Financial assets	897			
AF.2 Currency and deposits	382			
AF.3 Securities other than shares	90			
AF.4 Loans	50			
AF.5 Shares and other equity	200			
AF.6 Insurance technical reserves	25			
AF.7 Other accounts receivable	150			
		B.90	Net worth	4 121



### IV.2: Changes in balance sheet

Assets			Liabilities and net worth	
Total changes in assets			Total changes in liabilities	
AN Non-financial assets AN.1 Produced assets AN.11 Fixed assets AN.12 Inventories AN.13 Valuables	290 182 150 29	AF AF.2 AF.3 AF.4 AF.5	Liabilities Currency and deposits Securities other than shares Loans Shares and other equity	155 0 7 68 42
AN.2 Non-produced assets AN.21 Tangible non-produced assets AN.22 Intangible non-produced assets  AF Financial assets AF.2 Currency and deposits AF.3 Securities other than shares AF.4 Loans AF.5 Shares and other equity	81 17 21 27 9	AF.7	Insurance technical reserves Other accounts payable	0 37
AF.6 Insurance technical reserves AF.7 Other accounts receivable	7	B.10 B.10.1 B.10.2 B.10.3 B.10.31	Changes in net worth, total due to: Saving and capital transfers Other changes in volume of assets Nominal holding gains/losses Neutral holding gains/losses Real holding gains/losses	216 65 17 134 82 51

#### IV.3: Closing balance sheet

Assets			Liabilities and net worth	
AN Non-financial assets	5 331	AF	Liabilities	1 972
		AF.2	Currency and deposits	40
AN.1 Produced assets	3 183	AF.3	Securities other than shares	51
AN.11 Fixed assets	3 028	AF.4	Loans	965
AN.12 Inventories	114	AF.5	Shares and other equity	729
AN.13 Valuables	41	AF.6	Insurance technical reserves	12
AN.2 Non-produced assets	2 148	AF.7	Other accounts payable	174
AN.21 Tangible non-produced assets	2 097			
AN.22 Intangible non-produced assets				
AF Financial assets	978			
AF.2 Currency and deposits	399			
AF.3 Securities other than shares	111			
AF.4 Loans	77			
AF.5 Shares and other equity	209			
AF.6 Insurance technical reserves	25			
AF.7 Other accounts receivable	157			
		B.90	Net worth	4 337



#### I: Production account

	Uses			Resources	
P.2	Intermediate consumption		P.1	Output	102
			P.11	Market output	102
			P.12	Output for own final use	0
B.1g	Value added, gross	73			
K.1	Consumption of fixed capital	10			
B.1n	Value added, net	63			

#### II: Distribution and use of income accounts

#### II.1: Primary distribution of income account

#### II.1.1: Generation of income account

	Uses			Resources	
D.1	Compensation of employees	15	3.1n	Value added, net	63
D.11	Wages and salaries	10			
D.12	Employers' social contributions	5			
D.121	Employers' actual social contributions	4			
D.122	Employers' imputed social contributions	1			
D.29	Other taxes on production	3			
D.39	Other subsidies on production	0			
B.2	Operating surplus	45			

#### II.1.2: Allocation of primary income account

	Uses			Resources	
D.4	Property income	138	B.2	Operating surplus	45
D.41	Interest	77			
D.42	Distributed income of corporations	36	D.4	Property income	160
D.421	Dividends	36	D.41	Interest	125
			P.119	Adjustment for FISIM	- 48
D.422	Withdrawals from income of quasi-corporations	0	D.42	Distributed income of corporations	25
D.43	Reinvested earnings on direct foreign investment	0	D.421	Dividends	25
D.44	Property income attributed to insurance policyholders	25	D.422	Withdrawals from income of quasi-corporations	0
D.45	Rent	0	D.43	Reinvested earnings on direct foreign investment	7
			D.44	Property income attributed to insurance policyholders	0
			D.45	Rent	3
B.5	Balance of primary incomes	19			



#### II.1.2.1: Entrepreneurial income account

	Uses			Resources	
D.4 D.41	Property income Interest	102 77	B.2	Operating surplus	45
D.44	Property income attributed to insurance policyholders	25	D.4	Property income	160
D.45	Rent	0	D.41	Interest	125
			P.119	Adjustment for FISIM	- 48
			D.42	Distributed income of corporations	25
			D.421	Dividends	25
			D.422	Withdrawals from income of quasi-corporations	0
			D.43	Reinvested earnings on direct foreign investment	7
			D.44	Property income attributed to insurance policyholders	0
			D.45	Rent	3
B.4	Entrepreneurial income	55			

#### II.1.2.2: Allocation of other primary income account

er e
repreneurial income 55

#### II.2: Secondary distribution of income account

	Uses		Resources	
D.5	Current taxes on income, wealth, etc.	10	B.5 Balance of primary incomes	19
D.51	Taxes on income	7		
D.59	Other current taxes	3	D.61 Social contributions	39
			D.611 Actual social contributions	38
D.62	Social benefits other than social transfers in kind	29	D.6111 Employers' actual social contributions	18
D.622	Private funded social benefits	28	D.61111 Compulsory employers' actual social contributions	15
D.623	Unfunded employee social benefits	1	D.61112 Voluntary employers' actual social contributions	3
			D.6112 Employees' social contributions	20
D.7	Other current transfers	46	D.61121 Compulsory employees' social contributions	15
D.71	Net non-life insurance premiums	0	D.61122 Voluntary employees' social contributions	5
D.72	Non-life insurance claims	45	D.612 Imputed social contributions	1
D.75	Miscellaneous current transfers	1		
			D.7 Other current transfers	49
			D.71 Net non-life insurance premiums	45
			D.72 Non-life insurance claims	0
			D.75 Miscellaneous current transfers	4
B.6	Disposable income	22		

#### II.4: Use of income account

#### II.4.1: Use of disposable income account

	Uses		_	Resources	
D.8	Adjustment for the change in net equity of households in pension funds reserves	11	B.6	Disposable income	22
B.8	Saving	11			



#### III: Accumulation accounts

#### III.1: Capital account

#### III.1.1: Change in net worth due to saving and capital transfers account

Changes in assets		Changes in liabilities and net wo	rth
B.10.1 Changes in net worth due to saving	B,8n	Saving, net	11
and capital transfers	4		
	D.9	Capital transfers, receivable	0
	D.92	Investment grants	0
	D.99	Other capital transfers	0
	D.9	Capital transfers, payable	- 7
	D.91	Capital taxes	0
	D.99	Other capital transfers	- 7

#### III.1.2: Acquisition of non-financial assets account

Changes in assets	Changes in liabilities and net worth
P.51 Gross fixed capital formation P.511 Acquisitons less disposals of tangible fixed assets P.5111 Acquisitions of new tangible fixed assets P.5112 Acquisitions of existing tangible fixed assets P.5113 Disposals of existing tangible fixed assets P.512 Acquisitions less disposals of intangible fixed assets	9 B.10.1 Changes in net worth due to saving 8 and capital transfers 4 7 1 0 1
P.5121 Acquisitions of new intangible fixed assets P.5122 Acquisitions of existing intangible fixed assets P.513 Disposals of existing intangible fixed assets P.513 Additions to the value of non-produced non-financial assets P.5131 Major improvements to non-produced non-financial assets P.5132 Costs of ownership transfer on non-produced non-financial assets	1 0 0 0
P.52 Changes in inventories P.53 Acquisitions less disposals of valuables	- 10 0 0
K.2 Acquisitions less disposals of non-produced non-financial assets K.21 Acquisitions less disposals of land and other tangible non-produced assets	0
K.22 Acquisitions less disposals of intangible non-produced assets  B.9 Net lending (+) / net borrowing (-)	5



#### III.2: Financial account

	Changes in assets			Changes in liabilities and net worth	
F	Net acquisition of financial assets	237	F	Net incurrence of liabilities	232
F.1	Monetary gold and SDRs	- 1			
F.2	Currency and deposits	15	F.2	Currency and deposits	130
F.21	Currency	15	F.21	Currency	35
F.22	Transferable deposits	0	F.22	Transferable deposits	63
F.29	Other deposits	0	F.29	Other deposits	32
F.3	Securities other than shares	53	F.3	Securities other than shares	53
F.4	Loans	167	F.4	Loans	0
F.41	Short-term	63	F.41	Short-term	0
F.42	Long-term	104	F.42	Long-term	0
F.5	Shares and other equity	3	F.5	Shares and other equity	13
F.6	Insurance technical reserves	0	F.6	Insurance technical reserves	36
F.62	Prepayments of insurance premiums and reserves for		F.61	Net equity of households in life insurance	
	outstanding claims	0		reserves and in pension funds reserves	33
			F.611	Net equity of households in life insurance reserves	22
F.7	Other accounts receivable	0	F.612	Net equity of households in pension funds reserves	11
F.71	Trade credits and advances	0	F.62	Prepayments of insurance premiums and reserves for	
F.79	Other accounts receivable, except trade credits and	0		outstanding claims	3
	advances	0	F.7	Other accounts payable	0
			F.71	Trade credits and advances	0
			F.79	Other accounts payable, except trade credits and	
				advances	0
			B.9	Net lending(+)/net borrowing(-)	5



#### III.3: Other changes in assets accounts

#### III.3.1: Other changes in volume of assets account

	Changes in assets		Changes in liabilities and net worth
AN N	Non-financial assets	- 2	AF Liabilities
AN.1	Produced assets	- 2	K.7 Catastrophic losses
K.4	Economic appearance of produced assets	0	K.8 Uncompensated seizures
K.7	Catastrophic losses	0	K.10 Other volume changes in financial assets and
K.8	Uncompensated seizures	0	liabilities n.e.c.
K.9	Other volume changes in non-financial assets n.e.c.	0	K.12 Changes in classifications and structure
K.12	Changes in classifications and structure	- 2	K.12.1 Changes in sector classification and structure
K.12.1	Changes in sector classification and structure	0	K.12.2 Changes in classification of assets and liabilities
K.12.1	Changes in sector classification and structure  Changes in classification of assets and liabilities	- 2	K.12.22 Changes in classification of assets and habilities  K.12.22 Changes in classification of assets or liabilities
K.12.21	Monetisation/demonetisation of gold	- 2	8
		- 2	other than monetisation/demonetisation of gold
K.12.22	Changes in classification of assets or liabilities		of which:
	other than monetisation/demonetisation of gold	0	AF.2 Currency and deposits
of which		- 24	AF.3 Securities other than shares
AN.11	Fixed assets	0	AF.4 Loans
AN.12	Inventories	0	AF.5 Shares and other equity
AN.13	Valuables	- 2	AF.6 Insurance technical reserves
AN.2	Non-produced assets	()	AF.7 Other accounts payable
K.3	Economic appearance of non-produced assets	0	
K.5	Natural growth of non-cultivated biological resources	0	
K.6	Economic disappearance of non-produced assets	0	
K.61	Depletion of natural assets	0	
K.62	Other economic disappearance of non-produced asse	0	
K.7	Catastrophic losses	0	
K.8	Uncompensated seizures	0	
K.9	Other volume changes in non-financial assets n.e.c.	0	
K.12	Changes in classifications and structure	O	
K.12.1	Changes in sector classification and structure	0	
K.12.2	Changes in classification of assets and liabilities	0	
K.12.22	Changes in classification of assets or liabilities		
	other than monetisation/demonetisation of gold	0	
of which	:		
AN.21	Tangible non-produced assets	O	
AN.22	Intangible non-produced assets	O	
AF F	inancial assets	O	
K.7	Catastrophic losses	0	
K.8	Uncompensated seizures	- 3	
K.10	Other volume changes in financial assets and		
	liabilities n.e.c.	1	
K.12	Changes in classifications and structure	2	
K.12.1	Changes in sector classification and structure	0	
K.12.2	Changes in classification of assets and liabilities	2	
K.12.21	Monetisation/demonetisation of gold	2	
K.12.22	Changes in classification of assets or liabilities		
	other than monetisation/demonetisation of gold	0	
of which		.,	
AF.1	Monetary gold and SDRs	7	
AF.2	Currency and deposits	ó	
AF.3	Securities other than shares	- 3	
AF.4	Loans		
		- 4	
AF.5	Shares and other equity	0	
AF.6	Insurance technical reserves	0	
AF.7	Other accounts receivable	0	P10.3 Classical data di
			B.10.2 Changes in net worth due to other changes in volume of assets -



#### III.3.2: Revaluation account

Changes in assets			Changes in liabilities and net worth	
K.11 Nominal holding gains(+)/losses(-):		K.11	Nominal holding gains(-)/losses(+):	
AN Non-financial assets	4	AF	Liabilities	51
AN.1 Produced assets	2	AF.2	Currency and deposits	0
AN.11 Fixed assets	2	AF.3	Securities other than shares	34
AN.12 Inventories	0	AF.4	Loans	C
AN.13 Valuables	0	AF.5	Shares and other equity	17
AN.2 Non-produced assets	2	AF.6	Insurance technical reserves	C
AN.21 Tangible non-produced assets	1	AF.7	Other accounts payable	0
AN.22 Intangible non-produced assets	0			
AF Financial assets	57			
AF.1 Monetary gold and SDRs	11			
AF.2 Currency and deposits	0			
AF.3 Securities other than shares	30			
AF.4 Loans	0			
AF.5 Shares and other equity	16			
AF.6 Insurance technical reserves	0			
AF.7 Other accounts receivable	0			
		D 10 3	Changes in net worth due to nominal holding gains/losses	10

#### III.3.2.1: Neutral holding gains/losses account

	Changes in assets		Changes in liabilities and net worth			
K.11.1	Neutral holding gains (+)/losses (-):		K.11.1 Neutral holding gains (-)/losses (+):			
AN.1 AN.11 AN.12 AN.13 AN.2 AN.21	Non-financial assets Produced assets Fixed assets Inventories Valuables Non-produced assets Tangible non-produced assets	3 2 2 0 0 1 1	AF Liabilities AF.2 Currency and deposits AF.3 Securities other than shares AF.4 Loans AF.5 Shares and other equity AF.6 Insurance technical reserves AF.7 Other accounts payable	68 26 21 0 14 7		
AN.22	Intangible non-produced assets	0				
AF	Financial assets	70				
AF.1	Monetary gold and SDRs	14				
AF.2	Currency and deposits	0				
AF.3	Securities other than shares	19				
AF.4	Loans	24				
AF.5	Shares and other equity	13				
AF.6	Insurance technical reserves	1				
AF.7	Other accounts receivable	0				
			B.10.31 Changes in net worth due to neutral holding gains/losses	5		



#### III.3.2.2: Real holding gains/losses account

Changes in assets		Changes in liabilities and net worth	
K.11.2 Real holding gains(+)/losses(-):		K.11.2 Real holding gains(-)/losses(+):	
AN Non-financial assets	1	AF Liabilities	- 17
AN.1 Produced assets	0	AF.2 Currency and deposits	- 26
AN.11 Fixed assets	0	AF.3 Securities other than shares	13
AN.12 Inventories	0	AF.4 Loans	(
AN.13 Valuables	0	AF.5 Shares and other equity	3
AN.2 Non-produced assets	1	AF.6 Insurance technical reserves	- 7
AN.21 Tangible non-produced assets	1	AF.7 Other accounts payable	0
AN.22 Intangible non-produced assets	0		
AF Financial assets	- 13		
AF.1 Monetary gold and SDRs	- 3		
AF.2 Currency and deposits	0		
AF.3 Securities other than shares	11		
AF.4 Loans	- 24		
AF.5 Shares and other equity	3		
AF.6 Insurance technical reserves	- 1		
AF.7 Other accounts receivable	0		
		B.10.32 Changes in net worth due to real holding gains/losses	

#### IV: Balance sheets

#### IV.1: Opening balance sheet

Assets		Liabilities and net v	vorth
Non-financial assets	144	AF Liabilities	3 384
N.1 Produced assets	104	AF.2 Currency and deposits	1 281
N.11 Fixed assets	99	AF.3 Securities other than shares	1 053
N.12 Inventories	0	AF.4 Loans	0
N.13 Valuables	5	AF.5 Shares and other equity	715
NN.2 Non-produced assets	40	AF.6 Insurance technical reserves	335
N.21 Tangible non-produced assets	37	AF.7 Other accounts payable	0
N.22 Intangible non-produced assets	3		
AF Financial assets	3 508		
NF.1 Monetary gold and SDRs	690		
AF.2 Currency and deposits	0		
NF.3 Securities other than shares	950		
AF.4 Loans	1 187		
NF.5 Shares and other equity	651		
	30		
AF.6 Insurance technical reserves	20		
	0		



#### IV.2: Changes in balance sheet

Assets		Liabilities and net worth	
Total changes in assets		Total changes in liabilities	
AN Non-financial assets	1 AF	Liabilities	285
AN.1 Produced assets	-1 AF.:	2 Currency and deposits	130
AN.11 Fixed assets	1 AF.:		87
AN.12 Inventories	O AF	Loans	0
AN.13 Valuables	- 2 AF.	Shares and other equity	30
AN.2 Non-produced assets	2 AF.0		38
AN.21 Tangible non-produced assets	1 AF.:	Other accounts payable	0
AN.22 Intangible non-produced assets	0		
AF Financial assets	294		
AF.1 Monetary gold and SDRs	17		
AF.2 Currency and deposits	15		
AF.3 Securities other than shares	80		
AF.4 Loans	163		
AF.5 Shares and other equity	19		
AF.6 Insurance technical reserves	0		
AF.7 Other accounts receivable	0		
	B.10	0	10
		due to:	
	B.10	0	4
	B.10	8	- 4
	B.10	0.0	10
	B.10	80	5
	B.10	0.32 Real holding gains/losses	5

#### IV.3: Closing balance sheet

Assets			Liabilities and net worth	
AN Non-financial assets	145	AF	Liabilities	3 669
AN.1 Produced assets	103	AF.2	Currency and deposits	1 411
AN.11 Fixed assets	100	AF.3	Securities other than shares	1 140
AN.12 Inventories	0	AF.4	Loans	0
AN.13 Valuables	3	AF.5	Shares and other equity	745
AN.2 Non-produced assets	42	AF.6	Insurance technical reserves	373
AN.21 Tangible non-produced assets	38	AF.7	Other accounts payable	0
AN.22 Intangible non-produced assets	3			
AF Financial assets	3 802			
AF.1 Monetary gold and SDRs	707			
AF.2 Currency and deposits	15			
AF.3 Securities other than shares	1 030			
AF.4 Loans	1 350			
AF.5 Shares and other equity	670			
AF.6 Insurance technical reserves	30			
AF.7 Other accounts receivable	0			
		B.90	Net worth	278



# Table A.IV.5 Full sequence of accounts for general government

#### I: Production account

	Uses			Resources	
P.2	Intermediate consumption	246	P.1	Output	434
			P.11	Market output	74
			P.12	Output for own final use	0
			P.13	Other non-market output	360
B.1g	Value added, gross	188			
K.1	Consumption of fixed capital	30			
B.1n	Value added, net	158			

#### II: Distribution and use of income accounts

#### II.1: Primary distribution of income account

#### II.1.1: Generation of income account

	Uses			Resources	
D.1	Compensation of employees	140	B.1n Value	added, net	158
D.11	Wages and salaries	87			
D.12	Employers' social contributions	53			
D.121	Employers' actual social contributions	48			
D.122	Employers' imputed social contributions	5			
D.29	Other taxes on production	2			
D.39	Other subsidies on production	0			
B.2	Operating surplus	16			

#### II.1.2: Allocation of primary income account

Uses		Resources	
D.4 Property income	46	B.2 Operating surplus	16
D.41 Interest	39		
D.42 Distributed income of corporations	()	D.2 Taxes on production and imports	235
D.422 Withdrawals from income of quasi-corporations	0	D.21 Taxes on products	141
D.43 Reinvested earnings on direct foreign investment	0	D.211 Value added type taxes (VAT)	121
D.45 Rent	7	D.212 Taxes and duties on imports excluding VAT	17
		D.2121 Import duties	17
		D.2122 Taxes on imports excluding VAT and duties	(
		D.214 Taxes on products except VAT and import taxes	2
		D.29 Other taxes on production	9.
		D.3 Subsidies	- 4-
		D.31 Subsidies on products	- {
		D.311 Import subsidies	(
		D.319 Other subsidies on products	- {
		D.39 Other subsidies on production	- 30
		D.4 Property income	30
		D.41 Interest	1.
		D.42 Distributed income of corporations	18
		D.421 Dividends	
		D.422 Withdrawals from income of quasi-corporations	1.
		D.43 Reinvested earnings on direct foreign investment	(
		D.44 Property income attributed to insurance policyholders	
		D.45 Rent	
B.5 Balance of primary incomes	191		



# Table A.IV.5 Full sequence of accounts for general government [cont.]

#### II.1.2.1: Entrepreneurial income account

	Uses			Resources	
D.4	Property income	9	B.2	Operating surplus	16
D.41	Interest	2			
D.45	Rent	7	D.4	Property income	4
			D.41	Interest	0
			D.42	Distributed income of corporations	4
			D.421	Dividends	4
			D.422	Withdrawals from income of quasi-corporations	0
			D.43	Reinvested earnings on direct foreign investment	0
			D.44	Property income attributed to insurance policyholders	0
			D-45	Rent	0
B.4	Entrepreneurial income	11			

#### II.1.2.2: Allocation of other primary income account

	Uses		Resources	
D.4 Property income	37	B.4	Entrepreneurial income	11
D.41 Interest	37			
		D.2	Taxes on production and imports	235
		D.21	Taxes on products	141
		D.211	Value added type taxes (VAT)	121
		D.212	Taxes and duties on imports excluding VAT	17
		D.2121	Import duties	17
		D.2122	<ul> <li>Taxes on imports excluding VAT and duties</li> </ul>	0
		D.214	Taxes on products except VAT and import taxes	3
		D.29	Other taxes on production	94
		D.3	Subsidies	- 44
		D.31	Subsidies on products	- 8
		D.311	Import subsidies	0
		D.319	Other subsidies on products	- 8
		D.39	Other subsidies on production	- 36
		D.4	Property income	26
		D.41	Interest	12
		D.42	Distributed income of corporations	14
		D.421	Dividends	1
		D.422	Withdrawals from income of quasi-corporations	13
B.5 Balance of primary incor	mes 191			



#### II.2: Secondary distribution of income account

Uses		Resources				
D.5	Current taxes on income, wealth, etc.	0	B.5 Balance of primary incomes	191		
D.59	Other current taxes	0				
			D.5 Current taxes on income, wealth, etc.	213		
D.62	Social benefits other than social transfers in kind	289	D.51 Taxes on income	204		
D.621	Social security benefits in cash	232	D.59 Other current taxes	9		
D.622	Private funded social benefits	0				
D.623	Unfunded employee social benefits	5	D.61 Social contributions	268		
D.624	Social assistance benefits in cash	52	D.611 Actual social contributions	263		
			D.6111 Employers' actual social contributions	155		
D.7	Other current transfers	139	D.61111 Compulsory employers' actual social contributions	144		
D.71	Net non-life insurance premiums	4	D.61112 Voluntary employers' actual social contributions	11		
D.73	Current transfers within general government	96	D.6112 Employees' social contributions	76		
D.74	Current international cooperation	31	D.61121 Compulsory employees' social contributions	69		
D.75	Miscellaneous current transfers	8	D.61122 Voluntary employees' social contributions	7		
			D.6113 Social contributions by self-and			
			non-employed persons	32		
			D.61131 Compulsory social contributions by self-and			
			non-employed persons	22		
			D.61132 Voluntary social contributions by self-and			
			non-employed persons	10		
			D.612 Imputed social contributions	5		
			D.7 Other current transfers	108		
			D.72 Non-life insurance claims	1		
			D.73 Current transfers within general government	96		
			D.74 Current international corporations	1		
			D.75 Miscellaneous current transfers	10		
B.6	Disposable income	352				

#### II.3: Redistribution of income in kind account

	Uses		_	Resources	
D.63	Social transfers in kind	206	В.6	Disposable income	352
D.631	Social benefits in kind	162			
D.6311	Social security benefits, reimbursements	78			
D.6312	Other social security benefits in kind	65			
D.6313	Social assistance benefits in kind	19			
D.632	Transfers of individual non-market goods and				
	services	44			
B.7 A	Adjusted disposable income	146			

#### II.4: Use of income account

#### II.4.1: Use of disposable income account

	Uses			Resources	
P.3	Final consumption expenditure	362	B.6	Disposable income	352
P.31	Individual consumption expenditure	206			
P.32	Collective consumption expenditure	156			
D.8	Adjustment for the change in net equity				
	of households in pension funds reserves	0			
B.8	Saving	- 10			



### II.4.2: Use of adjusted disposable income account

Uses			Resources			
P.4	Actual final consumption	156	B.7	Adjusted disposable income	146	
P.42	Actual collective consumption	156				
D.8	Adjustment for the change in net equity of households					
	in pension funds reserves	0				
B.8	Saving	- 10				

#### III: Accumulation accounts

## III.1: Capital account

### III.1.1: Change in net worth due to saving and capital transfers account

Changes in assets		Changes in liabilities and net worth			
B.10.1 Changes in net worth due to saving	B.8n	Saving, net	- 10		
and capital transfers	- 38 D.9	Capital transfers, receivable	6		
	D.91	Capital taxes	2		
	D.92	Investment grants	0		
	D.99	Other capital transfers	4		
	D.9	Capital transfers, payable	- 34		
	D.91	Capital taxes	0		
	D.92	Investment grants	- 27		
	D,99	Other capital transfers	- 7		



#### III.1.2: Acquisition of non-financial assets account

	Changes in assets			Changes in liabilities and net worth	
P.51	Gross fixed capital formation	37	B.10.1	Changes in net worth due to saving	
P.511	Acquisitions less disposals of tangible fixed assets	23		and capital transfers	- 38
P.5111	Acquisitions of new tangible fixed assets	24			
P.5112	Acquisitions of existing tangible fixed assets	1			
P.5113	Disposals of existing tangible fixed assets	- 2			
P.512	Acquisitions less disposals of intangible fixed assets	12			
P.5121	Acquisitions of new intangible fixed assets	12			
P.5122	Acquisitions of existing intangible fixed assets	2			
P.5123	Disposals of existing intangible fixed assets	- 2			
P.513	Additions to the value of non-produced				
	non-financial assets	2			
P.5131	Major improvements to non-produced				
	non-financial assets	2			
P.5132	Costs of ownership transfer on non-produced				
	non-financial assets	0			
K.1	Consumption of fixed capital	- 30			
P.52	Changes in inventories	0			
P.53	Acquisitions less disposals of valuables	3			
	Acquisitions less disposals of non-produced non-financial assets	2			
K.21	Acquisitions less disposals of land and other				
	tangible non-produced assets	2			
K.22	Acquisitions less disposals of intangible				
	non-produced assets	0			
B.9	Net lending (+) / net borrowing (-)	- 50			

#### III.2: Financial account

	Changes in assets			Changes in liabilities and net worth				
F	Net acquisition of financial assets	120	F	Net incurrence of liabilities	170			
F.1	Monetary gold and SDRs	0						
F.2	Currency and deposits	7	F.2	Currency and deposits	2			
F.21 F.22	Currency	2	F.21 F.22	Currency Transferable deposits	0			
F.22	Transferable deposits Other deposits	1	F.22 F.29	Other deposits	2			
F.3	Securities other than shares	26	F.3	Securities other than shares	64			
F.4	Loans	45	F.4	Loans	94			
F.41	Short-term	1	F.41	Short-term	32			
F.42	Long-term	44	F.42	Long-term	62			
F.5	Shares and other equity	36	F.5	Shares and other equity	0			
F.6 F.62	Insurance technical reserves Prepayments of insurance premiums and reserves for	0	F.6 F.61	Insurance technical reserves Net equity of households in life insurance	0			
	outstanding claims	0		reserves and in pension funds reserves	0			
			F.612	Net equity of households in pension funds reserves	0			
F.7	Other accounts receivable	6						
F.71	Trade credits and advances	1	F.7	Other accounts payable	10			
F.79	Other accounts receivable, except trade credits and		F.71	Trade credits and advances	6			
	advances	5	F.79	Other accounts payable, except trade credits and advances	4			
			B.9	Net lending(+)/net borrowing(-)	- 50			



#### III.3: Other changes in assets accounts

#### III.3.1: Other changes in volume of assets account

	Changes in assets			Changes in liabilities and net worth	
AN N	on-financial assets	0	AF L	iabilities	
AN.1	Produced assets	- 3	K.7	Catastrophic losses	
K.4	Economic appearance of produced assets	3	K.8	Uncompensated seizures	
K.7	Catastrophic losses	- 4	K.10	Other volume changes in financial assets and	
K.8	Uncompensated seizures	1		liabilities n.e.c.	
K.9	Other volume changes in non-financial assets n.e.c.	0	K.12	Changes in classifications and structure	
K.12	Changes in classifications and structure	- 3	K.12.1	Changes in sector classification and structure	
K.12.1	Changes in classifications and structure  Changes in sector classification and structure	- 3	K.12.1	Changes in sector classification and structure Changes in classification of assets and liabilities	
K.12.1		0	K.12.22		
	Changes in classification of assets and liabilities		N.12,22	Changes in classification of assets or liabilities	
K.12.21	Monetisation/demonetisation of gold	0	-7 - 62 E	other than monetisation/demonetisation of gold	
K.12.22	Changes in classification of assets or liabilities		of which:		
	other than monetisation/demonetisation of gold	0	AF.2	Currency and deposits	
of which:			AF.3	Securities other than shares	
AN.11	Fixed assets	- 3	AF.4	Loans	-
AN.12	Inventories	0	AF.5	Shares and other equity	
AN.13	Valuables	0	AF.6	Insurance technical reserves	
AN.2	Non-produced assets	3	AF.7	Other accounts payable	
K.3	Economic appearance of non-produced assets	0		T.A.	
K.5	Natural growth of non-cultivated biological resources	4			
K.6	Economic disappearance of non-produced assets	- 2			
K.61	Depletion of natural assets	- 2			
K.62	Other economic disappearance of non-produced asse	0			
K.7	Catastrophic losses	- 2			
K.8	Uncompensated seizures	4			
K.9	Other volume changes in non-financial assets n.e.c.	0			
K.12	Changes in classifications and structure	- 1			
K.12.1	Changes in sector classification and structure	- 1			
K.12.2	Changes in classification of assets and liabilities	0			
K.12.22	Changes in classification of assets or liabilities				
	other than monetisation/demonetisation of gold	0			
of which:					
AN.21	Tangible non-produced assets	3			
AN.22	Intangible non-produced assets	0			
	nancial assets	1			
K.7	Catastrophic losses	0			
K.8	Uncompensated seizures	3			
K.10	Other volume changes in financial assets and				
	liabilities n.e.c.	0			
K.12	Changes in classifications and structure	- 2			
K.12.1	Changes in sector classification and structure	- 2			
K.12.2	Changes in classification of assets and liabilities	0			
K.12.21	Monetisation/demonetisation of gold	0			
K.12.22	Changes in classification of assets or liabilities				
	other than monetisation/demonetisation of gold	0			
of which:	0				
AF.1	Monetary gold and SDRs	0			
AF.2	Currency and deposits	0			
AF.3	Securities other than shares	3			
AF.4	Loans	0			
AF.5	Shares and other equity	- 2			
AF.6	Insurance technical reserves	0			
AF.7	Other accounts receivable	0	0.40.0		
				hanges in net worth due to other	
			C	hanges in volume of assets	



#### III.3.2: Revaluation account

Changes in assets			Changes in liabilities and net worth			
K.11	Nominal holding gains(+)/losses(-):		K.11	Nominal holding gains(-)/losses(+):		
AN	Non-financial assets	44	AF	Liabilities	7	
AN.1	Produced assets	20	AF.2	Currency and deposits	0	
AN.11	Fixed assets	18	AF.3	Securities other than shares	7	
AN.12	Inventories	1	AF.4	Loans	0	
AN.13	Valuables	1	AF.5	Shares and other equity	0	
AN.2	Non-produced assets	23	AF.6	Insurance technical reserves	0	
AN.21	Tangible non-produced assets	23	AF.7	Other accounts payable	0	
AN.22	Intangible non-produced assets	0				
AF	Financial assets	2				
AF.1	Monetary gold and SDRs	1				
AF.2	Currency and deposits	0				
AF.3	Securities other than shares	0				
AF.4	Loans	0				
AF.5	Shares and other equity	0				
AF.6	Insurance technical reserves	0				
AF.7	Other accounts receivable	0				
			B.10.3	Changes in net worth due to nominal holding gains/losses	38	

#### III.3.2.1: Neutral holding gains/losses account

Changes in assets		Changes in liabilities and net worth			
K.11,1	Neutral holding gains (+)/losses (-):		K.11.1	Neutral holding gains (-)/losses (+):	
AN	Non-financial assets	32	AF	Liabilities	14
AN.1	Produced assets	20	AF.2	Currency and deposits	2
AN.11	Fixed assets	18	AF.3	Securities other than shares	4
AN.12	Inventories	1	AF.4	Loans	7
AN.13	Valuables	1	AF.5	Shares and other equity	0
AN.2	Non-produced assets	12	AF.6	Insurance technical reserves	0
AN.21	Tangible non-produced assets	12	AF.7	Other accounts payable	0
AN.22	Intangible non-produced assets	0			
AF	Financial assets	8			
AF.1	Monetary gold and SDRs	2			
AF_2	Currency and deposits	3			
AF.3	Securities other than shares	0			
AF.4	Loans	2			
AF.5	Shares and other equity	0			
	Insurance technical reserves	0			
AF.6	insurance technical reserves				
	Other accounts receivable	0			



#### III.3.2.2: Real holding gains/losses account

Changes in assets			_	Changes in liabilities and net worth			
K.11.2	Real holding gains(+)/losses(-):		K.11.2	Real holding gains(-)/losses(+):			
AN	Non-financial assets	12	AF	Liabilities	- 7		
AN.1	Produced assets	0	AF.2	Currency and deposits	- 2		
AN.11	Fixed assets	0	AF.3	Securities other than shares	3		
AN.12	Inventories	0	AF.4	Loans	- 7		
AN.13	Valuables	0	AF.5	Shares and other equity	0		
AN.2	Non-produced assets	12	AF.6	Insurance technical reserves	0		
AN.21	Tangible non-produced assets	12	AF.7	Other accounts payable	0		
AN.22	Intangible non-produced assets	0					
AF	Financial assets	- 6					
AF.1	Monetary gold and SDRs	0					
AF.2	Currency and deposits	- 3					
AF.3	Securities other than shares	0					
AF.4	Loans	- 2					
AF.5	Shares and other equity	0					
AF.6	Insurance technical reserves	0					
AF.7	Other accounts receivable	0					
			B.10.3	2 Changes in net worth due to real holding gains/losses	12		

#### IV: Balance sheets

#### IV.1: Opening balance sheet

Assets			Liabilities and net worth			
AN	Non-financial assets	1 591	AF	Liabilities	687	
AN.1	Produced assets	1 001	AF.2	Currency and deposits	102	
AN.11	Fixed assets	913	AF.3	Securities other than shares	212	
AN.12	Inventories	47	AF.4	Loans	328	
AN.13	Valuables	41	AF.5	Shares and other equity	4	
AN.2	Non-produced assets	590	AF.6	Insurance technical reserves	19	
AN.21	Tangible non-produced assets	578	AF.7	Other accounts payable	22	
AN.22	Intangible non-produced assets	12				
AF	Financial assets	396				
AF.1	Monetary gold and SDRs	80				
AF.2	Currency and deposits	150				
AF.3	Securities other than shares	0				
AF.4	Loans	115				
AF.5	Shares and other equity	12				
AF.6	Insurance technical reserves	20				
AF.7	Other accounts receivable	19				
			B.90	Net worth	1 300	



#### IV.2: Changes in balance sheet

Assets		Liabilities and net worth			
Total changes in assets		Total changes in liabilities			
AN Non-financial assets	56 AF	Liabilities	176		
AN.1 Produced assets	25 AF.	2 Currency and deposits	2		
AN.11 Fixed assets	20 AF.	3 Securities other than shares	71		
AN.12 Inventories	1 AF.	4 Loans	93		
AN.13 Valuables	4 AF.	.5 Shares and other equity	C		
AN.2 Non-produced assets	30 AF.	6 Insurance technical reserves	C		
AN.21 Tangible non-produced assets	30 AF.	7 Other accounts payable	10		
AN.22 Intangible non-produced assets	. 0				
AF Financial assets	123				
AF.1 Monetary gold and SDRs	1				
AF.2 Currency and deposits	7				
AF.3 Securities other than shares	29				
AF.4 Loans	45				
AF.5 Shares and other equity	34				
AF.6 Insurance technical reserves	0				
AF.7 Other accounts receivable	6				
	B.1				
		due to:			
	B.1	0	- 38		
	B.1	0.2 Other changes in volume of assets	1		
	B.1	0.3 Nominal holding gains/losses	38		
	B.1	0.31 Neutral holding gains/losses	26		

#### IV.3: Closing balance sheet

Assets			Liabilities and net worth	
AN Non-financial assets	1 647	AF	Liabilities	863
AN.1 Produced assets	1 026	AF.2	Currency and deposits	104
AN.11 Fixed assets	933	AF.3	Securities other than shares	283
AN.12 Inventories	48	AF.4	Loans	421
AN.13 Valuables	45	AF.5	Shares and other equity	4
AN.2 Non-produced assets	620	AF.6	Insurance technical reserves	19
AN.21 Tangible non-produced assets	608	AF.7	Other accounts payable	32
AN.22 Intangible non-produced assets	12		• •	
AF Financial assets	519			
AF.1 Monetary gold and SDRs	81			
AF.2 Currency and deposits	157			
AF.3 Securities other than shares	29			
AF.4 Loans	160			
AF.5 Shares and other equity	46			
AF.6 Insurance technical reserves	20			
AF.7 Other accounts receivable	25			
		B.90	Net worth	1 302



#### 1: Production account

	Uses			Resources	
P.2	Intermediate consumption	694	P.1	Output	1 269
			P.11	Market output	1 129
			P.12	Output for own final use	140
B.1g	Value added, gross	575			
K.1	Consumption of fixed capital	42			
B.1n	Value added, net	533			

#### II: Distribution and use of income accounts

#### II.1: Primary distribution of income account

#### II.1.1: Generation of income account

	Uses		Resources		
D.1	Compensation of employees	39 B.	1n Value added, net	533	
D.11	Wages and salaries	39			
D.12	Employers' social contributions	0			
D.121	Employers' actual social contributions	0			
D.122	Employers' imputed social contributions	0			
D.29	Other taxes on production	3			
D.39	Other subsidies on production	- 1			
B.2	Operating surplus	60			
B.3	Mixed income	432			

#### II.1.2: Allocation of primary income account

	Uses		Resources	
D.4	Property income	44 B.2	Operating surplus	60
D.41	Interest	17 B.3	Mixed income	432
0.45	Rent	27		
		D.1	Compensation of employees	766
		D.11	Wages and salaries	573
		D.12	Employers' social contributions	193
		D.12	1 Employers' actual social contributions	174
		D.12	2 Employers' imputed social contributions	19
		D.4	Property income	134
		D.41	Interest	33
		D.42	Distributed income of corporations	57
		D.42	1 Dividends	13
		D.42	2 Withdrawals from income of quasi-corporations	44
		D.43	Reinvested earnings on direct foreign investment	3
		D.44	Property income attributed to insurance policyholders	20
		D.45	Rent	21
B.5	Balance of primary incomes	1 348		



#### II.1.2.1: Entrepreneurial income account

	Uses		Resources	
D.4	Property income	7 B.2	Operating surplus	60
D.41	Interest	0 B.3	Mixed income	432
D.45	Rent	7		
		D.4	Property income	5
		D.41	Interest	0
		D.42	Distributed income of corporations	5
		D.421	Dividends	5
		D.422	2 Withdrawals from income of quasi-corporations	0
		D.44	Property income attributed to insurance policyholders	0
B.4	Entrepreneurial income	490		

#### II.1.2.2: Allocation of other primary income account

Uses	Resources	
D.4 Property income	37 B.4 Entrepreneurial income	49
D.41 Interest	17	
D.45 Rent	20 D.1 Compensation of employees	76
	D.11 Wages and salaries	57.
	D.12 Employers' social contributions	19
	D.121 Employers' actual social contributions	17
	D.122 Employers' imputed social contributions	1
	D.4 Property income	12
	D.41 Interest	3
	D.42 Distributed income of corporations	5
	D.421 Dividends	
	D.422 Withdrawals from income of quasi-corporations	4
	D.43 Reinvested earnings on direct foreign investment	
	D.44 Property income attributed to insurance policyhole	ders 2
	D.45 Rent	2
B,5 Balance of primary incomes	1 348	



#### II.2: Secondary distribution of income account

Uses			Resources			
D.5	Current taxes on income, wealth, etc.	178	B.5 E	Balance of primary incomes	1 348	
D.51	Taxes on income	176				
D.59	Other current taxes	2	D.61	Social contributions	0	
			D.611	Actual social contributions	0	
D.61	Social contributions	322	D.6111	Employers' actual social contributions	0	
D.611	Actual social contributions	303	D.61111	Compulsory employers' actual social contributions	0	
D.6111	Employers' actual social contributions	174	D.61112	Voluntary employers' actual social contributions	0	
D.6111	1 Compulsory employers' actual social contributions	160	D.6112	Employees' social contributions	0	
D.6111	2 Voluntary employers' actual social contributions	14	D.61121	Compulsory employees' social contributions	0	
D.6112	Employees' social contributions	97	D.61122	Voluntary employees' social contributions non-employed persons	0	
D.6112	Compulsory employees' social contributions	85	D.62	Social benefits other than social transfers in kind	332	
D.6112		12	D.621	Social security benefits in cash	232	
D.6113	Social contributions by self-and	12	D.621	Private funded social benefits	29	
D.0113		32	D.622 D.623	Unfunded employee social benefits	19	
D.6113	non-employed persons	32	D.623	Social assistance benefits in cash	52	
D.6113	<ol> <li>Compulsory social contributions by self-and non-employed persons</li> </ol>	22	D.624	Social assistance benefits in Cash	32	
D.6113	2 Voluntary social contributions by self-and		D.7 C	Other current transfers	36	
	non-employed persons	10	D.72	Non-life insurance claims	35	
D.612	Imputed social contributions	19	D.75	Miscellaneous current transfers	1	
D.62	Social benefits other than social transfers in kind	0				
D.622	Private funded social benefits	0				
D.7	Other current transfers	71				
D.71	Net non-life insurance premiums	31				
D.75	Miscellaneous current transfers	40				
B.6	Disposable income	1 145				

#### II.3: Redistribution of income in kind account

Uses	Resources		
	B.6 Disposable income	1 145	
	D.63 Social transfers in kind	219	
	D.631 Social benefits in kind	162	
	D.6311 Social security benefits, reimbursements	78	
	D.6312 Other social security benefits in kind	65	
	D.6313 Social assistance benefits in kind	19	
	D.632 Transfers of individual non-market goods and		
	services	57	
B.7 Adjusted disposable income	1 364		

#### II.4: Use of income account

#### II.4.1: Use of disposable income account

	Uses			Resources	
P.3	Final consumption expenditure	996	8.6	Disposable income	1 145
P.31	Individual consumption expenditure	996			
			D.8	Adjustment for the change in net equity	
				of households in pension funds reserves	11
B.8	Saving	160			



#### II.4.2: Use of adjusted disposable income account

_	Uses		_	Resources	
P.4	Actual final consumption	1 215	B.7	Adjusted disposable income	1 364
P.41	Actual individual consumption	1 215			
			D.8	Adjustment for the change in net equity of households in pension funds reserves	11
B.8	Saving	160		in pension tands reserves	

#### III: Accumulation accounts

#### III.1: Capital account

#### III.1.1: Change in net worth due to saving and capital transfers account

Changes in assets		Changes in liabilities and	net worth
B.10.1 Changes in net worth due to saving	B.8	n Saving, net	160
and capital transfers	178		
	D.	Capital transfers, receivable	23
	D.	12 Investment grants	0
	<u>D.</u>	Other capital transfers	23
	D.	Capital transfers, payable	- 5
	D.	71 Capital taxes	- 2
	D.	Other capital transfers	- 3

#### III.1.2: Acquisition of non-financial assets account

	Changes in assets			Changes in liabilities and net worth	
P.51 P.511	Gross fixed capital formation Acquisitions less disposals of tangible fixed assets	61 49	B.10.1	Changes in net worth due to saving and capital transfers	178
P.5111	Acquisitions of new tangible fixed assets	50			
P.5112		4			
P.5113		- 5			
P.512	Acquisitions less disposals of intangible fixed assets	12			
P.5121		9			
P.5122		3			
P.5123		0			
P.513	Additions to the value of non-produced				
	non-financial assets	0			
P.5131	Major improvements to non-produced				
	non-financial assets	0			
P.5132					
	non-financial assets	0			
K.1	Consumption of fixed capital	- 42			
P.52	Changes in inventories	2			
P.53	Acquisitions less disposals of valuables	5			
K.2	Acquisitions less disposals of non-produced				
	non-financial assets	4			
K.21	Acquisitions less disposals of land and other				
	tangible non-produced assets	3			
K.22	Acquisitions less disposals of intangible				
	non-produced assets	1			
B.9	Net lending (+) / net borrowing (-)	148			



#### III.2: Financial account

	Changes in assets			Changes in liabilities and net worth	
F	Net acquisition of financial assets	181	F	Net incurrence of liabilities	33
F.2	Currency and deposits	68	F.2	Currency and deposits	0
F.21	Currency	10	F.22	Transferable deposits	0
F.22	Transferable deposits	41	F.29	Other deposits	0
F.29	Other deposits	17			
F.3	Securities other than shares	29	F.3	Securities other than shares	0
	Securities defer than shares		F.4	Loans	28
F.4	Loans	5	F.41	Short-term	11
F.41	Short-term	3	F.42	Long-term	1.7
F.42	Long-term	2			
			F.7	Other accounts payable	5
F.5	Shares and other equity	3	F.71	Trade credits and advances	4
			F.79	Other accounts payable, except trade credits and advances	1
F.6	Insurance technical reserves	36		auvances	
F.61	Net equity of households in life insurance reserves	22			
	and in pension funds reserves	33			
F.611	Net equity of households in life insurance reserves	22 11			
F.612 F.62	Net equity of households in pension funds reserves	_ !!			
r.62	Prepayments of insurance premiums and reserves for	2			
	outstanding claims	3			
F.7	Other accounts receivable	40			
F.71	Trade credits and advances	11			
F.79	Other accounts receivable, except trade credits and				
	advances	29			
			B.9	Net lending(+)/net borrowing(-)	148



#### III.3: Other changes in assets accounts

#### III.3.1: Other changes in volume of assets account

Changes in assets		Changes in liabilities and net worth				
AN N	Non-financial assets	0	AF	Liabilities		
AN.1	Produced assets	0	K.7	Catastrophic losses	5)	
C.4	Economic appearance of produced assets	0	K.8	Uncompensated seizures		
.7	Catastrophic losses	0	K.10	Other volume changes in financial assets and		
8	Uncompensated seizures	0	,	liabilities n.e.c.		
.9	Other volume changes in non-financial assets n.e.c.	0	K.12	Changes in classifications and structure		
.12	Changes in classifications and structure	0	K.12.1	Changes in sector classification and structure		
.12.1	Changes in sector classification and structure	0	K.12.2	Changes in classification of assets and liabilities		
.12.2	Changes in classification of assets and liabilities	0	K.12.22	Changes in classification of assets or liabilities		
.12.21	Monetisation/demonetisation of gold	0		other than monetisation/demonetisation of gold		
.12.22	Changes in classification of assets or liabilities		of which			
	other than monetisation/demonetisation of gold	0	AF.2	Currency and deposits		
f which:			AF.3	Securities other than shares		
N.11	Fixed assets	0	AF.4	Loans		
N.12	Inventories	0	AF.7	Other accounts payable		
N.13	Valuables	0	741.7	Other accounts payable		
N.2	Non-produced assets	0				
3.3	Economic appearance of non-produced assets	0				
.5	Natural growth of non-cultivated biological resources	0				
6	Economic disappearance of non-produced assets	0				
.61	Depletion of natural assets	0				
.62	Other economic disappearance of non-produced asse	0				
7	Catastrophic losses	0				
8	Uncompensated seizures	0				
0.9	Other volume changes in non-financial assets n.e.c.	0				
C12	Changes in classifications and structure	0				
3.12.1	Changes in sector classification and structure	0				
(.12.1	Changes in classification of assets and liabilities	0				
.12.22	Changes in classification of assets and liabilities  Changes in classification of assets or liabilities	U				
.12.22	other than monetisation/demonetisation of gold	0				
of which:		U				
N.21	Tangible non-produced assets	0				
N.22	Intangible non-produced assets	0				
114.22	mangiore non-produced assets					
F F	Financial assets	2				
.7	Catastrophic losses	0				
8	Uncompensated seizures	0				
.10	Other volume changes in financial assets and					
	liabilities n.e.c.	2				
.12	Changes in classifications and structure	0				
.12.1	Changes in sector classification and structure	0				
0.12.2	Changes in classification of assets and liabilities	0				
.12.22	Changes in classification of assets or liabilities					
	other than monetisation/demonetisation of gold	0				
f which:						
F.2	Currency and deposits	0				
\F.3	Securities other than shares	0				
¥F.4	Loans	0				
\F.5	Shares and other equity	0				
F.6	Insurance technical reserves	2				
\F_7	Other accounts receivable	0				
			B.10.2	Changes in net worth due to other		
				changes in volume of assets		



#### III.3.2: Revaluation account

	Changes in assets			Changes in liabilities and net worth	
K.11	Nominal holding gains(+)/losses(-):		K.11	Nominal holding gains(-)/losses(+):	
AN	Non-financial assets	80	AF	Liabilities	0
AN.1	Produced assets	35	AF.2	Currency and deposits	0
AN.11	Fixed assets	28	AF.3	Securities other than shares	0
AN.12	Inventories	2	AF.4	Loans	0
AN.13	Valuables	5	AF.7	Other accounts payable	0
AN.2	Non-produced assets	45			
AN.21	Tangible non-produced assets	45			
AN.22	Intangible non-produced assets	0			
AF	Financial assets	16			
AF.2	Currency and deposits	0			
AF.3	Securities other than shares	6			
AF.4	Loans	0			
AF.5	Shares and other equity	10			
AF.6	Insurance technical reserves	0			
AF.7	Other accounts receivable	0			
			B.10.3	Changes in net worth due to nominal holding gains/losses	96

#### III.3.2.1: Neutral holding gains/losses account

	Changes in assets		Changes in liabilities and net worth				
K.11.1	Neutral holding gains (+)/losses (-):		K.11.1	Neutral holding gains (-)/losses (+):			
AN.1 AN.11 AN.12 AN.13 AN.2	Non-financial assets Produced assets Fixed assets Inventories Valuables Non-produced assets	56 34 28 2 4	AF AF.2 AF.3 AF.4 AF.5 AF.7	Liabilities Currency and deposits Securities other than shares Loans Shares and other equity Other accounts payable	6 0 0 3 0		
AN.21 AN.22	Tangible non-produced assets Intangible non-produced assets	22	711.7	Other accounts payable			
AF.2 AF.3 AF.4 AF.5 AF.6 AF.7	Financial assets Currency and deposits Securities other than shares Loans Shares and other equity Insurance technical reserves Other accounts receivable	36 17 4 0 8 6					
			B.10.3	Changes in net worth due to neutral holding gains/losses	87		



#### III.3.2.2: Real holding gains/losses account

Changes in assets			Changes in liabilities and net worth	
K.11.2 Real holding gains(+)/losses(-):		K.11.2	Real holding gains(-)/losses(+):	
AN Non-financial assets AN.1 Produced assets AN.11 Fixed assets AN.12 Inventories AN.13 Valuables AN.2 Non-produced assets AN.21 Tangible non-produced assets	24 1 0 0 1 22 22	AF AF.2 AF.3 AF.4 AF.7	Liabilities Currency and deposits Securities other than shares Loans Other accounts payable	- 6 0 0 - 3 - 2
AN.22 Intangible non-produced assets  AF Financial assets  AF.2 Currency and deposits  AF.3 Securities other than shares  AF.4 Loans  AF.5 Shares and other equity  AF.6 Insurance technical reserves  AF.7 Other accounts receivable	- 20 - 17 2 0 2 - 6			
		B.10.3	2 Changes in net worth due to real holding gains/losses	9

#### IV: Balance sheets

#### IV.1: Opening balance sheet

Assets			Liabilities and net worth	
AN Non-financial assets	2 822	AF	Liabilities	289
AN.1 Produced assets	1 698	AF.2	Currency and deposits	10
AN.11 Fixed assets	1 423	AF.3	Securities other than shares	2
AN.12 Inventories	97	AF.4	Loans	169
AN.13 Valuables	178	AF.7	Other accounts payable	108
AN.2 Non-produced assets	1 124			
AN.21 Tangible non-produced assets	1 124			
AN.22 Intangible non-produced assets	0			
AF Financial assets	1 819			
AF.2 Currency and deposits	840			
AF.3 Securities other than shares	198			
AF.4 Loans	24			
AF.5 Shares and other equity	411			
AF.6 Insurance technical reserves	291			
AF.7 Other accounts receivable	55			
		B.90	Net worth	4 352



#### IV.2: Changes in balance sheet

	Assets			Liabilities and net wort	h	
	Total changes in assets			Total changes in liabilities		
AN	Non-financial assets	110	AF	Liabilities		33
AN.1	Produced assets	61	AF.2	Currency and deposits		0
AN.11	Fixed assets	47	AF.3	Securities other than shares		0
AN.12	Inventories	4	AF.4	Loans		28
AN.13	Valuables	10	AF.7	Other accounts payable		5
AN.2	Non-produced assets	49				
AN.21	Tangible non-produced assets	48				
AN.22	Intangible non-produced assets	1				
AF	Financial assets	199				
AF.2	Currency and deposits	68				
AF.3	Securities other than shares	35				
AF.4	Loans	5				
AF.5	Shares and other equity	13				
AF.6	Insurance technical reserves	38				
AF.7	Other accounts receivable	40				
			B.10	Changes in net worth, total		276
				due to:		
			B.10.1	Saving and capital transfers		178
			B.10.2	Other changes in volume of assets		2
			B.10.3	Nominal holding gains/losses		96
			B.10.3	<ol> <li>Neutral holding gains/losses</li> </ol>		87
			B.10.3	2 Real holding gains/losses		9

## IV.3: Closing balance sheet

	Assets			Liabilities and no	et worth	
AN	Non-financial assets	2 932	AF	Liabilities		322
AN.1	Produced assets	1 759	AF.2	Currency and deposits		10
AN.11	Fixed assets	1 470	AF.3	Securities other than shares		2
AN.12		101	AF.4	Loans Other accounts payable		197
AN.13		188	AF.7		113	
AN.2	Non-produced assets	1 173				
AN.21	0	1 172				
AN.22		Intangible non-produced assets 1				
AF	Financial assets	2 018				
AF.2	Currency and deposits	908				
AF.3	Securities other than shares	233				
AF.4	Loans	29				
AF.5	Shares and other equity	424				
AF.6	Insurance technical reserves	329				
AF.7	Other accounts receivable	95				
			B.90	Net worth		4 628



#### I: Production account

Uses				Resources			
P.2	Intermediate consumption	6	P.1	Output	37		
			P.11	Market output	21		
			P.12	Output for own final use	0		
			P.13	Other non-market output	16		
B.1g	Value added, gross	31					
K.1	Consumption of fixed capital	3					
B.1n	Value added, net	28					

#### II: Distribution and use of income accounts

#### II.1: Primary distribution of income account

#### II.1.1: Generation of income account

	Uses			Resources	
D.1 (	Compensation of employees	23	B.1n	Value added, net	28
D.11	Wages and salaries	12			
D.12	Employers' social contributions	11			
D.121	Employers' actual social contributions	10			
D.122	Employers' imputed social contributions	1			
D.29	Other taxes on production	0			
D.39	Other subsidies on production	0			
B.2	Operating surplus	5			

#### II.1.2: Allocation of primary income account

	Uses		Resources				
D.4	Property income	7	B.2	Operating surplus	5		
D.41	Interest	7					
D.42	Distributed income of corporations	0	D.4	Property income	5		
D.422	Withdrawals from income of quasi-corporations	0	D.41	Interest	5		
D.43	Reinvested earnings on direct foreign investment	0	D.42	Distributed income of corporations	0		
D.44	Property income attributed to insurance policyholders	0	D.421	Dividends	0		
D.45	Rent	0	D.422	Withdrawals from income of quasi-corporations	0		
			D.43	Reinvested earnings on direct foreign investment	0		
			D.44	Property income attributed to insurance policyholders	0		
			D.45	Rent	0		
B.5	Balance of primary incomes	3					

#### II.1.2.1: Entrepreneurial income account

Uses	Resources
D.4 Property income	2 B.2 Operating surplus
D.41 Interest	2
D.45 Rent	0 D.4 Property income
	D.41 Interest
	D.42 Distributed income of corporations
	D.421 Dividends
	D.422 Withdrawals from income of quasi-corporations
B.4 Entrepreneurial income	3



#### II.1.2.2: Allocation of other primary income account

	Uses			Resources	
D.4	Property income	5	B,4	Entrepreneurial income	3
D.41	Interest	5			
D.45	Rent	0	D.4	Property income	5
			D.41	Interest	5
			D.42	Distributed income of corporations	0
			D.421	Dividends	0
			D.422	Withdrawals from income of quasi-corporations	O
			D.43	Reinvested earnings on direct foreign investment	0
			D.44	Property income attributed to insurance policyholders	0
			D.45	Rent	0
B.5	Balance of primary incomes	3			

#### II.2: Secondary distribution of income account

	Uses		Resources	
D.5	Current taxes on income, wealth, etc.	0	B.5 Balance of primary incomes	3
D.59	Other current taxes	0	D.61 Social contributions	1
D.62	Social benefits other than social transfers in kind	1	D.61 Social contributions D.611 Actual social contributions	0
D.622	Private funded social benefits	0	D.6111 Employers' actual social contributions	0
D.623	Unfunded employee social benefits	1	D.61111 Compulsory employers' actual social contributions	0
			D.6112 Employees' social contributions	0
D.7	Other current transfers	2	D.61121 Compulsory employees' social contributions	0
D.71	Net non-life insurance premiums	0	D.61122 Voluntary employees' social contributions	0
D.75	Miscellaneous current transfers	2	D.612 Imputed social contributions	1
			D.7 Other current transfers	36
			D.72 Non-life insurance claims	0
			D.75 Miscellaneous current transfers	36
B.6	Disposable income	37		

#### II.3: Redistribution of income in kind account

	Uses			Resources	
D.63 D.631 D.6313 D.632	Social transfers in kind Social benefits in kind Social assistance benefits in kind Transfers of individual non-market goods and	13 0 0	B.6	Disposable income	37
	services	13			
B.7 A	Adjusted disposable income	24			

#### II.4: Use of income account

#### II.4.1: Use of disposable income account

_	Uses			Resources	
P.3 P.31 D.8	Final consumption expenditure Individual consumption expenditure Adjustment for the change in net equity of households in pension funds reserves	13 13 0	B.6	Disposable income	37
B.8	Saving	24			



#### II.4.2: Use of adjusted disposable income account

	Uses			Resources	
D.8	Adjustment for the change in net equity of households in pension funds reserves	0	B.7	Adjusted disposable income	24
B.8	Saving	24			

#### III: Accumulation accounts

#### III.1: Capital account

#### III.1.1: Change in net worth due to saving and capital transfers account

Changes in assets			Changes in liabilities and net wor	th
B.10.1 Changes in net worth due to saving	В	.8n	Saving, net	24
and capital transfers	21			
	D	,9	Capital transfers, receivable	0
	D	.92	Investment grants	0
	<u>D</u>	.99	Other capital transfers	0
	D	.9	Capital transfers, payable	- 3
	D	.91	Capital taxes	0
	D	.99	Other capital transfers	- 3

#### III.1.2: Acquisition of non-financial assets account

	Changes in assets			Changes in liabilities and net worth	
P.51	Gross fixed capital formation	19	B.10.1	Changes in net worth due to saving	
P.511	Acquisitions less disposals of tangible fixed assets	14		and capital transfers	21
P.5111	Acquisitions of new tangible fixed assets	13			
P.5112	Acquisitions of existing tangible fixed assets	1			
P.5113	Disposals of existing tangible fixed assets	0			
P.512	Acquisitions less disposals of intangible fixed assets	5			
P,5121		10			
P.5122	Acquisitions of existing intangible fixed assets	0			
P.5123	Disposals of existing intangible fixed assets	- 5			
P.513	Additions to the value of non-produced				
	non-financial assets	0			
P.5131	Major improvements to non-produced				
	non-financial assets	0			
P.5132	Costs of ownership transfer on non-produced				
	non-financial assets	0			
K.1	Consumption of fixed capital	- 3			
P.52	Changes in inventories	0			
P.53	Acquisitions less disposals of valuables	0			
K.2	Acquisitions less disposals of non-produced non-financial assets	1			
K.21	Acquisitions less disposals of land and other tangible non-produced assets	1			
K.22	Acquisitions less disposals of intangible				
	non-produced assets	- 0			
B.9	Net lending (+) / net borrowing (-)	4			



#### III.2: Financial account

	Changes in assets			Changes in liabilities and net worth	
F	Net acquisition of financial assets	32	F	Net incurrence of liabilities	28
F.2	Currency and deposits	12	F.2	Currency and deposits	0
F.21	Currency	2	F.22	Transferable deposits	0
F.22	Transferable deposits	7	F.29	Other deposits	0
F.29	Other deposits	3			
			F.3	Securities other than shares	0
F.3	Securities other than shares	12			
			F.4	Loans	24
F.4	Loans	0	F.41	Short-term	17
F.41	Short-term	0	F.42	Long-term	7
F.42	Long-term	0	r.r	Shares and other any dry	
F.5	Shares and other equity	0	F.5	Shares and other equity	4
1.5	Shares and other equity	- 0	F.6	Insurance technical reserves	0
F.6	Insurance technical reserves	0	F.61	Net equity of households in life insurance reserves	
F.62	Prepayments of insurance premiums and reserves for	0	1.01	and in pension funds reserves	0
	outstanding claims	0	F.612	Net equity of households in pension funds reserves	0
F.7	Other accounts receivable	8	F.7	Other accounts payable	0
F.71	Trade credits and advances	0	F.71	Trade credits and advances	0
F.79	Other accounts receivable, except trade credits and		F.79	Other accounts payable, except trade credits and	
	advances	8		advances	0
	_		B.9	Not lending(+)/not harrowing()	4
_			0.9	Net lending(+)/net borrowing(-)	4



#### III.3: Other changes in assets accounts

#### III.3.1: Other changes in volume of assets account

Changes in assets			Changes in liabilities and net worth				
AN Non-financial ass	ets	0	AF I	iabilities	(		
AN.1 Produced asse		0	K.7	Catastrophic losses	(		
	opearance of produced assets	0	K.8	Uncompensated seizures			
C.7 Catastrophic		ŏ	K.10	Other volume changes in financial assets and			
	ated seizures	0	16.10	liabilities n.e.c.			
	ne changes in non-financial assets n.e.c.	0	K.12	Changes in classifications and structure			
	classifications and structure	0	K.12.1	Changes in sector classification and structure			
	n sector classification and structure	0	K.12.1	Changes in sector classification and structure  Changes in classification of assets and liabilities			
· ·	n classification of assets and liabilities	0	K.12.22	Changes in classification of assets and liabilities  Changes in classification of assets or liabilities			
	es in classification of assets or liabilities	O	N.12.22	other than monetisation/demonetisation of gold			
C.	nan monetisation/demonetisation of gold	0	of which:				
of which:	ian moneusation/demoneusation or gold	U		Currency and deposits	(		
			AF.2				
AN.11 Fixed assets		0	AF.3	Securities other than shares	(		
AN.12 Inventories		0	AF.4	Loans	(		
AN.13 Valuables	Lacota	0	AF.5	Shares and other equity	(		
AN.2 Non-produced		0	AF.6	Insurance technical reserves			
	opearance of non-produced assets	0	AF.7	Other accounts payable	(		
	vth of non-cultivated biological resources	0					
	sappearance of non-produced assets	0					
	of natural assets	0					
	onomic disappearance of non-produced asse	0					
K.7 Catastrophic		0					
K.8 Uncompens	ated seizures	0					
K.9 Other volun	ne changes in non-financial assets n.e.c.	0					
K.12 Changes in a	classifications and structure	0					
K.12.1 Changes i	n sector classification and structure	0					
K.12.2 Changes i	n classification of assets and liabilities	0					
K.12.22 Change	es in classification of assets or liabilities						
other th	nan monetisation/demonetisation of gold	O					
of which:							
AN.21 Tangible no	n-produced assets	O					
	on-produced assets	0					
AF Financial assets		0					
K.7 Catastrophic lo		0					
K.8 Uncompensate		0					
	changes in financial assets and						
liabilities n.e.c.		0					
	ssifications and structure	O					
	sector classification and structure	0					
	classification of assets and liabilities	0					
K.12.22 Changes i	n classification of assets or liabilities						
other than	n monetisation/demonetisation of gold	O					
of which:							
AF.2 Currency and		O					
NF.3 Securities other	r than shares	O					
NF.4 Loans		0					
AF.5 Shares and oth	ner equity	0					
NF.6 Insurance tech	nical reserves	0					
NF.7 Other account	s receivable	0					
			B.10.2	Changes in net worth due to other			
			1	changes in volume of assets			



#### III.3.2: Revaluation account

	Changes in assets			Changes in liabilities and net worth	
K.11	Nominal holding gains(+)/losses(-):		K.11	Nominal holding gains(-)/losses(+):	
AN AN.1 AN.11 AN.12 AN.13 AN.2 AN.21	Valuables Non-produced assets Tangible non-produced assets	8 5 5 0 0 3 3	AF AF.2 AF.3 AF.4 AF.5 AF.6 AF.7	Liabilities Currency and deposits Securities other than shares Loans Shares and other equity Insurance technical reserves Other accounts payable	0 0 0 0 0
AN.22		0			
AF.2	Financial assets Currency and deposits	0			
AF.3 AF.4	Securities other than shares Loans	0			
AF.5 AF.6	Shares and other equity Insurance technical reserves	1 0			
AF.7	Other accounts receivable	0	B.10.3	Changes in net worth due to nominal holding gains/losses	10

#### III.3.2.1: Neutral holding gains/losses account

Changes in assets			Changes in liabilities and net worth				
K.11.1	Neutral holding gains (+)/losses (-);		K.11.1	Neutral holding gains (-)/losses (+);			
AN	Non-financial assets	6	AF	Liabilities	2		
AN.1	Produced assets	5	AF.2	Currency and deposits Securities other than shares	0		
AN.11	Fixed assets	5	AF.3 AF.4		1		
AN.12	Inventories	0	AF.5	Loans Shares and other equity	ó		
AN.13	Valuables	0	AF.6	Insurance technical reserves	0		
AN.21	Non-produced assets Tangible non-produced assets	2	AF.7	Other accounts payable	1		
AN.22	Intangible non-produced assets	0	7.11.7	otte: decoding payable			
AF	Financial assets	3					
AF.2	Currency and deposits	2					
AF.3	Securities other than shares	1					
AF.4	Loans	0					
AF.5	Shares and other equity	0					
AF.6	Insurance technical reserves	0					
AF.7	Other accounts receivable	0	-				
			B.10.3	1 Changes in net worth due to neutral holding gains/losses	8		



#### III.3.2.2: Real holding gains/losses account

Changes in assets	Changes in liabilities and net worth
K.11.2 Real holding gains(+)/losses(-):	K.11.2 Real holding gains(-)/losses(+):
AN Non-financial assets	2 AF Liabilities
AN.1 Produced assets	0 AF.2 Currency and deposits
AN.11 Fixed assets	0 AF.3 Securities other than shares
AN.12 Inventories	0 AF.4 Loans
AN.13 Valuables	0 AF.5 Shares and other equity
AN.2 Non-produced assets	2 AF.6 Insurance technical reserves
AN.21 Tangible non-produced assets	2 AF.7 Other accounts payable -
AN.22 Intangible non-produced assets	0
AF Financial assets	- 2
AF.2 Currency and deposits	- 2
AF.3 Securities other than shares	0
AF.4 Loans	0
AF.5 Shares and other equity	0
AF.6 Insurance technical reserves	0
AF.7 Other accounts receivable	0
	B.10.32 Changes in net worth due to real holding gains/losses

#### IV: Balance sheets

#### IV.1: Opening balance sheet

Assets			Liabilities and net worth	
AN Non-financial assets	324	AF	Liabilities	121
AN.1 Produced assets	243	AF.2	Currency and deposits	38
AN.11 Fixed assets	231	AF.3	Securities other than shares	0
AN.12 Inventories	2	AF.4	Loans	43
AN.13 Valuables	10	AF.5	Shares and other equity	0
AN.2 Non-produced assets	81	AF.6	Insurance technical reserves	5
AN.21 Tangible non-produced assets	81	AF.7	Other accounts payable	35
AN.22 Intangible non-produced assets	0			
AF Financial assets	172			
AF.2 Currency and deposits	110			
AF.3 Securities other than shares	25			
AF.4 Loans	8			
AF.5 Shares and other equity	22			
AF.6 Insurance technical reserves	4			
AF.7 Other accounts receivable	3			
		B.90	Net worth	375



#### IV.2: Changes in balance sheet

	Assets			Liabilities and net worth	
	Total changes in assets			Total changes in liabilities	
AN	Non-financial assets	25	AF	Liabilities	28
AN.1	Produced assets	21	AF.2	Currency and deposits	0
AN.11	Fixed assets	21	AF.3	Securities other than shares	0
AN.12	Inventories	0	AF.4	Loans	24
AN.13	Valuables	0	AF.5	Shares and other equity	4
AN.2	Non-produced assets	4	AF.6	Insurance technical reserves	0
AN.21	Tangible non-produced assets	4	AF.7	Other accounts payable	0
AN.22	Intangible non-produced assets	0			
AF	Financial assets	33			
AF.2	Currency and deposits	12			
AF.3	Securities other than shares	13			
AF.4	Loans	0			
AF.5	Shares and other equity	1			
AF.6	Insurance technical reserves	0			
AF.7	Other accounts receivable	8			
			B.10	Changes in net worth, total	31
				due to:	
			B.10.1	Saving and capital transfers	21
			B.10.2	Other changes in volume of assets	0
			B.10.3	Nominal holding gains/losses	10
			B.10.3	<ol> <li>Neutral holding gains/losses</li> </ol>	8
			B.10.3	Real holding gains/losses	2

## IV.3: Closing balance sheet

	Assets			Liabilities and net worth	
AN	Non-financial assets	349	AF	Liabilities	149
AN.1	Produced assets	264	AF.2	Currency and deposits	38
AN.11	2 Inventories 3 Valuables Non-produced assets 1 Tangible non-produced assets	252 2 10 85 85	AF.4 AF.5 AF.6	Securities other than shares Loans Shares and other equity	0 67 4 5
AN.12					
AN.13					
AN.2 AN.21					
					35
AN.22		0			
AF	Financial assets	205			
AF.2	Currency and deposits	122			
\F.3	Securities other than shares	38			
AF.4	Loans Shares and other equity	8 23			
AF.5					
AF.6	Insurance technical reserves	4			
AF.7	Other accounts receivable	11			
			B.90	Net worth	406

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