

CHAPTER 3: FINAL EXPENDITURE ON GDP AND ITS CLASSIFICATION

Introduction

3.1. Eurostat-OECD comparisons of GDP are made from the expenditure side. Each country participating in a comparison is required to provide either Eurostat or the OECD with a detailed breakdown of final expenditure on GDP for the reference year. The detailed expenditures are used as weights in the calculation of PPPs and in the estimation of real final expenditures. For this they need to be harmonised across participating countries that are required to report their final expenditures according to a common classification. This chapter explains the definitions and concepts underlying the common classification used for Eurostat and OECD comparisons. It describes the structure and presentation of the classification. The classification itself can be found in Annex II. The chapter also covers the reporting of expenditure data by countries and the subsequent validation of reported data by Eurostat or the OECD.

Final expenditure on GDP

3.2. A prerequisite of international comparisons of final expenditure on GDP is that the definition of GDP and its component expenditures is the same for all participating countries. To this end, the Eurostat-OECD expenditure classification adheres to the definitions, concepts, classifications and accounting rules of the SNA 93¹ and the ESA 95². Participating countries compile their estimates of final expenditure on GDP following one of these two international systems of national accounts. The two systems are fully consistent with each other. The ESA 95 is a version of the SNA 93 appropriate to the circumstances and needs of the European Union (EU). The SNA 93 provides guidelines and recommendations for global implementation. The ESA 95 specifies how the guidelines and the recommendations should be applied by EU Member States. It has legal status within the European Union.

3.3. The SNA 93 and the ESA 95 define GDP from the expenditure side as:

- total final expenditures at purchasers' prices³
- *plus* f.o.b. (free on board) value⁴ of exports of goods and services
- *less* f.o.b. value of imports of goods and services.

3.4. Final expenditures are expenditures on goods and services purchased for final use - that is, for final consumption or for gross capital formation. Final consumption consists of the goods and services used up by individual households or the community to satisfy their individual or collective needs. Expenditures on final consumption are incurred by households, non-profit institutions serving households

(NPISHs) and general government. Gross capital formation comprises gross fixed capital formation, change in inventories and acquisitions less disposals of valuables. Expenditures on gross capital formation are incurred by resident producers of goods and services: incorporated enterprises, unincorporated enterprises (including households engaged in own-account production), general government and non-profit institutions. Final expenditures do not include expenditures on intermediate consumption - that is, the goods and services, other than fixed assets⁵, that are used or consumed as inputs by a production process.

3.5. The difference between the f.o.b. value of exports of goods and services and the f.o.b. value of imports of goods and services is called the "balance of exports and imports" (or "net exports").

3.6. Final expenditure on GDP is, therefore,

total final consumption expenditure:

- final consumption expenditure of households
- final consumption expenditure of NPISHs
- final consumption expenditure of general government

plus gross capital formation:

- gross fixed capital formation
- change in inventories
- acquisitions less disposals of valuables

plus balance of exports and imports.

Actual and imputed expenditures

3.7. Final expenditure includes actual expenditures and imputed expenditures. Actual expenditures cover monetary transactions. They can be measured directly because for each transaction there is a price agreed between buyer and seller that is stated in monetary units. Imputed expenditures are non-monetary transactions. They cannot be measured directly because either the transaction is explicit, as in barter trade, but the price agreed is not stated in monetary units, or the transaction is implicit, as, for example, owner-occupiers "purchasing" housing services from themselves, and no price is involved. Expenditures on non-monetary transactions are obtained by estimating or imputing a value to them - hence, "imputed expenditures".

3.8. Imputations are made for:

- *consumption of own-produced goods*: goods that households produce and consume themselves (agricultural produce, preserved foodstuffs, wine, spirits, clothing, furniture, etc.);

- *own-account production of fixed capital assets*: gross fixed capital formation carried out by producers on their own account (including own-account construction, improvement and extension of dwellings by households);
- *imputed rentals of owner-occupiers*: housing services that owner-occupiers “sell” to themselves;
- *income in kind*: goods and services that employees receive free, or at very low prices, from their employers (meals, drinks, transportation to and from work, recreation facilities, company cars for personal use, etc.);
- *financial intermediation services indirectly measured or FISIM*: financial intermediation services that banks provide clients but for which they do not charge explicitly;
- *imputed social contributions*: unfunded social insurance schemes operated by employers (such as pension schemes for government employees that are funded out of general revenue);
- *barter trade*;
- *consumption of fixed capital by non-market producers* – that is, by NPISHs and general government.

3.9. The values to be imputed are defined by national accounting conventions. These vary from case to case and are described in the SNA 93 and the ESA 95. Generally, goods and services produced for own final use should be valued at the basic prices⁶ at which they could be sold if offered for sale on the market or, failing that, as the sum of their costs of production. For example, the imputed rentals of owner-occupiers should be valued at the estimated rental that a tenant pays for a dwelling of the same size and quality in a comparable location with similar neighbourhood amenities. To do this requires the existence of a well-organised market for rented accommodation. In the absence of such a market, the value of imputed rentals will have to be derived by some other objective procedure such as the user-cost method⁷.

Individual and collective consumption expenditures

3.10. The SNA 93 and the ESA 95 describe the components of final consumption expenditure as either “individual” or “collective”. Individual consumption expenditure comprises the expenditures made by households, NPISHs and general government on goods and services that benefit individual households. Such goods and services are called “individual goods and services”. Collective consumption expenditure comprises the expenditures made by general government on services that benefit households collectively. Such services are called “collective services”. Health, education and social protection are examples of individual services that households purchase for themselves and which

NPISHs and general government provide to specific identifiable households. Defence, public order and safety, and environment protection are examples of collective services that general government provides to the community as a whole.

3.11. On the basis of this differentiation, final consumption expenditure breaks down into the following four main aggregates:

- *Individual consumption expenditure by households*: The actual and imputed final consumption expenditure incurred by households on individual goods and services. By definition, all final consumption expenditures of households are for the benefit of individual households so all such expenditure is classified as individual. Household final consumption expenditure covers a broad range of goods and services that includes food, beverages, tobacco, clothing, footwear, housing, heating and lighting, furniture and furnishings, household appliances, medical goods and services, transport equipment, transport and communication services, recreation and sporting equipment, recreation and sporting services, cultural services, education services, the services of hotels and restaurants, personal care services, social protection, insurance and financial services, etc. Imputations for consumption of own-produced goods, “rentals” of owner-occupiers, income in kind, FISIM and, possibly, barter transactions can be important components of household expenditure.
- *Individual consumption expenditure by NPISHs*: The actual and imputed final consumption expenditure incurred by NPISHs on individual goods and services. In practice, nearly all final consumption expenditures of NPISHs are individual in nature and so, for simplicity, all final consumption expenditures of NPISHs are treated by convention as individual. Essentially, the final consumption expenditure of NPISHs relates to individual services – that is, housing, health, recreation, sport, culture, education and social protection. It also includes the “collective” services provided by religious and community organisations, political parties and political action groups, trade unions and professional associations operating as NPISHs.⁸

Individual consumption expenditure by government: The actual and imputed final consumption expenditure incurred by general government on housing, health, recreation and culture, education, and social protection. Not all government expenditure on these services constitutes individual consumption expenditure. Expenditures on the overall policy-making, planning, budgetary, co-ordinating and monitoring responsibilities of ministries overseeing the services and on the research and development carried out for the services are classified as collective consumption expenditure because they cannot be identified with specific individual households and are considered to benefit households collectively.

Box 3.1: Moving from final consumption expenditure to actual final consumption

| “Who pays” | Final consumption expenditure | Actual final consumption | “Who consumes” |
|--------------------|--|-------------------------------|--------------------|
| Households | Individual consumption expenditure by households | Actual individual consumption | Households |
| NPISHs | Individual consumption expenditure by NPISHs | | |
| General government | Individual consumption expenditure by government | Actual collective consumption | General government |
| | Collective consumption expenditure by government | | |

- *Collective consumption expenditure by government:* The actual and imputed final consumption expenditure incurred by general government on collective services. It covers all government final consumption expenditure on general public services, defence, public order and safety, economic affairs, environment protection, and housing and community amenities. It includes as well government expenditure on the collective features of individual services mentioned in the previous bullet point.

Actual individual and collective consumption

3.12. Each of the four aggregates defined above clearly indicates who is the beneficiary of the expenditure – individuals or the community – and who makes the expenditure – households, NPISHs or general government. The SNA 93 and the ESA 95 use the distinction between “who consumes” and “who pays” to derive two additional aggregates: actual individual consumption and actual collective consumption.

- *Actual individual consumption* is a measure of the goods and services that individual households actually consume as opposed to what they actually purchase. It is derived, as shown in Box 3.1, by adding individual consumption expenditure by NPISHs and individual consumption expenditure by government to individual consumption expenditure by households. In this context, the SNA 93 and the ESA 95 treat the individual consumption expenditures of NPISHs and government as “social transfers in kind”.
- *Actual collective consumption* is a measure of the services that general government provides to the community as a whole and which households consume collectively. It is obtained, as shown in Box 3.1, by subtracting individual consumption expenditure by government from final consumption expenditure of general government. In other words, it is the same as collective consumption expenditure by government.

3.13. Countries following the SNA 93 or the ESA 95 estimate final expenditure on GDP by the “who pays” principle. Thus the concept of actual individual consumption is of particular relevance to comparisons

of the economic well-being of households (when well-being is measured by the volume of individual goods and services consumed) because of the different ways individual services, particularly health and education services, are financed in countries.

3.14. In some countries, government (and/or NPISHs) provide the greater part of health and education services and these expenditures are included in the individual consumption expenditure of government (and/or NPISHs). In other countries, households purchase nearly all health and education services from market producers and these expenditures are included in the individual consumption expenditure of households. Under these circumstances, individual consumption expenditure by households is not the correct measure with which to compare the volumes of individual goods and services actually consumed by households in different countries. Households in countries where government (and/or NPISHs) are the main providers of individual services will appear to consume a smaller volume of goods and services than households in countries where the households themselves pay directly for the bulk of these services. This is avoided by comparing the actual individual consumption (by households) of countries as illustrated by Box 3.2.

Market and non-market services

3.15. By definition, the collective services that government provides to households can only be produced by government. But the individual services that government provides to households can be either purchased by government from market producers or produced by government itself. The individual services that government purchases from market producers are “market services”. The individual and collective services that general government produces itself are mainly “non-market services”. The difference between market services and non-market services is that the former are sold at prices that are economically significant, while the latter are either provided free or sold at prices that are not economically significant. The SNA 93 defines economically-significant prices as prices that have a significant influence on the amounts producers are willing to supply and on the amounts purchasers wish to buy. The ESA 95 is more specific. It defines economically-significant prices as prices which cover over 50 per cent of the costs of production.

Box 3.2: Individual consumption expenditure by households and actual individual consumption (by households)

| Country | Per capita volume indices in 1999 | |
|---------------|--|---|
| | Individual consumption expenditure by households | Actual individual consumption (by households) |
| Denmark | 59 | 77 |
| Finland | 46 | 58 |
| Iceland | 65 | 80 |
| Norway | 57 | 72 |
| Sweden | 48 | 64 |
| United States | 100 | 100 |

1. The table above gives the per capita volume indices from the 1999 Eurostat-OECD comparison for individual consumption expenditure by households and actual individual consumption (by households) for the five Nordic countries and the United States. The indices show that in 1999 households in the United States both spent and consumed more per head than did households in the Nordic countries. The differences are larger for individual consumption expenditure - 45 per cent on average - than they are for actual individual consumption - 30 per cent on average. But which measure better reflects relative economic well-being? Were households in the United States 30 per cent or 45 per cent "better off" than Nordic households in 1999?
2. In Nordic countries, individual services are mostly purchased by government and, following the "who pays" criterion, are included in government expenditure. In the United States, individual services are mainly purchased by households and, in accordance with the "who pays" principle, are recorded under household expenditure. A comparison of economic welfare based on the per capita volume indices of individual consumption expenditure by households is clearly misleading in this situation. The comparison has to be based on what households actually consumed - that is, on the value of the individual goods and services they purchased themselves plus the value of the individual goods and services provided to them by government. It is the per capita volume indices of actual consumption (by households) that provide a correct picture of relative economic well-being. Households in the United States were 30, not 45, per cent "better off" than Nordic households in 1999.

3.16. Because they are sold at economically-significant prices, expenditures on market services can be obtained by multiplying the quantities sold by the prices they are sold at. The same prices can also be used to calculate the PPPs for market services. The lack of economically-significant prices for non-market services precludes their expenditures and their PPPs being derived in the same manner as they are for market services. Instead, following the convention adopted by national accountants, expenditures on non-market services are estimated by summing up their costs of production. And, to maintain consistency with the prices underlying the expenditure estimates, PPPs for non-market services are calculated with the prices of inputs. This is referred to as the "input-price approach". To implement the input-price approach, the expenditures on non-market services need to be broken down by cost components, namely: compensation of employees, intermediate consumption, consumption of fixed capital, net operating surplus, net taxes on production and receipts from sales.

Gross capital formation

3.17. The SNA 93 and the ESA 95 define gross capital formation as comprising gross fixed capital formation, change in inventories, and acquisitions less disposals of valuables, of which gross fixed capital formation is the most important. These three aggregates are defined as follows:

- *Gross fixed capital formation*: The acquisitions less disposals of fixed assets plus major improvements to non-produced assets.

Fixed assets are assets that are produced by a human production processes. They exclude land and subsoil assets which are produced by nature. Fixed assets are used repeatedly, or continuously, in processes of production for more than one year. Fixed assets are either tangible, such as buildings, machinery, etc., or intangible, such as mineral exploration⁹, computer software¹⁰, etc. They may be new or existing - that is, used or second-hand. Sales and purchases of existing fixed assets between residents cancel out over the economy as a whole and, except for the transfer of ownership costs which do not cancel out, can be ignored. Sales and purchases of existing fixed assets between residents and non-residents do not cancel each other out and cannot be ignored. They are recorded as investment by the importer and disinvestment by the exporter. Imports of second-hand machinery and equipment can be a significant part of the gross fixed capital formation of some countries participating in Eurostat-OECD comparison. An important element of gross fixed capital formation is own-account production of fixed capital assets (including the construction of new dwellings and the extension and modification of existing dwellings carried out by households on own account).

Non-produced assets are assets that are needed for production and come into existence in ways other than through processes of production. Major improvements to non-produced assets must come about through productive activity. Land, for example, is a non-produced asset. Major improvements to land usually involve the

construction of dykes, drainage ditches, irrigation channels, etc. for the purpose of reclaiming land from the sea, marshes, deserts, etc. The clearance of land to bring it into production for the first time is also a major improvement. Non-produced assets, like fixed assets may be both tangible, such as subsoil assets, land, etc., and intangible, such as leases, patented entities, etc.

- *Change in inventories:* The acquisition less disposals of stocks of raw materials, semi-finished goods and finished goods that are held by producer units prior to their being further processed or sold or otherwise used. Inventories also cover all raw materials and goods stored by government as strategic reserves. Semi-finished goods include work-in-progress - that is, goods and services that are only partially completed and whose production process will be continued by the same producer in a period following the accounting period. Work-in-progress is particularly important for production processes with long gestation periods, such as the construction of large-scale civil engineering works, the manufacture of ships and aeroplanes, and reforestation. Also covered by work-in-progress is the natural growth prior to harvest of agricultural crops and the natural growth in livestock raised for slaughter.
- *Acquisitions less disposals of valuables:* Changes in the stocks of goods that have been acquired primarily as stores of value because they are expected to appreciate - or at least not to decline - in value and do not deteriorate over time under normal conditions. Valuables include gold (other than monetary gold) and other precious metals, expensive jewellery and precious stones, works of art and antiques.

Structure of the classification

3.18. The Eurostat-OECD classification breaks down final expenditure on GDP into seven main aggregates:

- Individual consumption expenditure by households,
- Individual consumption expenditure by NPISHs,
- Individual consumption expenditure by government,
- Collective consumption expenditure by government,
- Gross fixed capital formation,
- Change in inventories and acquisitions less disposals of valuables,
- Balance of exports and imports.

3.19. These seven main aggregates are subsequently broken down first into expenditure categories, then into expenditure groups and expenditure classes

and finally into basic headings. There are 31 expenditure categories, 71 expenditure groups, 152 expenditure classes and 226 basic headings. The distribution of these aggregation levels by main aggregate is shown in Box 3.3.

- 3.20. The most important aggregation level is the lowest level, the basic heading level. Basic headings are the building blocks of Eurostat-OECD comparisons. It is at the level of the basic heading that expenditures are defined, products selected, prices collected, prices edited and PPPs first calculated and averaged. In theory, a basic heading covers a group of similar well-defined goods or services. In practice, coverage is determined by the lowest level of final expenditure for which explicit expenditure weights can be estimated. An actual basic heading can therefore include a broader range of products than is theoretically desirable. Examples of basic headings are given in Box 3.4. Their coverage varies. The basic headings for potatoes and men's footwear are relatively homogeneous, while those for major household appliances and maintenance and repair services for dwellings are distinctly heterogeneous with the latter being a mix of both goods and services.

Derivation of actual individual consumption

3.21. The Eurostat-OECD classification is first and foremost an expenditure classification. Individual consumption expenditure is clearly structured by "who pays" – households, NPISHs or general government. Participating countries are required to provide a breakdown of their final expenditure on GDP in line with this structure. Yet, for the reason explained in Box 3.2, one of the principal aims of Eurostat-OECD comparisons is to compare actual individual consumption (by households) at various levels of aggregation. And the results of comparisons are presented by "who consumes" – households or general government. The Eurostat-OECD classification is designed to allow the final consumption expenditures of households, NPISHs and government to be reclassified according to whether they benefit households individually or collectively.

3.22. This is achieved by using three functional classifications from the SNA 93: COICOP¹¹, COPNI¹² and COFOG 98¹³. These classify respectively the expenditures of households, NPISHs and general government by purpose – that is, by the ends that they wish to achieve through these expenditures. COICOP is designed to classify only a single outlay: individual consumption expenditure. COPNI and COFOG 98 are designed to classify a range of transactions of which the outlay on final consumption expenditure is one. In this respect, the main use of COPNI and COFOG 98 is to classify the individual consumption expenditures by NPISHs and government in a way that is consistent with the classification of individual consumption expenditure by households in COICOP.

Box 3.3: Number of categories, groups, classes and basic headings by main aggregates

| Main aggregates Categories | Categories | Groups | Classes | Basic headings |
|---|------------|-----------|------------|-------------------|
| 11.00 Individual consumption expenditure by households | 13 | 48 | 109 | 148 |
| - .01 Food and non-alcoholic beverages | | 2 | 11 | 34 |
| - .02 Alcoholic beverages, tobacco and narcotics | | 3 | 5 | 5 |
| - .03 Clothing and footwear | | 2 | 6 | 10 |
| - .04 Housing, water, electricity, gas and other fuels | | 5 | 11 | 11 |
| - .05 Furnishings, household equipment and maintenance | | 6 | 12 | 16 |
| - .06 Health | | 3 | 7 | 7 |
| - .07 Transport | | 3 | 14 | 18 |
| - .08 Communication | | 3 | 3 | 3 |
| - .09 Recreation and culture | | 6 | 20 | 22 |
| - .10 Education | | 5 | 5 | 5 |
| - .11 Restaurants and hotels | | 2 | 3 | 4 |
| - .12 Miscellaneous goods and services | | 7 | 11 | 11 |
| - .13 Net purchases abroad | | 1 | 1 | 2 |
| 12.00 Individual consumption expenditure by NPISHs | 6 | 6 | 6 | 6 |
| - .01 Housing | | 1 | 1 | 1 |
| - .02 Health | | 1 | 1 | 1 |
| - .03 Recreation and culture | | 1 | 1 | 1 |
| - .04 Education | | 1 | 1 | 1 |
| - .05 Social protection | | 1 | 1 | 1 |
| - .06 Other services | | 1 | 1 | 1 |
| 13.00 Individual consumption expenditure by government | 5 | 7 | 16 | 29 |
| - .01 Housing | | 1 | 1 | 1 |
| - .02 Health | | 2 | 7 | 17 |
| - .03 Recreation and culture | | 1 | 1 | 1 |
| - .04 Education | | 2 | 6 | 9 |
| - .05 Social protection | | 1 | 1 | 1 |
| 14.00 Collective consumption expenditure by government | 1 | 1 | 5 | 7 |
| 15.00 Gross fixed capital formation | 3 | 6 | 13 | 32 |
| - .01 Machinery and equipment | | 2 | 7 | 20 |
| - .02 Construction | | 3 | 3 | 9 |
| - .03 Other products | | 1 | 3 | 3 |
| 16.00 Change in inventories and acquisitions less disposals of valuables | 2 | 2 | 2 | 2 |
| - .01 Change of inventories | | 1 | 1 | 1 |
| - .02 Acquisitions less disposals of valuables | | 1 | 1 | 1 |
| 17.00 Balance of exports and imports | 1 | 1 | 1 | 2 |
| GDP | 31 | 71 | 152 | 226 |

3.23. Together, COICOP, COPNI and COFOG 98 ensure the harmonised treatment of individual consumption expenditures of households, NPISHs and government that is central to the Eurostat-OECD classification. The correspondence with the three classifications as it is to be found in the Eurostat-OECD classification is summarised in Box 3.5. The table shows the correspondence between the expenditure categories of the classification and how these are summed to obtain actual individual consumption at the category level. This correspondence carries through to the lower levels of aggregation for households and for government, but not for NPISHs because participating countries generally do not have the detailed expenditure data required.

Treating market and non-market services

3.24. The different ways government expenditure on market services and government expenditure on non-market services are valued and the different ways their PPPs are calculated require the Eurostat-OECD classification to meet two conditions. First, government expenditure on individual services purchased from market producers has to be clearly separated from government expenditure on individual services produced by government. Second, government expenditures on government-produced individual services and on government-

Box 3.4: Examples of basic heading definitions

| | |
|-------------------|---|
| 11.01.17.2 | Fresh or chilled potatoes (ND) Fresh or chilled potatoes; <i>includes</i> other tuber vegetables (manioc, arrowroot, cassava, sweet potatoes, etc.). |
| 11.03.21.1 | Men's footwear (SD) All footwear for men including sports footwear suitable for everyday or leisure wear (shoes for jogging, cross-training, tennis, basket ball, boating, etc.); <i>includes</i> gaiters, leggings and similar articles; shoelaces; parts of footwear, such as heels, soles, etc., purchased by households with the intention of repairing footwear themselves; <i>excludes</i> shoe-trees, shoehorns and polishes, creams and other shoe-cleaning articles (11.05.61.1); orthopaedic footwear (11.06.13.1); game-specific footwear (ski boots, football boots, golfing shoes and other such footwear fitted with ice skates, rollers, spikes, studs, etc.) (11.09.32.1); shin-guards, cricket pads and other protective apparel for sport (11.09.32.1). |
| 11.05.31.1 | Major household appliances whether electric or not (D) Refrigerators, freezers and fridge-freezers; washing-machines, dryers, drying cabinets, dishwashers, ironing and pressing machines; cookers, spit roasters, hobs, ranges, ovens and micro-wave ovens; air conditioners, humidifiers, space heaters, water heaters, ventilators and extractor hoods; vacuum cleaners, steam-cleaning machines, carpet shampooing machines and machines for scrubbing, waxing and polishing floors; safes, sewing machines, knitting machines, water softeners, etc.; <i>includes</i> the delivery and installation of the appliances when applicable; <i>excludes</i> such appliances that are built into the structure of the building (capital formation). |
| 11.04.32.1 | Services for the maintenance and repair of the dwelling (S) Services of plumbers, electricians, carpenters, glaziers, painters, decorators, floor polishers, etc. engaged for minor maintenance and repair of the dwelling; <i>includes</i> total value of the service (that is, both the cost of labour and the cost of materials are covered); <i>excludes</i> separate purchases of materials made by households with the intention of undertaking the maintenance or repair themselves (11.04.31.1); services engaged for major maintenance and repair (intermediate consumption) or for extension and conversion of the dwelling (capital formation). |

produced collective services have to be broken down by cost components: compensation of employees, intermediate consumption, gross operating surplus¹⁴, net taxes on production and receipts from sales¹⁵. By these means, it is possible to apply PPPs based on purchasers' prices of outputs to government expenditure on market services and PPPs based on purchasers' prices of inputs to government expenditure on non-market services.

Main aggregates

3.25. The main aggregates have already been defined. This paragraph describes how they are dealt with in the expenditure classification.

- *Individual consumption expenditure by households* is broken down by purpose in line with COICOP into 148 basic headings. It refers – or is supposed to refer – to expenditures by resident households. This means that it is to include purchases of goods and services by resident households when travelling abroad and to exclude purchases of goods and services in the domestic market by non-resident households. In practice, most countries are unable to do this at the basic heading level and a global adjustment – called “net purchases abroad” – is made instead. This expenditure class is defined in the classification as the difference between two basic headings: purchases by residential households in the rest of the world *less* purchases by non-residential households in the economic territory of the country.

Individual consumption expenditure by NPISHs is broken down by purpose according to COPNI into six categories, six groups, six classes and six basic headings. All cover the same six individual services: housing, health, recreation and culture, education, social protection, and other services. This is because data on NPISHs are not available uniformly across countries. Even so, a more detailed breakdown, in line with that applied for households and general government, would be desirable for health and education. “Other services” includes expenditure by NPISHs on religion, political parties, labour and professional organisations, environment protection, and research and development.

Individual consumption expenditure by government is broken down into five expenditure categories with each category covering an individual service - housing, health, recreation and culture, education, and social protection - as defined by COFOG 98. The five expenditure categories are subsequently broken down into the 29 basic headings listed in Box 3.6. From the Box it can be seen that housing, recreation and culture, and social protection are not broken down any further, each remains as a single basic heading. But health and education are first broken down by whether the expenditure is for the purchase of health or education services from market producers - referred to as “benefits and reimbursements” - or for the production of health and education services by government itself. The expenditures on government-produced health and education services are then broken down by

Box 3.5: Derivation of actual individual consumption for expenditure categories

| Purpose of expenditure | Households [COICOP] | NPISHs [COPNI] | Government [COFOG 98] | Actual individual Consumption |
|---|------------------------|-------------------|--------------------------|----------------------------------|
| Food and non-alcoholic beverages | 11.01 | | | 11.01 |
| Alcoholic beverages, tobacco and narcotics | 11.02 | | | 11.02 |
| Clothing and footwear | 11.03 | | | 11.03 |
| Housing, water, electricity, gas and other fuels of which Actual rentals for housing | 11.04 11.04.1* | 12.01 | 13.01 | 11.04.1* + 12.01 + 13.01 |
| Furnishings, household equipment & maintenance | 11.05 | | | 11.05 |
| Health | 11.06 | 12.02 | 13.02 | 11.06 + 12.02 + 13.02 |
| Transport | 11.07 | | | 11.07 |
| Communication | 11.08 | | | 11.08 |
| Recreation and culture | 11.09 | 12.03 | 13.03 | 11.09 + 12.03 + 13.03 |
| Education | 11.10 | 12.04 | 13.04 | 11.10 + 12.04 + 13.04 |
| Restaurants and hotels | 11.11 | | | 11.11 |
| Miscellaneous goods and services: of which Social protection | 11.12 11.12.4* | 12.05 | 13.05 | 11.12.4* + 12.05 + 13.05 |
| Other services | | 12.06 | | 12.06 |
| Total individual consumption expenditure | 11.00 | 12.00 | 13.00 | 11.00 + 12.00 + 13.00 |

* Expenditure group

cost components as required for the input-price approach. The cost components are shown in Box 3.6. Although broadly similar, they are not exactly the same for each service. For example, under health, compensation of employees is broken down by skill level of employee. Under education, it is broken down by level of education provided.

- *Collective consumption expenditure by government* is defined in line with COFOG 98. It is treated as a single aggregate and broken down by cost components as required for the input-price approach. The breakdown is given in Box 3.6. Compensation of employees and intermediate consumption are broken down by type of service – that is, by whether they relate to defence or to collective services other than defence.
- *Gross fixed capital formation* is broken down by type of product following CPA 96¹⁶ into 26 basic headings: twenty for machinery and equipment, three for construction and three for other products. “Other products” include products of agriculture, forestry, fisheries and aquaculture; computer software; land improvement, mineral exploration and other intangible fixed assets.
- *Change in inventories and acquisitions less disposals of valuables* is broken down into two basic headings: change in inventories¹⁷ and acquisitions less disposals of valuables.
- *Balance of exports and imports* comprises two basic headings: exports of goods and services (which is positive) and imports of goods and services (which is negative).¹⁸ According to the SNA 93 and the ESA 95, both exports and imports should be valued at f.o.b. (free on board) prices – that is, the prices at the frontier of the exporting country. This is difficult to do in the

case of imports, which are usually registered in customs records at the value at the frontier of the importing country – that is, at c.i.f. (cost, insurance and freight)¹⁹ prices. If merchandise imports are adjusted to f.o.b. prices, the effect is to reduce the value of merchandise imports and to increase the value of net imports of freight and insurance services by exactly the same amount. Since only the balance – that is, the combined totals - of exports and imports of goods and services is required for the calculation of PPPs, the Eurostat-OECD classification, as a practical matter, calls for merchandised imports to be valued at c.i.f. prices.

Presentation of the classification

3.26. The classification is presented in Annex II. GDP, main aggregates, expenditure categories and expenditure groups are identified by capital letters and by one-, two-, four- and five-digit codes respectively. Expenditure classes are underlined and have six-digit codes. Basic headings have seven-digit codes. These distinctions are illustrated in Box 3.7.

3.27. Annex II provides a definition for each basic heading. Examples of these definitions are given in Box 3.4. From these it can be seen that a definition lists either the products or the product groups covered by the basic heading. For example, the definition of services for the maintenance and repair of the dwelling specifies products: *services of plumbers, electricians, carpenters, glaziers, painters, decorators, floor polishers, etc.* The definition for major household appliances identifies six product groups: *refrigerators, freezers and fridge-freezers; washing-machines, dryers, drying cabinets, dishwashers, ironing and pressing machines; cookers, spit roasters, hobs, ranges, ovens and micro-wave ovens; air conditioners, humidifiers, space heaters, water heaters, ventilators and ex-*

Box 3.6: Government final consumption expenditure by basic heading

| INDIVIDUAL CONSUMPTION EXPENDITURE BY GOVERNMENT | |
|---|---|
| 13.01.11.1 | Housing |
| Health benefits and reimbursements | |
| 13.02.11.1 | Pharmaceutical products |
| 13.02.11.2 | Other medical products |
| 13.02.11.3 | Therapeutic appliances and equipment |
| 13.02.12.1 | Out-patient medical services |
| 13.02.12.2 | Out-patient dental services |
| 13.02.12.3 | Out-patient paramedical services |
| 13.02.12.4 | Hospital services |
| Production of health services | |
| 13.02.21.1 | Compensation of employees: Physicians |
| 13.02.21.2 | Compensation of employees: Nurses and other medical staff |
| 13.02.21.3 | Compensation of employees: Non-medical staff |
| 13.02.22.1 | Intermediate consumption: Pharmaceutical products |
| 13.02.22.2 | Intermediate consumption: Other medical goods |
| 13.02.22.3 | Intermediate consumption: Therapeutic appliances and equipment |
| 13.03.22.4 | Intermediate consumption n.e.c. |
| 13.02.23.1 | Gross operating surplus |
| 13.02.24.1 | Net taxes on production |
| 13.02.25.1 | <u>less</u> Receipts from sales |
| 13.03.11.1 | Recreation and culture |
| Education benefits and reimbursements | |
| 13.04.11.1 | Education benefits and reimbursements |
| Production of education services | |
| 13.04.21.1 | Compensation of employees: Pre-primary and primary education |
| 13.04.21.2 | Compensation of employees: Secondary education |
| 13.04.21.3 | Compensation of employees: Post-secondary non-tertiary education |
| 13.04.21.4 | Compensation of employees: Tertiary education |
| 13.04.22.1 | Intermediate consumption |
| 13.04.23.1 | Gross operating surplus |
| 13.04.24.1 | Net taxes on production |
| 13.04.25.1 | <u>less</u> Receipts from sales |
| 13.05.11.1 | Social protection |
| COLLECTIVE CONSUMPTION EXPENDITURE BY GOVERNMENT | |
| 14.01.11.1 | Compensation of employees (collective services relating to defence) |
| 14.01.11.2 | Compensation of employees (collective services other than defence) |
| 14.01.12.1 | Intermediate consumption (collective services relating to defence) |
| 14.01.12.2 | Intermediate consumption (collective services other than defence) |
| 14.01.13.1 | Gross operating surplus |
| 14.01.14.1 | Net taxes on production |
| 14.01.15.1 | <u>less</u> Receipts from sales |

tractor hoods; vacuum cleaners, steam-cleaning machines, carpet shampooing machines and machines for scrubbing, waxing and polishing floors; safes, sewing machines, knitting machines, water softeners, etc.

3.28. The lists are not comprehensive, but they are complete enough to demarcate the boundaries of the basic headings and to distinguish between them. In addition, there are clarifications, when possible ambiguities may arise, of what is to be specifically included and what is to be specifically excluded. In

the case of exclusions, the correct basic heading for the excluded product is identified. From the definition of men's footwear in Box 3.4, it can be seen that the expenditure on the basic heading should include expenditure on *gaiters, leggings and similar articles; shoelaces; parts of footwear, such as heels, soles, etc., purchased by households with the intention of repairing footwear themselves* and should exclude expenditure on *shoe-trees, shoe-horns and polishes, creams and other shoe-cleaning articles (11.05.61.1); orthopaedic footwear (11.06.13.1); game-specific footwear (ski boots,*

Box 3.7: Levels of aggregation

| | |
|---|------------------------|
| 10.00.00.0 GROSS DOMESTIC PRODUCT | |
| 11.00.00.0 INDIVIDUAL CONSUMPTION EXPENDITURE BY HOUSEHOLDS | = main aggregate |
| 11.01.00.0 FOOD AND NON-ALCOHOLIC BEVERAGES | = expenditure category |
| 11.01.10.0 FOOD | = expenditure group |
| 11.01.11.0 Bread and cereals [COICOP 01.1.1]* | = expenditure class |
| 11.01.11.1 Rice (ND)** | = basic heading |
| 11.01.11.2 Other cereals (ND)** | = basic heading |
| 11.01.11.3 Bread (ND)** | = basic heading |
| 11.01.11.4 Other bakery products (ND)** | = basic heading |
| 11.01.11.5 Pasta products (ND)** | = basic heading |
| 11.01.12.0 Meat [COICOP 01.1.2]* | = expenditure class |
| 11.01.12.1 Beef and veal (ND)** | = basic heading |
| 11.01.12.2 Pork (ND)** | = basic heading |

* classification correspondence

** classification by type of product

football boots, golfing shoes, other such footwear fitted with ice skates, rollers, spikes, studs, etc.) (11.09.32.1); shin-guards, cricket pads and other protective apparel for sport (11.09.32.1). Excluded expenditures should be assigned to the basic heading stipulated: 11.05.61.1, 11.06.13.1, 11.09.32.1 or 11.09.32.1.

Correspondence with COICOP, COPNI, COFOG 98 and CPA 96

3.29. The individual consumption expenditures of households, NPISHs and government are classified by purpose using COICOP, COPNI and COFOG 98. Gross fixed capital formation is classified according to CPA 96 which classifies products by activity in line with NACE Rev. 1²⁰.

3.30. In Annex II, the correspondence with COICOP, COPNI and CPA 96 is specified in square brackets [] at the level of the expenditure class. From Box 3.7, it can be seen that expenditure class 11.01.11 Bread and cereals corresponds to COICOP class 01.1.1 and that expenditure class 11.01.12 Meat corresponds to COICOP class 01.1.2. Usually there is a one-to-one correspondence between the expenditure classes of individual consumption expenditure by households and COICOP classes. This is not the case with the expenditure classes of individual consumption by NPISHs and the classes of COPNI. Nor is it so with the expenditure classes of gross fixed capital formation and the classes of CPA 96. In both cases, the correspondence is between an expenditure class and a range of classes of the underlying classification. For example, it can be seen in Annex II that expenditure class 12.02.11 Health corresponds to COPNI classes 02.1.1 to 02.6.0 and that expenditure class 15.01.12 General purpose machinery corresponds to CPA 96 classes 29.11 to 29.24.

3.31. The correspondence with COFOG 98 is defined two aggregation levels higher, at the expenditure cate-

gory level. The correspondence is broad, generally at the level of COFOG divisions (or two-digit level). For example, in Annex II, the correspondence between expenditure category 13.02.00.0 HEALTH and COFOG 98 is defined as follows:

“COFOG 07 Health covers government outlays on health services provided to individual persons and health services provided on a collective basis. Only expenditures on individual services - COFOG 07.1.1 to 07.4.0 - are allocated here (*that is, to 13.02.00.0 HEALTH*). Expenditures on collective services - COFOG 07.5.0 and 07.6.0 - are assigned to 14.01.10.0 (*that is, to collective services*).”

A clear distinction is made between those expenditures that are individual and those that are collective as required by COFOG 98.

Classification by type of product

3.32. Each basic heading in Annex II is classified by type of product – that is, whether the products it covers are goods or services. For example, in Box 3.7, all the basic headings are designated (ND). This indicates that they contain non-durable consumer goods as explained below.

3.33. Under individual consumption expenditure by households, basic headings containing goods are denoted by either (ND), (SD) or (D) indicating “non-durable”, “semi-durable” or “durable” respectively, while those containing services are denoted by (S). Most of these basic headings comprise either goods or services, but, for practical reasons, some basic headings contain both goods and services. Similarly, there are basic headings which contain either both non-durable and semi-durable goods or both semi-durable and durable goods. Such basic headings are assigned a (ND), (SD), (D) or (S) according to which type of product is considered to be predominant.

- 3.34. The distinction between non-durable goods and durable goods is based on whether the goods can be used only once or whether they can be used repeatedly or continuously over a period of considerably more than one year.²¹ Durables have as well a relatively high purchasers' price. Semi-durable goods differ from durable goods in that their expected lifetime of use, though more than one year, is often significantly shorter and that their purchasers' price is substantially less.²² These differentiations are the same as those applied to classify COICOP classes by type of product.
- 3.35. All basic headings under individual consumption expenditure by NPISHs and individual consumption expenditure by government are classified as individual services (IS). Likewise, all basic headings under collective consumption expenditure by government are classified as collective services (CS) and all basic headings under gross fixed capital formation are classified as investment goods (IG).

Reporting and validation of expenditure data

- 3.36. Participating countries are required to report details of their final expenditure on GDP for a reference year, t , twice: first in the September of year $t+1$ and then in the September of year $t+2$.
- 3.37. The detailed expenditures reported in $t+1$ are used to calculate the preliminary PPPs for t that are released in the December of $t+1$. Countries are expected to report the best estimates for the various levels of aggregation that are available for t at that time. Being provisional, the extent to which the breakdowns, particularly at the lower levels of aggregation, will reflect that of a previous year rather than t will vary from country to country. As a minimum, GDP, the main aggregates and the expenditure categories should be current estimates for t , but the structure of expenditure below these levels may be that of $t-1$ or even $t-2$.
- 3.38. The detailed expenditures reported in $t+2$ are used to calculate the final PPPs for t that are released in the December of $t+2$. Countries are expected to report breakdowns that refer to t at all levels of aggregation. It is also expected that the breakdowns will be final, or almost so, as most countries will have introduced the major revisions to their estimates of GDP and its component expenditures for t by September of $t+2$.
- 3.39. Participating countries are required to report their detailed expenditures on the electronic reporting form supplied by Eurostat or by the OECD. An example of the first page of the reporting form is provided in Box 3.8. The various levels of aggregation are listed in descending order - GDP, main aggregates, expenditure categories, expenditure groups, expenditure classes, basic headings - with each aggregation level being nested under the aggregation level immediately above it. The reporting form is programmed to be completed from the bottom up - that is, from the basic heading upwards. For example, once the expenditures on the basic headings "rice", "other cereals, flour and other cereal products", "bread", "other bakery products" and "pasta" have been entered, expenditure on the expenditure class "bread and cereals" will be calculated automatically. This expenditure will be carried through to all the higher levels of aggregation - "food", "food and non-alcoholic beverages", "individual consumption expenditure by households" and, finally, "GDP" - as shown in Box 3.8. Of course, as the expenditures for the other basic headings are introduced, the higher levels of aggregation will change. They will keep on accumulating until the expenditures for all their constituent basic headings have been included.
- 3.40. The shaded cells on the reporting form indicate basic headings. They are not programmed - that is, they do not contain an aggregation formula. The unshaded cells indicate aggregation levels above the basic heading level. They are programmed for automatic aggregation. In principle, participating countries should complete the form by entering only the expenditures on the 226 basic headings listed. Automatic aggregation will complete the reporting form and provide a data set that is internally consistent - that is, each aggregate is the sum of its components. In practice, it is unlikely that countries will apply this bottom up approach throughout. For certain expenditure classes, and even, perhaps, for some expenditure groups, countries will follow a top down approach. The reporting form facilitates this by allowing the aggregation formula for the unshaded cells to be overridden.
- 3.41. As an example of top down reporting, a country may have firm information about expenditures on the expenditure class "fruit", but no direct information on the two basic headings - "fresh or chilled fruit" and "frozen, preserved, processed fruit and fruit products" - that make up the expenditure class. In this case, the country can enter the expenditure on fruit directly into the unshaded cell, return later to this expenditure class and use their best judgement (see next paragraph) about the split between the two basic headings. When a top down approach is used, the internal consistency of the data set is no longer guaranteed. For this reason, participating countries are expected to check the internal consistency of the expenditures reported at each aggregation level before returning the completed form to Eurostat or the OECD.
- 3.42. Participating countries should make sure that the reporting form is complete and that there is an entry for each basic heading. If the form is not complete, countries should attempt to fill the gaps themselves otherwise it will be done for them by Eurostat or the OECD. As countries are generally in a better position to estimate missing expenditures, it is preferable that they, and not Eurostat or the OECD, do the estimations. Possible ways of doing this include referring back to the expenditure data of former

Box 3.8: Expenditure reporting form

| Main aggregates, categories, groups, classes and basic headings | Reference year (t) |
|---|--------------------|
| 10.00.00.0 GROSS DOMESTIC PRODUCT | 100 |
| 11.00.00.0 INDIVIDUAL CONSUMPTION EXPENDITURE BY HOUSEHOLDS | 100 |
| 11.01.00.0 FOOD AND NON-ALCOHOLIC BEVERAGES | 100 |
| 11.01.10.0 FOOD | 100 |
| 11.01.11.0 <u>Bread and cereals</u> | 100 |
| 11.01.11.1 Rice | 15 |
| 11.01.11.2 Other cereals, flour and other cereal products | 5 |
| 11.01.11.3 Bread | 35 |
| 11.01.11.4 Other bakery products | 20 |
| 11.01.11.5 Pasta products | 25 |
| 11.01.12.0 <u>Meat</u> | |
| 11.01.12.1 Beef and veal | |
| 11.01.12.2 Pork | |
| 11.01.12.3 Lamb, mutton and goat | |
| 11.01.12.4 Poultry | |
| 11.01.12.5 Other meats and edible offal | |
| 11.01.12.6 Delicatessen and other meat preparations | |
| 11.01.13.0 <u>Fish and seafood</u> | |
| 11.01.13.1 Fresh, chilled or frozen fish and seafood | |
| 11.01.13.2 Preserved and processed fish and seafood | |
| 11.01.14.0 <u>Milk, cheese and eggs</u> | |
| 11.01.14.1 Fresh milk | |
| 11.01.14.2 Preserved milk and other milk products | |
| 11.01.14.3 Cheese | |
| 11.01.14.4 Eggs and egg-based products | |
| 11.01.15.0 <u>Oil and fats</u> | |
| 11.01.15.1 Butter | |
| 11.01.15.2 Margarine | |
| 11.01.15.3 Other edible oils and fats | |
| 11.01.16.0 <u>Fruit</u> | |
| 11.01.16.1 Fresh or chilled fruit | |
| 11.01.16.2 Frozen/preserved/processed fruit/fruit products | |
| 11.01.17.0 <u>Vegetables</u> | |
| 11.01.17.1 Fresh or chilled vegetables other than potatoes | |
| 11.01.17.2 Fresh or chilled potatoes | |
| 11.01.17.3 Frozen/preserved/processed vegetables/vegetable products | |
| 11.01.18.0 <u>Sugar, jam, honey and confectionery</u> | |
| 11.01.18.1 Sugar | |
| 11.01.18.2 Jams, marmalades and honey | |
| 11.01.18.3 Confectionery, chocolate & other cocoa preparations | |
| 11.01.18.4 Edible ice, ice cream and sorbet | |
| 11.01.19.0 <u>Food products n.e.c.</u> | |
| 11.01.19.1 Food, products n.e.c. | |
| 11.01.20.0 NON-ALCOHOLIC BEVERAGES | |
| 11.01.21.0 <u>Coffee, tea and cocoa</u> | |
| 11.01.21.1 Coffee, tea and cocoa | |
| 11.01.22.0 <u>Mineral waters, soft drinks, fruit and vegetable juices</u> | |
| 11.01.22.1 Mineral waters | |
| 11.01.22.2 Soft drinks and concentrates | |
| 11.01.22.3 Fruit and vegetable juices | |

reference years, searching for a data source which, while not consulted during regular compilations of the national accounts, could be used for PPP purposes, and soliciting experts for “guesstimates”. If none of these options are effective, the reporting form should be returned incomplete. On no account should completeness be obtained by distributing the expenditure on an expenditure class equally over its constituent basic headings.

- 3.43. Participating countries should also verify the temporal consistency of the expenditures they report. The shares of the component expenditures of all levels of aggregation should be compared with their respective shares in previous reference years. Conspicuous shifts in shares that cannot be readily explained should be investigated and corrected when necessary. Otherwise they should be flagged and endorsed either on the reporting form or in a covering note. This will avoid needless queries when either Eurostat or the OECD repeats the edit.
- 3.44. On receipt of the reporting forms, Eurostat and the OECD will repeat the checks for completeness, internal consistency and temporal consistency. They will verify as well the spatial consistency of the reported expenditures by comparing the shares of component expenditures of each level of aggregation across countries. Even though the expenditure patterns of participating countries can vary considerable, this edit allows inconsistencies arising from differences in interpretation and implementation to be identified. Unless a country has changed its practice between reference years, such inconsistencies are unlikely to be found when checking temporal consistency. For example, in the past, some countries included the cost of food purchased in restaurants under food, while others included it under restaurants. This discrepancy was discovered by comparing the expenditure shares of countries. Another example concerns rentals for housing. Rentals, as defined in the SNA 93 and the ESA 95, should not include charges for heating or for miscellaneous services relating to the dwelling such as refuse collection or co-proprietor charges in multi-occupied dwellings. Not all countries observe this definition and countries not doing so can be identified when their expenditure shares are compared with countries that do.
- 3.45. When reporting forms are incomplete because countries have not been able to apportion the expenditures on expenditure classes over their constituent basic headings, the allocations will be made by Eurostat or the OECD. The preferred method is to follow the allocations made for the expenditure classes in question by a country or a group of countries having a “similar” expenditure pattern. There is no precise definition of “similar” and “similarity” can be partial. For example, two countries could have similar patterns of household expenditure on food, clothing, transport services, etc. and dissimilar patterns of government expenditure on individual and collective services. The verification of spatial consistency provides useful input into the identification of countries with similar expenditure patterns, but the selection of countries is often subjective and influenced by factors such as geographic proximity, common history, social policy and income level.
- 3.46. Because there is no rigorous definition of similarity and because there is a greater possibility of error if only one country is chosen, Eurostat and the OECD prefer to apply average allocations of groups of similar countries. When this is not an option, allocations of single countries will be employed. When there is neither a group of countries nor a single country, average allocations of all participating countries may be applied. When this is done outliers are eliminated before calculating the averages. Distributing the expenditure on an expenditure class equally over its constituent basic headings is rarely used and then only as a last resort. The estimates made by Eurostat and the OECD will be sent to countries. They are required either to approve them or to propose alternatives.
- 3.47. Once verification is concluded, the expenditure breakdowns that participating countries report for t in September t+2 will be complete and internally consistent. Their temporal and spatial consistency will have been validated. They will also be final – that is, the shares of components for all aggregation levels up to the main aggregate level are fixed. They will not be changed to take account of revisions to GDP estimates that take place below the main aggregate level after September t+2. Revisions to GDP and the main aggregates that are made between September t+2 and December t+2 when the PPPs are calculated will be accommodated however. Changes to the main aggregates will be distributed proportionally over their component expenditures in line with each component’s share in the finalised expenditure breakdown.
- 3.48. The PPPs for t that are calculated and disseminated in December t+2 are final. They will not be recalculated to take account of revisions to the GDP for t that occur after December t+2. Instead the revised estimates of GDP and its component expenditures will be converted to real final expenditures using the PPPs of December t+2. The final PPPs for t will only be recalculated if:
- a mistake²³ has been made by either a participating country, Eurostat or the OECD;
 - the mistake is discovered within three months of their publication; and
 - the mistake results in a change of at least 0.5 per cent in real GDP per capita of any participating country.
- In the long term, the final PPPs for t and for other reference years may be recalculated when changes to the definitions, concepts, classifications and accounting rules of the SNA 93 and the ESA 95 are introduced in 2008.

Statistical discrepancy

3.49. Neither the reporting form nor the expenditure classification on which it is based makes provision for the statistical discrepancy that may arise when countries use two independent approaches to esti-

mate GDP. For the purposes of Eurostat-OECD comparisons, participating countries that report a statistical discrepancy in their estimates of final expenditure on GDP should include the discrepancy under the basic heading “change in inventories” on the reporting form.

¹ *System of National Accounts 1993*, Commission of the European Communities, International Monetary Fund, Organisation for Economic Co-operation and Development, United Nations, World Bank, 1993.

² *European System of Accounts 1995*, Eurostat, Luxembourg, 1996.

³ The purchaser's price is the amount paid by the purchaser in order to take delivery of a unit of a good or service at the time and place required by the purchaser. It includes supplier's retail and wholesale margins, separately invoiced transport and insurance charges, non-deductible tax on products and sometimes, as in the case of certain items of machinery and equipment, installation costs.

⁴ The f.o.b. (free on board) price is the price of a good delivered at the customs frontier of the exporting country. It includes the freight and insurance charges incurred to that point (including, when applicable, the cost of loading onto a carrier for onward transportation from that point) and any export duties or other taxes on exports levied by the exporting country.

⁵ Fixed assets provide capital services that are “consumed” over a number of years. Their consumption is recorded as consumption of fixed capital.

⁶ The amount received by the producer from the purchaser for a unit of good or service produced as output. It includes subsidies on products and other taxes on production. It excludes taxes on products, other subsidies on production, supplier's retail and wholesale margins and separately invoiced transport and insurance charges.

⁷ This consists of summing the relevant cost items: intermediate consumption (current maintenance and repairs, insurance services), consumption of fixed capital, other taxes on production and net operating surplus (nominal rate of return on the capital invested in the dwelling and land).

⁸ Had these services been provided by government they would normally be considered to be collective and not individual services.

⁹ Covers all expenditures on such exploration irrespective of whether or not new discoveries are made.

¹⁰ Covers both purchases of ready-made software and the cost of software developed “in house”.

¹¹ “Classification of Individual Consumption According to Purpose (COICOP)”, *Classification of Expenditure According to Purpose*, United Nations, New York, 2000.

¹² “Classification of the Purposes of Non-Profit Institutions Serving Households (COPNI)”, *Classification of Expenditure According to Purpose*, United Nations, New York, 2000.

¹³ “Classification of the Functions of Government (COFOG)”, *Classification of Expenditure According to Purpose*, United Nations, New York, 2000.

¹⁴ Gross operating surplus is consumption of fixed capital plus net operating surplus. In practice, for non-market producers, it will be equal to consumption of fixed capital as net operating surplus is likely to be negligible.

¹⁵ Receipts from sales are recorded as a negative value. They are subtracted from the gross output of government non-market production to obtain government final consumption expenditure on government-produced individual and collective services.

¹⁶ *Statistical Classification of Products by Activity in the European Economic Community (CPA 1996)*, Eurostat, Luxembourg, 1998.

¹⁷ For the purposes of Eurostat-OECD comparisons, change in inventories also includes the statistical discrepancies of those participating countries that report them in their estimates of final expenditure on GDP.

¹⁸ The Eurostat reporting form requires a further breakdown of these two basic headings by destination (for exports) and by origin (for imports). These data are required for purposes other than the calculation of PPPs. See footnotes 9 and 10 of Annex II for details.

¹⁹ The c.i.f. (cost, insurance and freight) price is the price of a good delivered at the customs frontier of the importing country. It includes any insurance and freight charges incurred to that point. It excludes any import duties or other taxes on imports and trade and transport margins within the importing country.

²⁰ *Statistical Classification of Economic Activities in the European Community (NACE Rev.1)*, Eurostat, Luxembourg, 1996.

²¹ Paragraph 9.38, SNA 93.

²² Paragraph 6.93, SNA 68.

²³ Defined as a use of incorrect basic information or an inappropriate application of a calculation procedure.