

GNI INVENTORY

of

HUNGARY

Version 2.1

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of HCSO**

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FOREWORD

Inventory of Hungarian gross national income compilation has been drafted according to the requirements of the Council Regulation No 1287/2003 which demands that Member States provide the Commission (Eurostat) with an inventory of the procedures and basic statistics used to compile gross national income and its components according to European System of Accounts 1995.

Description of sources and methods as well as data presented in the Inventory relate to 2002. However, where appropriate reference is also made to changes in data sources and in methods applied that occurred after 2002. The recent Inventory has been prepared also for 2002 as reference year but it includes the result of methodological and revision work done until June 2009.

The structure of the Inventory follows the common structure as adopted by the Eurostat Gross National Income Committee in June 2005, as “Guidelines for writing the GNI Inventory”. It starts with an overview of the system of accounts which gives the first look over the architecture of the Hungarian national accounts. This is followed by Chapter 2 describing the revision policy. The core of the Inventory is composed of Chapters 3, 4 and 5 which describe in detail the GDP calculation by the production, expenditure and income approach. The most important is chapter on sources and methods for the production approach which is considered to be the most reliable approach to gross domestic product compilation. Chapter 6 gives information on balancing the three approaches and on validation of the estimates. Main approaches with respect to exhaustiveness are presented in Chapter 7. In Chapter 8 the transition from gross domestic product to gross national income is described and in Chapter 9 calculation of financial intermediation services indirectly measured and their allocation by user sectors. The last two chapters give a description of main classifications and main data sources used.

HCSO will continue developing the GNI methodology, therefore this methodological description will be regularly updated in the future.

Budapest, February 2010

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CHAPTER 1. OVERVIEW OF THE ACCOUNT SYSTEM

1.1. Introduction, Institutional Framework

1. Since December 1993 the **Act XLVI of 1993 on Statistics** is in force in Hungary which defines the scope and the role of the different actors of the statistical system, as well as its general objectives. The Hungarian CSO is a professionally independent administrative institution of nationwide authority operating under the supervision of the Government. The Act was amended in 1999 in the following areas:

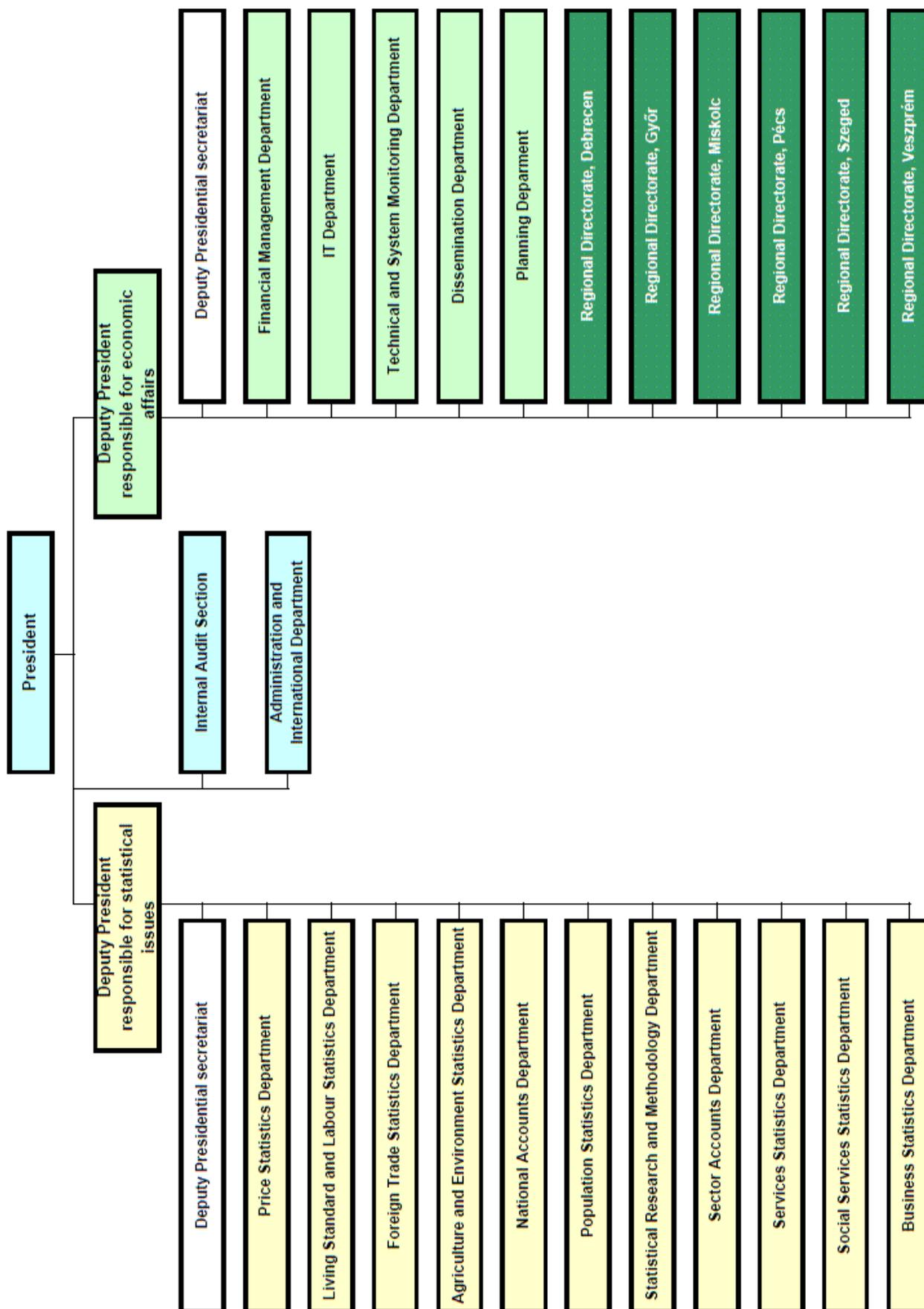
- there was a need for the establishment of a professional background in which the impartiality and professional independence are ensured for all participants of the official statistical service;
- a satisfactory legal background shall be established for the management and transmission of the individual data abroad;
- For statistical purposes the Hungarian CSO shall be authorised to have a wider access to registers of the public administration as data sources in order to improve the accuracy and cost efficiency of the statistical information without laying too much burden on the respondents.

2. The statistical act ensures the confidentiality of the statistical information (in line with the Act LXIII of 1992 on the Protection of Personal Data and the Disclosure of Information of Public Interest) and put all reporters under the obligation to provide such information. In addition, two acts (Act LVIII of 2001 on the National Bank of Hungary; Act XXXVIII of 1992 on Public Finances) have a key role in ensuring a proper information system for the National Accounts. It was laid down in the wording of these acts that the data provision system should be developed taking into account statistical needs.

3. According to the Act the official statistical service is made up by central and administrative statistics. The members of the service are, apart from HCSO, the ministries and certain administrative and judiciary organisations. The main actors of the system are the HCSO and the National Statistical Council (NSC). The National Statistical Council is a professional advisory and commenting body to the HCSO President; it was statutorily established. The members (recently 31 members) of the body are the representatives of ministries, the National Bank of Hungary, the Office of the National Council of the Judiciary, the Office of the Chief Public Prosecutor, the Office for Economic Competition, the trade unions, the chambers, the social insurance, the local governments and the representatives of scientists and researchers. The data protection commissioner is a permanent invited participant. On a yearly basis, there are several meetings, it is compulsory to hold at least one sitting a year.

4. The Hungarian legal practice – in spite of the similar basic principles – is slightly different from the practice applied in the European Union. The basic difference is that while in the EU the various statistical areas, data collections connected to the National Statistical Data Collection Programme, are regulated by governmental rules, in the Hungarian legal practice, all the members of the statistical service are entitled to pursue statistical activity by virtue of a basic law. In line with this, the NSC is able to control and co-ordinate the NSDCP.

Table 1.1 Organisational chart of the HCSO, 2009



Organisation of National Accounts services

5. At all times the HCSO is the responsible for producing NA for Hungary. (Financial Accounts are compiled by the NBH.) The previous National Accounts Department in the HCSO was divided into two parts in 1999. The structure and tasks of the two departments are as follows:

National Accounts Department:

- *Input-output Section (7 persons)*
Compiling SUT and IOT at current and constant prices.
Calculation of weighted VAT rata
- *Income Accounts Section (11 persons)*
Coordination of income accounts
Sector accounts of financial corporations
ROW accounts
Calculation of Regional GDP
FDI statistics
- *Production Accounts Section (10 persons)*
Coordination of production accounts at current and constant prices (annual and quarterly)
Calculation of the production of non-financial corporations at current and constant prices (annual and quarterly)

Sector Accounts Department:

- *Households sector Accounts and Capital Accounts Section (12 persons)*
Calculation of household accounts
Compilation of the use side of GDP at current and constant prices (annual and quarterly)
Calculation of weighted VAT average of households
Data collection on gambling Calculation of fixed capital (PIM)
Calculation of GFCF at current and constant prices (annual and yearly)
Calculation of inventories and changes in inventories at current and constant prices (annual and quarterly)
Balance sheets
- *Government and Non-profit Sector Accounts Section (9persons)*
Calculation of government accounts at current and constant prices (annual and quarterly)
Calculation of NPI at current and constant prices (annual and yearly)
Data collection on churches
Compilation of EDP Reports

6. The two departments have about 60 employees. The average age is 40. The staff is quite well educated: 70% has university or college degree; 75% can, at least, read on one foreign language. During the last ten years the two departments tried to speed up the work processes by involving computer experts. This program was successful, because not only the processing time became shorter but a new database was built up by them.

Council of National Accounts

7. It is a consultative and decision-making body directed by the head of the National Accounts Department. The members of the council are the heads of the following departments:

- o National Accounts Department
- o Sector Accounts Department
- o Foreign Trade Statistics Department
- o Price Statistics Department

The members of the council meet once per month, sometimes more frequently.

1.2. Supervisory and control system

1.2.1. Risk management

8. There were a number of developments in HCSO in the last few years (or are under way at present) which help review the data sources of National Accounts and their methods, and make more transparent the data compilation process of data surveys and thus National Accounts. These developments are the following:

9. **Metainformation system:** the metainformation system of HCSO serves as the basis for the majority of HCSO's informatics systems (META-controlled systems). These systems follow the data compilation process of the given statistical domain from data collection to dissemination. In addition, the META system contains the concepts used in various areas/statistical domains, their definitions, furthermore, relations between the concepts, classifications, and the administrative data sources and data collections used, too.

A considerable proportion of this information has been available for users as well on the website of HCSO since September 2008, completed with the structured documentation of different statistical domains, which contains the legal basis of the particular statistical domain, its purpose, short content, data source, timeliness, revision policy, history, the list of its publications, the description of the methodology for data compilation and of data quality, and links to related concepts, classifications and data sources.

Name convention also helps uniform treatment. Name convention means the identification of objects, database tables, indicators and classifications according to uniform rules.

10. Informatics documents store (DOKTÁR):

An ORACLE-based system publicly available on the intranet of HCSO, which stores and displays via its user interface system documentations, informatics and statistical methodological directions, standards, vademecums, information materials, informatics order sheets etc.

11. As regards National Accounts, the DOKTÁR stores the following types of documents at present:

- In respect of statistical methodological inputs it contains the questionnaires of various data collections, their fill-in and implementation guides, the expectations (specifications) of statisticians on processing software, the detailed description of tasks and sub-tasks related to data collection, the time schedule of their implementation within the year, the persons responsible for them, and detailed specifications on outputs.
- It contains the documentations of informatics applications and processing systems prepared for both general statistical functions and individual data collections.
- The system plan, operation and development specifications and the user's guide of the common database of SBS and National Accounts (see paragraph 14), and other information related to the system.

12. **Project on process quality and its measurement system:** In the frame of the project the quality guidelines concerning statistical data compilation processes (HCSO Presidential Direction No IV/2007) were written, which draw up expectations on the quality of different process stages. Furthermore, for various process stages different document schemes were prepared, which give a structured general picture of activities performed in statistical production processes. Though at present only the documentation on sampling is filled in completely, schemes are also available for the areas of weighting, estimation, error calculation, imputation, seasonal adjustment and statistical confidentiality.

13. **Informatics systems**, which ensure the integrated treatment of the statistical data compilation process from the point of view of informatics:

- **GÉSA:** an integrated data collection organising system for institutional surveys of economic and social statistics, at the aid of which respondents are informed on their obligation to supply data in a proactive manner, and HCSO has a full picture of the population and respondents of data collections and of the effectiveness of data collections. By the aid of the system the process of data collection can be followed up and monitored. This serves as basis for the unit-level quality indicators of data collections.
- **ADÉL:** an integrated data preparation framework for the entry of questionnaire data and for the checking (coherence and credibility tests) and primary and subsequent correction of data arriving in any form (on paper, electronically, from administrative sources). The quality check of incoming data is based on this. The data preparation of not all surveys is made via the ADÉL system.
- **KSHXML:** an internet-based data collection system, which ensures the receipt of good-quality data by checking the questionnaires while they are filled in by respondents.
- **Integrated Data Processing System (IDPS):** a comprehensive project launched in 2008 to organise the data processing stage of the statistical production process into an integrated informatics system. At present the accurate definition and documentation of processing processes of all basic statistics are under way, as well as the collection and algorithmization of uniformly used methods. According to the requirement specification prepared in the frame of the project the data processing processes of national accounts significantly differ from algorithms applied in other processing processes, and the elaboration of their methodology is under way. Therefore the system – in a first step – will not considerably and directly support the process of establishing national accounts. The next step of the project is to establish the logical system plan. The system is planned to be developed and partially introduced in 2010, but the full-scale introduction within the Office is expected to take years.

14. **Common SBS-National accounts database:** A flexible informatics application that is a basis for producing annual structural business statistics (SBS), and for compiling national accounts. SBS data are produced from annual data collections until the reference year of 2001, and from the annual integrated survey (and imputed from tax data) for reference years 2001–2003. From the reference year of 2005 we started to produce SBS data using the Common database and data processing system. National accounts were compiled outside the Common database until the reference year of 2005. In the reference year of 2006 we started to test the Common database, and at last from the reference year of 2007 the first data production from the Common database. Its functions: data production, data checking, corrections, operation.

15. **Input-output tables** (see Chapter 6.2.1).

16. **Production management system:** an Integrated Production Control system, which enhances the transparency of statistical production processes and supports the completion of duties. The system will ensure the modelling of production processes (graphic illustration) and the collection, storage and dynamic management of documentations related to the different stages. It will embrace the establishment of the workflow system, where the deadlines, relations and implementation of process stages will be checked and controlled. At present, in the pilot phase, the process model is available for 2 data collections/data collection groups (Labour force survey, monthly STS).

17. **Other developments:** Data Warehouse, Dissemination Database.

1.2.2. Forms of organisation of work

- Work plans and time schedules: quarterly/annually prepared time schedules agreed upon with participants at the level of statistical departments, ensuring the production of e.g. quarterly and annual national accounts. Similar ones are prepared in connection with the development tasks of national accounts, too, e.g. for the retrospective calculation of annual and quarterly time series of national accounts. (See work plan for NA compilation for the year 2007 in 2009)
- Agreements on labour force utilisation: through the programme planning system of HCSO. Each year the labour force utilisation of the coming year is planned in a monthly breakdown by programmes and activities. The labour force utilisation plan is prepared by programme elements (e.g. the compilation of GNI data), and is also put in writing, with the signature of the heads of the departments concerned. The system is based on special planning software.
- In order to ensure the availability of outside sources for the compilation of national accounts HCSO signs detailed co-operation contracts with the relevant partners (National Bank of Hungary, Hungarian Tax and Financial Control Administration), which cover the data to be transmitted, their quality and the deadline of transmission as well as the guarantees on them. There is also a common work plan for solving methodological problems on makroeconomic statistics.

1.2.3. The regular production of quality reports on statistical sources and products

18. HCSO regularly produces quality reports to Eurostat or other international organisations. In 2004 18, while in 2007 33 concerned areas have already had to submit quality reports at different annual or sub-annual periodicity, or in the form of one-time reports. Some of the areas concerned in HCSO: LFS, HBS, EU-SILC, SBS, STS, ICT, FSS etc. In case of STS statistics detailed reports, too, that monitor the statistical data compilation process have to be produced regularly (referring to different areas each year) in addition to the “conventional” quality report evaluating the quality of the final product.

19. The Standard Quality Report of HCSO was prepared at the end of 2008. It is harmonised with Eurostat guidelines, which contains 9 comprehensive (in all, 18 detailed) quality indicators, completed by further characteristics that cannot be expressed in numerical terms, as well as the textual description of results. Even that year each statistical department filled in a test quality report on at least one statistical domain, totalling 10 specific areas. The filling in of quality reports has to be started from 2009 in each statistical domain. The report contains a detailed evaluation of the relevance, accuracy, timeliness, punctuality, availability, comprehensibility, comparability and coherence of the particular product (statistical domain), as well as production costs and response burden, furthermore, permits the drawing up of proposals for measures. An HCSO Quality Report has to be filled in and updated at a yearly periodicity (for the particular reference year) but regularly for each statistical domain.

20. For statistical surveys the Process Quality project produced a “Self-assessment questionnaire for survey managers”, which contains the evaluation of the quality of each process stage in line with the “Quality guidelines” document, as well as the development tasks identified accordingly. The questionnaire can be considered as an adaptation of the self-assessment questionnaire produced in the framework of the “DESAP – European self-assessment checklist for survey managers” project financed by Eurostat and co-ordinated by the German Statistical Office. It is proposed to fill in the self-assessment questionnaire – as planned – at least every three years for each survey.

1.2.4. The documentation of supervisory controls performed by management on national accounts compilation.

21. The council of NA, as described in paragraph 1.1 of the GNI Inventory, often discusses problems concerning NA sub-areas to be developed/under development. This is a forum of not only the detected problems but also of forming an opinion on and evaluating the proposals, initiatives and propositions aimed at their solution. Practically neither strategic decisions nor significant changes to methodology/data sources can be adopted without the consent of the council. In addition to the permanent members of the council a representative of the unit responsible for the relevant statistical domain is always present as well. In each case memorandums are made on the sessions of the council and on the expertst meetings held under the aegis of the council. The

council runs on HCSO's intranet a separate webpage, where the whole HCSO staff can have access to the materials and memorandums of all sessions, mission reports, the documents of Eurostat meetings, legal rules, manuals etc.

1.2.5. The performance of internal audits on the processes of collection and compilation of statistical data.

22. As the quality framework of HCSO – since the adoption of quality guidelines, the standard quality report and the quality indicators – has regulated the data production process and the measurement of statistical data quality, the present task is to make an evaluation against quality requirements. In 2008 the Office prepared the uniform self-assessment tools (self-assessment questionnaire, quality report), and the elaboration of the quality report on national accounts is in process. In the frame of the Quality coaching project of Eurostat and with efficient support from the Statistical Office of the Slovak Republic a concept was prepared this year to introduce an internal quality audit of HCSO statistical domains. After it will have been adopted the responsible unit is expected to be selected soon, and the auditors will be trained. Based on this concept HCSO plans to implement 2–5 pilot audits in 2009, and the quality audit of the 120 statistical domains – including national accounts – is going to be made in five years.

23. Besides, in the framework of the Process quality project we will elaborate the indicators measuring and monitoring the quality of processes, which will help the examination of their quality already in the production process.

1.3. Revision policy

1.3.1. Current revisions

24. From June 2009 the data of quarterly and annual national accounts are revised and published according to the following plan:

Table 1.2. Current revisions

Subject	Deadline (months)	Notes
Quarterly and annual flash estimates (GDP index)	T+45 days	
First preliminary data of quarterly and annual GDP	T+70 days	Annual data of the previous year, the sum of the four quarters
Quarterly sector accounts (government and rest of the world sectors)	T+90 days	
Annual National Accounts, second preliminary data	T+9	
First revision of quarterly GDP based on annual (T+9) data	T+10.5	Published together with flash GDP data of quarter 3
Preliminary regional GDP	T+16.5	
Annual NA revision, regional GDP	T+21	Based on preliminary SUT
Second revision of quarterly GDP based on annual (T+21) data	T+22.5	Published together with flash GDP data of quarter 3
Optional revision of annual NA	T+33	Based on final SUT
Optional third revision of quarterly GDP based on annual (T+33) data	T+34.5	Published together with flash GDP data of quarter 3

25. The publication dates of revisions and revised estimates are adjusted to EU requirements, Hungarian user needs, and the dates of generation of more accurate basic data and more detailed new information. Accordingly, the first flash estimate is published t+45 days and is followed by a further

three more detailed and accurate estimates. The new revision policy of Regional Accounts will come into effect in 2010 and that of the SUT-based final data in 2011. Currently SUT is published T+36 months.

1.3.2. Benchmark revisions

26. Considering EU requirements and domestic needs the introduction of the most important developments is expected in the following years:

- SUT integration: 2009–2011 (see Chapter 6.2.1)
- Introduction of the Common SBS-National accounts database: 2009 (see Chapter 1.2.1, paragraph 14)
- NACE revision: September 2011
- Data collection and methodological tasks arising from GNI Inventory reservations (2009–2012)
- ESA revision: 2014

27. Taking into account the above we plan to make the next benchmark revision in September 2011, which can comprise the introduction of the new NACE, the changeover to kind-of-activity units and the introduction of a part of the developments resulting from the SUT integration. The benchmark revision due to the new ESA can be implemented in 2014 or 2015, depending on future events.

1.4. Outline of the production approach

28. The following table demonstrates the calculation of GDP according to the production approach:

Table 1.3. GDP calculation (HUF million)

P.1	Output at basic prices	+35.517.023
P.2	Intermediate consumption	- 20.675.734
D.21-D.31	Taxes less subsidies on products	+ 2.307.160
B.1.*g	Gross domestic product at market prices	+17.148.449

1.4.1. Reference framework

29. The production approach is considered to be the main estimation method for assembling GDP in Hungary. The discrepancy between the production and the expenditure approach is indicated explicitly in the annual publications as part of the changes in inventories. The balancing procedure is made on an aggregated level. There is no detailed reconciliation procedure, using for example, annual input-output tables or supply and use tables. We are aware of the recommendations of the GNI Committee about the integration of the SUT into the national accounts. The work on the integration process has already begun, but the full integration probably requires several years, according to the international experiences.

30. In the system of the Hungarian national accounts the **institutional and statistical observation unit** is the enterprise. The breakdown of output and GVA by activities therefore refers to the institutional units (and not to the specialized operational sites). In the Hungarian national accounts, the data used and the course of procession, including the compilation of production accounts, is rather linked to the institutional sectors than the branches/activities.

31. The **main aggregates** are calculated in accordance with the regulation of ESA95. The gross output (P.1) consists of the goods and services created during the accounting period. The intermediate

consumption (P.2) comprises products and services which are used to the production process directly and effectively. However, goods and services produced and consumed within the same accounting period and within the same unit are not recorded as part of the output or intermediate consumption of that unit.

32. In the Hungarian system of national accounts, **market and non-market output** is calculated according to the instructions of ESA95. The classification of institutional units complies with paragraph 3.27 and Table 3.1 of ESA95. To distinguish market and non-market producers, as a starting point, the classification by ownership is used. As for public corporations and non-profit institutions, the 50% criterion defined in paragraph 3.32 of ESA95 is applied. The government institutions classified into the General government sector are basically non-market producers. But in some cases, regarding their secondary activities they can be market producers, according to the 50% criterion of ESA95.

1.4.2. Main data sources

33. The production side calculation of GDP is based to a great extent on the **Business Register (BR)**. The BR contains every unit with tax number. There is no criteria (for activity, revenue or work force) to get into the Register.

34. In 2002, the **Non-financial corporations sector** gave the 55.4 percent of the total GVA at basic prices. Besides the Business Register, the compilation of accounts for the Non-financial corporations sector is mainly based on an own-developed **enterprise database system** called JAVA. This database system is essentially built on corporate profit tax returns, but it integrates data coming from other data sources (e.g. statistical surveys, budgetary data and other tax declarations) in a determined way. (For a more detailed description on the JAVA Database see Chapter 11)

In 2002, other data sources were:

- Structural Business Statistics (SBS) survey
- Employment, wages and salaries survey (so called institutional labour survey)
- Employment cost survey
- Taxes, subsidies from Government statistics

35. In 2002, the gross value added of the **Financial corporations sector** represented a 3.3 percent in the total value added of all industries. The sector includes the Central Bank, Other monetary institutions, Other financial intermediaries, Insurance companies and pension funds and Activities auxiliary to financial intermediation. The main data sources are tax declarations, data collected by the Hungarian Financial Supervisory Authority for other monetary institutions, insurance companies and pension funds. The tax declarations contain supplementary information not included in the annual reports. Other data sources are the balance sheets and the profit and loss accounts of the National Bank of Hungary, Credit Institutions, Savings Cooperatives and Credit Cooperatives, Building Societies, Insurance Corporations and Associations and pension funds and guarantee funds. Of the HCSO data collections the labour statistics, labour cost surveys and integrated data collections are the most important items. In addition, we also use data from the reports of central government units and local governments.

36. In 2002, the **General government sector** gave the 18.0 percent of the total GVA at basic prices. Every general government unit in legal terms is a non-market producer and classified into the GG sector in NA. However, in the central or local government the budgetary institutions can be market producers. As they are not independent producers, they are considered as the local KAUs of the central

and local government organs and the SS funds. They remain classified into the sector but their output is calculated on the basis of the sales revenue. Public corporations and public non-profit institutions are classified into GG on the basis of the 50% criterion. For corporations classified into this sector, the data is calculated from the same sources, which are used in case of corporations classified into the non-Financial corporations sector: the corporate profit tax return and the SBS. For the non-profit institutions the data source is the statistical survey of HCSO.

37. In 2002 the **Households sector** gave 22.2 percent of total GVA at basic prices. The Households sector, in line with ESA95, covers the households both as consumers and producers. The Households sector accounts for the production of sole proprietors with licence and other permission. The personal income tax declaration is one of the data sources used for calculating the production of sole proprietors. In the Households sector about 400 thousand sole proprietors fill out a supplementary questionnaire attached to the personal income tax declaration. It records the sales and costs of the enterprise. HCSO receives the individual data of these supplementary questionnaires from the Tax and Financial Control Office. For the estimation of output and intermediate consumption of this subgroup additional information is gained from the corporate profit tax declarations of the small-scale corporations (with number of employees less than 10 persons) and from the report of the Ministry of Finance on the expected minimal level of income of sole entrepreneurs by counties and professions in 2001. (For more detailed description about the Households sector see Chapter 3.1.4)

38. In 2002, the **Non-profit institutions serving households sector** gave the 1.0 percent of the total GVA at basic prices. The data sources are the following: Statistical survey on non-profit organisations (OSAP 1158); Statistical survey on churches (OSAP 1658); Financial statements by political parties published in the Hungarian Official Journal. The output of the NPISHs is compiled on a cost basis.

1.4.3. Valuation

39. Valuation according to ESA95 rules is done by converting the micro-economic/administrative data (net sales, own performance capitalised, costs of raw materials and consumables, costs of contracted services, costs of other service activities) to the corresponding ESA95 aggregates (output, intermediate consumption) for non-financial corporations and sole proprietors with licence and other permission. For further details, see Chapters 3.3.1 and 3.3.4. Business accounting allows various types of methods for recording of changes in inventories. FIFO is the most commonly used method by the Hungarian firms. So far own produced and purchased stocks are not adjusted for holding gains. There is an ongoing work to develop a methodology to this.

40. The borderline between IC and GFCF is clearly defined. The Hungarian Accounting law defines a borderline (GFCF assets are used at least one year and the value of them were more than HUF 50 000– about EUR 200) and in national accounts this rule is used, as well. The methodological improvement on increase of this limit is in progress.

41. Major improvements/ repairs to fixed assets and purchases of software, as well, are included in GFCF, and not in the IC.

42. GO and GVA by branches is valued at basic prices, i.e. excluding taxes on products and including subsidies on products. IC is valued at purchaser's prices.

43. The production of private individuals with tax number and the unregistered production activities of households (which are recorded within the Households sector) are valued according to ESA95 rules and the relevant legal acts as described in chapters 3.7-3.22.

44. For financial intermediation all interest data are accounted on an accrual basis. Due to holding gains there were no corrections in 2002 accounts.

45. Annual reports of government institutions are compiled on a cash basis. In order to obtain accrual data necessary adjustments are made based on the information from the annual reports. Concerning the Gross output, adjustments are done for IC, compensation of employees and revenues.

1.4.4. Calculation of the value added

1.4.4.1. Non-financial corporations sector (S.11)

46. In the case of the Non-financial corporations sector mainly corporate profit tax returns and the Structural Business Survey (SBS) contain the data which are the sources used for compiling national accounts aggregates. Figures of these declarations include data deriving directly from business accounting. These are used for calculating output, intermediate consumption, value added and compensation of employees after the necessary adjustments included in the transition from business accounting to national accounts concept.

47. The information required for making these adjustments is available from corporate tax returns, personal income tax declarations, liability and subsidy declaration forms, SBS, and exogenous data in the accounts for sector S13 (taxes and subsidies on products) and S12 (insurance premiums).

48. Compilation of production accounts for the majority of enterprises is in line with the so called common calculation method: the supervised, corrected and substituted basic data are loaded to the JAVA database; for every type of enterprises there is a computer-algorithm, which calculates the needed indicators, according to the schemes.

1.4.4.2. Financial corporations sector (S.12)

49. The accounts used by financial corporations provide exhaustive information from which, once certain adjustments have been made, ESA95 variables can be calculated. The adjustments which are made to bring the reported variables into line with ESA95 variables are calculated mainly on the basis of information from the data collected by the Hungarian Financial Supervisory Authority, the HCSO labour surveys, the labour cost survey and the integrated (structural) data collection and the reports of central government units and local governments.

50. The calculation of the value added for the various kinds of units included in the Financial corporations sector is done at a detailed level of the NACE and it is therefore highly diversified. (See Chapter 3.16)

1.4.4.3. Government sector (S.13)

51. Annual financial reports are the main data sources for the **units belonging to the General government sector by legal forms (budgetary institutions)**. HCSO receives the individual annual final reports and the ESA95 indicators are calculated on an individual basis – except for CFC. The ESA95 aggregates for individual budgetary institutions are aggregated to sub-sector level. The annual financial report fully covers the financial and non-financial transactions of the budgetary institutions. The report also contains a balance sheet and a supplementary table with detailed information on the fixed capital.

52. The annual financial report is designed for administrative purposes. Two kinds of classifications are applied by the institutions: economic classification and a kind of activity classification. Both classifications are very detailed, and the reports also contain the cross-classification. The economic classification is very similar to the ESA 95 concept, however some adjustments are needed (i.e. adjustments due to insurance of assets, cost reimbursement, VAT adjustment, accrual adjustment, sick leave allowance, Private Pension fund contribution and social insurance supplements, welfare services, personal income tax paid by the employer). Consumption of fixed capital is valued at replacement costs. (See Chapter 3.3.3)

53. Market output of these units covers the sales revenue of the KAUs considered as market producers. Output for own final use: supplementary data are available in the annual financial report.

54. Corporate profit tax returns and the Structural Business Survey (SBS) are the main data sources for the **public corporations classified into GG sector**. These corporations are non-market units and the gross output is calculated on a cost basis. All the reclassified corporations are controlled and mostly financed by the central government: they are classified into the central government sub-sector.

55. The statistical survey compiled by HCSO is the main data source for the **non-profit institutions classified into GG sector**. In the survey, the classification of transactions follows the ESA95 requirements and there is no need to apply adjustments when calculating NVA and gross output.

1.4.4.4. Households sector (S.14)

56. The personal income tax declaration is one of the main data sources used for calculating the production of sole proprietors with licence or other permission. In 2002, about 400 000 sole proprietors filled out a supplementary questionnaire attached to the personal income tax declaration. Although it records the sales and costs of the enterprise, it is considered that the figures of tax data are not reliable either for output or for IC. On the other hand, the number of tax declarations is used for the estimation of the number of production units, considering that the business register is uncertain in this respect.

57. Considering data for gross output and intermediate consumption, adjustments are needed to obtain acceptable national accounts data for Output, IC and GVA generated by this sub-sector. Because of the low quality of personal income tax data, the output per employee and the IC/Output coefficients are substituted by corresponding data derived from that of the small-scale corporations. Information from the Ministry of Finance, i.e. the report on the expected minimal level of income of sole entrepreneurs by counties and professions in 2001, is used in the territorial and professional breakdown of GVA. The estimations are made at 4 digits of the classification of activities (370 activities) and counties (20 counties).

58. The estimation method of the gross output and intermediate consumption of sole proprietors with licence and other permission implicitly covers the adjustments applied in the Non-financial corporations sector. There are explicit adjustments only in case of tips given to hairdressers, waiters, receptionists, taxi-drivers, because the estimation method of the Output for sole proprietors with licence and other permission implicitly does not cover these items.

59. For private individuals with tax number and for unregistered activities of households, GVA estimations are made at the different branches by applying activity-specific methods. There are different estimation methods for calculating the output and intermediate consumption for these units as follows:

- modelling techniques (e.g. for owner-occupied dwelling services, gratitude money for health care, teaching);
- statistical surveys with indirect methods (domestic services for households);
- quantity and price data from statistical surveys (agricultural production of small producers for market sale and for own final use).

1.4.4.5. Non-profit institutions serving households sector (S.15)

60. The statistical survey conducted by HCSO is the main data source for the calculation of gross value added for non-profit institutions serving households. The output of the NPISHs is compiled on a cost basis:

- Intermediate consumption (P.2)
- + Compensation of employees (D.1)
- + Consumption of fixed capital (K.1)
- + Other taxes on production (D.29)
- Other subsidies on production (D.39)

1.4.5. Main approaches taken with regards to exhaustiveness

61. To ensure the exhaustiveness of the Hungarian national accounts certain adjustments are made in national accounts data. The estimations for non-observed economy are presented in line with Eurostat's Guidelines to *Tabular Approach to Exhaustiveness* by classifying the adjustments into 7 types of "non-exhaustiveness" for all of the three approaches of GDP calculations: output, expenditure and income.

62. It also provides the framework for the calculation of the adjustments, by linking available compilation methods to non-exhaustiveness types. (See Appendix). The exhaustiveness estimations of the production side concentrate on the Non-financial corporations sector and the Households sector. The most of presumed volume of the non-observed economy based on the underreporting behaviour of small entrepreneurs, and enterprises with staff less than 10 employees.

63. The estimation for illegal activities - N2 according to *Tabular Approach to Exhaustiveness* – was introduced officially in the Hungarian National Accounts in 2007, with the reference year of 2005, retrospectively.

64. Nevertheless, the estimation of non-observed economy by production approach needs more improvements. In connection with the project on the full integration of the SUT into the national accounts (see Chapter 6), we intend to develop an estimation on the non-observed economy. The new technology in the compilation of national accounts requires revision and improvement in the sources and methods used for the estimation of non-observed activities. Current sources and estimation methods are not fully able to satisfy all requirements of the new compilation technology. Combining data from both production and expenditure side in a SUT framework is a useful tool to check the consistency of data and to generate estimates for missing items including the non-observed economy as well. There is a work plan designed on the quality development of national accounts under the financing of the Grant 2006 by Eurostat (See Chapter 3.6).

1.5. Outline of the income approach

1.5.0. Introduction

65. GDP by the income approach is estimated at the same time and with the same data sources as GDP by the production approach and with operating surplus and mixed income as balancing items. Income approach is not an independent estimate of GVA in the Hungarian national accounts however all income components are estimated either directly or as a residual item. The income approach denotes calculation of GDP as the addition of its various components, consisting of compensation of employees, gross operating surplus (including consumption of fixed capital), mixed income and other

taxes on production less other subsidies on production. Compensation of employees, taxes and subsidies are estimated directly using different data sources but other income components are residuals as balancing items of income generation. Therefore directly estimated component, especially compensation of employees will be described in details. They are calculated using the same industry and producer type classification as was used in the production approach. On Table 1.2 the main income categories of the GDP 2002 are shown.

Table 1.4. GDP by income, 2002

		Million HUF	% of GDP
D1	Compensation of employees	7 797 338	45.4
B2g	Operating surplus	5 042 488	29.4
B3g	Mixed income	2 039 061	11.9
D2	Taxes on production and imports	2 568 343	15.0
D3	Subsidies	298 781	1.7
	GDP	17 148 449	100.0

66. The main income GDP categories shown in this chapter are compensation of employees, taxes on production and imports, subsidies on production, gross operating surplus and gross mixed income.

1.5.1. Compensation of employees

67. Compensation of employees includes wages and salaries and employers' social contributions which are further divided into actual and imputed. Wages and salaries include all gross payment in cash as well as goods and services in kind provided by employers to the employees for the work done in the observed period.

68. Compensation of employees is estimated with available data sources and according to accounting standards and rules. In the first step of the compilation process the category is estimated separately by individual data sources and by institutional sectors. Data are arranged into three main components: gross wages, other labour costs and actual employers' social contributions. In the final step data according to data sources on compensation of employees are rearranged to ESA95 components using the Labour Costs Survey 2000 as a benchmark.

1.5.2. Taxes on production and imports (D.2)

69. In the course of accounting taxes and subsidies, cash-flow data in the final accounts of the business year are used as data source. Among the possibilities for accrual accounting of taxes and social contributions offered by the 2516/2000 Regulation of the European Parliament and the Council, we apply the time adjusted cash method. This preference is influenced basically by the fact that cash-flow data are available. We account only taxes and subsidies paid actually, and do not correct tax data with the amount of taxes not paid.

70. Taxes recorded under this heading can be classified in the following categories:

D.21 Taxes on products

- D.211 Value added tax (VAT)
- D.212 Taxes and duties on imports
- D.214 Taxes on products, except VAT and import taxes

D.29 Other taxes on production and imports

- taxes on building sites,

- taxes on use of fixed assets and vehicles,
- taxes on payroll or workforce.

71. These taxes are payable regularly (each year) either to the central budget or to the local governments irrespectively of the profitability of the enterprises.

1.5.3. Subsidies (D.3)

72. Subsidies are current unrequited payments of the government or the EU to resident producers with the aim of influencing volumes, prices or remuneration of production factors.

73. D.31 Subsidies on products are direct payments for producing, selling (exporting) utilization products, services and production factors.

74. D.39 Other subsidies on production cover those subsidies which are not classified as subsidies on products and are receivable by resident producers as a consequence of their involvement in production.

75. They include:

- Subsidies on payroll and workforce
- Subsidies on agricultural
- Other subsidies

76. Data sources are Budget reporting of Ministry of finance, Ministry of Agriculture and Ministry of Economy.

1.5.4. Gross operating surplus

77. Gross operating surplus is estimated as value added by activity at basic prices less compensation of employees less other taxes on production plus other subsidies on production. Allocation of FISIM has no effect on gross operating surplus. FISIM is added to intermediate consumption and to output at the same time due to the cost method of output valuation of housing services of owner-occupiers.

78. In non-market activities of general government and NPISH, gross operating surplus equals the consumption of fixed capital which is for general government estimated by the perpetual inventory method.

1.5.5. Gross mixed income

79. Gross mixed income is income of self-employed persons. The category is estimated as residual item and is equal to gross value added less compensation of employees less other taxes on production plus other subsidies on production.

1.5.6. Main data sources

80. The sources of information available for the estimate of GDP from the income approach generally use valuation criteria similar to those established in ESA95. However, it may be noted that in some specific cases (such as a portion of remuneration in kind, certain taxes, and insurance transactions) such adjustments are made as are necessary for them to be correctly recorded in national accounts terms.

81. Most variables of GDP by income approach are calculated directly using administrative data sources or figures of surveys conducted by the HCSO.

- Data on other taxes and subsidies on production are calculated by using time adjusted cash data. See 4.8 and 4.9 for details.
- Wages and salaries in cash are calculated directly either from labour force survey or from fiscal data; some elements of wages in kind are estimated on the basis of tax declarations also directly, others are estimated combining direct information and estimations. See 4.7 for details.
- Social security contribution figures are based on administrative data sources using time adjusted cash method.
- Operating surplus figures of the non-financial and financial corporations' sector are residual items deriving from GDP estimates from the output side. Operating surplus of the General government sector is calculated on the basis of direct information and covers consumption of fixed capital. Mixed income of the Households sector is also a residual item.

82. In the case of wages and salaries, fiscal data are supplemented by estimations in order to arrive at an exhaustive estimate. See 4.7 for details.

1.6. Outline of the expenditure approach

1.6.1. GDP according to the expenditure approach

83. The expenditure approach measures total expenditures as the sum of final uses of goods and services by resident institutional units plus exports less imports of goods and services.

84. These categories are estimated from a wide variety of sources including expenditure surveys, the government's internal accounting system, surveys of traders and administrative sources. The table below shows how the expenditure measure of GDP is put together.

Table 1.5 GDP from expenditure side, 2002

ESA-code	Item	million HUF	% of GDP
P.31	Households final consumption expenditure	9 078 800	52.9
P.31	Final consumption expenditure of NPISHs	248 744	1.5
P.32	Final consumption expenditure of government	3 801 006	22.2
P.51	Gross Fixed Capital Formation	3 944 460	23.0
P.52	Changes in inventories	218 959	1.28
P.53	Acquisitions less disposals of valuables
	Statistical discrepancy	211 317	1.13
P.6	Exports of goods and services	10 820 458	63.1
P.7	Imports of goods and services	11 156 985	65.1
B.11	Balance of external trade	-336 527	-2.0
B.1g	GDP, total	17 148 449	100.0

1.6.2. The reference framework

1.6.2.1. Household final consumption expenditure

85. Household final consumption expenditure covers the consumption of goods and services for individual purposes. It contains the purchased goods and services, i.e. consumption of goods and services paid by the households, consumption of own accounts goods and the wages and salaries in kind from the employers.

86. The main data sources used for the estimation of household final consumption expenditures are the Household Budget Survey, the Retail Trade survey and several other surveys conducted by HCSO (e.g. telecommunication survey). The characteristics of these data sources are outlined in chapter 5.7 on the Household Final Consumption Expenditure.

1.6.2.2. Final consumption expenditure of government

87. According to ESA95 the government final consumption expenditure is divided into two parts:

- The value of the goods and services produced by general government itself other than own-account capital formation and sales;
- As for general government, purchases of goods and services produced by market producers that are supplied to households – without any transformation – as social transfers in kind. This implies that the general government just pays for goods and services that the sellers provide to households.
- Central government units and extra-budgetary funds are registered by the Ministry of Finance. Local governments and their institutions are registered at regional institutions. The coverage of these registers is complete.
- For the compilation of data referring to the central Government sector the estimates are based on annual reports of government institutions and on the government budget. Each government institution has an annual report, and all of them are included in the government budget. Therefore, the common data of the two sources are identical.
- Local government institutions have similar annual financial reports, and the Ministry of Finance uses them for compiling the report on the revenues and outlays of the local Government sector. There is no difference in the data of the two sources.

1.6.2.3. Final consumption expenditure of NPISHs

88. Final consumption expenditure of NPISHs includes two categories:

- 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 which means their non-market output
- expenditures by NPISHs on goods or services produced by market producers and redistributed through their intermediate non-profit activities to households for consumption

1.6.2.4. Gross fixed capital formation

89. The value of gross fixed capital formation comprises acquisitions and own-account productions of new and existing tangible and intangible fixed assets, performed improvements on existing fixed assets, and major improvements to land as positive entries, while disposals of fixed assets are recorded as negative counterparts.

90. The main sources to estimate annual GFCF are the annual Integrated economic survey, the Structural investment survey, the balance sheet data of corporations working with less than five employees, and depreciation data of entrepreneurs. Data on new dwelling constructions in physical volume terms (number and square meter) from permits of usage are available to estimate dwelling investments.

1.6.2.5. Changes in inventories

91. Changes in inventories are calculated as the difference between the closing stock of the actual year and the adjusted closing stock of the previous year. The data source for calculating changes in inventories is provided by tax declarations and by the quarterly integrated economic survey.

1.6.2.6. Acquisitions less disposals of valuables

92. There is no source information on this item, and there is no estimation process executed in order to measure it.

1.6.2.7. Exports and imports of goods and services

93. In 2002, the source of export data was the external merchandise trade statistics and the balance of payments statistics. The statistical recording of external merchandise trade is based on customs documentation. Until 30 April 2002, the Ministry of Economic Affairs and the Central Statistical Office were jointly responsible for the statistical processing of data collected within the framework of the customs procedures by the National Command of Customs and Excise Guard. Afterwards, the Central Statistical Office has the only responsibility for producing the external trade statistics. The balance of payments statistics are compiled by the National Bank of Hungary.

1.6.3. Independence from other approaches

94. The GDP from expenditure approach was compiled independently from the other two approaches in most cases.

95. The household final consumption expenditure was calculated from different data sources and methods (mainly the Household Budget Survey and Retail Trade Survey by commodities) than used in the other approaches. However, because of the conceptual and methodological rules of ESA95 there should be certain similarities in some cases. In the case of the own account agricultural production and the owner occupied dwellings services the gross output figures were recorded as household final consumption expenditures and the insurance data also came from the production side. The income in kind data was estimated by using the tax declaration of the enterprises and the same figure was accounted as wages and salaries in kind in the Allocation of primary income account. The total household consumption expenditure figure estimated by the "bottom-up" approach was compared to the household consumption expenditure figure coming from the Use of disposable income account of households.

96. For the government and NPISHs, the actual final consumption figures were derived from the gross output.

97. The gross fixed capital formation estimation was made independently from the other two approaches and was based on the annual investment report which is part of the annual integrated economic survey.

98. There were two different data sources to calculate changes in inventories. One of them was the database containing the data of tax declarations reported by financial and non-financial corporations, and entrepreneurs, while the other was the quarterly integrated economic survey aggregated for the current year. Changes in inventories were calculated as the difference between the closing stock of the actual year and the adjusted closing stock of the previous year. The same figures were applied to the production accounts.

99. For the national economy, exports and imports data were estimated independently, also. The three main data sources were the Intrastat survey, the custom data and the Balance of Payments.

1.6.4. Valuation

100. In most cases the relevant data sources give sufficient information to conform to ESA95 prices. In some cases this is not obvious and then the HCSO makes the necessary adjustments. In the expenditure approach the survey sources used are predominantly in line with ESA95 concepts. The necessary adjustments have to be made by the HCSO; these are described in the relevant chapters (e.g.: to move from “cost, insurance, freight [c.i.f.] to free-on-board” [f.o.b.] values in imports of goods).

1.6.5. Transition from private accounting and administrative concepts to ESA95 national accounts concepts

101. Adjustments, carried made to data of administrative or private accounting origin in order to meet the ESA 95 concepts, are explained in detail as part of the methodology concerning the expenditure components in question.

1.6.6. The roles of direct and indirect

102. The estimation method applied for **household final consumption** expenditure is based on annual or sub-annual direct statistical surveys and administrative sources. Because of the different reliability of the sources direct and indirect (benchmarking and extrapolation) estimation methods and modeling (imputed rent) are used for estimation (see 5.5 and 5.7).

103. **Estimations for the final consumption expenditure of NPISHs and government** are based on annual reports of government institutions and on the government budget, therefore, a direct method is used for calculation.

104. The calculation of the annual **Gross Fixed Capital Formation** data is mainly survey based. Units working with less than five employees are not surveyed. The GFCF estimation for the non-observed units is based on existing supplementary information. Dwelling investments are estimated using natural data and a detailed dwelling construction cost model. Apart from the investment survey, Data on annual investments in cultivated agricultural assets are measured by independent statistical surveys conducted by the Ministry of Agriculture and Rural Development.

Table 1.6 Estimation methods of capital formation by activities of capital formation

Activity	Estimation method
Acquisitions less disposals of tangible fixed assets	Mainly survey data, supplemented with estimation on the non-observed part based on book-keeping data, and that on data collections for agricultural industries and that on surveys of the Ministry of Agriculture and Rural Development. Construction cost model for dwelling constructions.
Acquisitions less disposals of intangible fixed assets	Survey data
Additions to the value of non-produced non-financial assets	Survey data, supplemented with estimation on the non-observed part based on records of the Ministry of Agriculture
Changes in inventories	Survey data and tax records

105. For the year 2002 calculation of **exports and imports of goods and services** administrative data sources (custom data) and balance of payments data are used, i.e. the calculation is based on direct estimation methods.

1.6.7. Roles of benchmarks and extrapolation

106. Direct methods are used for estimations for the reference year in most of the cases, e.g. for estimation of final consumption expenditure of NPISHs, final consumption expenditure of government, gross capital formation and exports and imports of goods and services. The benchmarking and extrapolation technique is used for around 50 per cent of estimations on household final consumption expenditure, using the supply and use tables for benchmarks, and the Household Budget Survey data for extrapolation. The details are described in chapter 5.7.

107. Benchmark data are applied for the indirect estimation of investments carried out by corporations and sole proprietors with 4 or less employees. These indirect estimates are based on the benchmark data of the Capital Stock survey, which was conducted in 2000 to measure the actual value of fixed assets. The methods are described in the relevant chapters in detail.

1.6.8. The main approaches taken with respect to exhaustiveness

108. As HSCO makes estimations for two approaches measuring GDP, the Office makes efforts to ensure exhaustiveness in the expenditure approach as well as in the production approach.

109. Several sources are in use to estimate **household final consumption expenditure**. The two main sources are the Household Budget Survey and the Retail Trade Survey. According to the PHARE2000 Project on Household Final Consumption the adjustments made by the NA Department on Household Budget Survey data are not considered as exhaustiveness adjustments. However, in some important areas other adjustments have to be made in order to achieve exhaustiveness.

110. One of these areas is that of alcoholic beverages and tobacco. For alcoholic beverages the supply and use tables were used (in physical terms). When the new supply and use tables were ready for 1998 and 1999 (at current prices) and were work in progress for 2000, it was possible to make a cross-checking for the estimation of consumption expenditure on alcoholic beverages and tobacco at current prices, too.

111. Giving tips is a widespread phenomenon in Hungary. The most important area is that of health services. For the time being estimation on tips (gratuity money) is based on the Household Budget Survey, completed by data from personal income tax returns. The first health satellite accounts were published in January 2003. Based on the satellite accounts data a detailed model was established for estimating the tips (gratitude money) on health services. This model uses the number of different kinds of treatments, the estimated amount of the given gratitude money by type of treatments and the possibility of giving gratitude money by treatments. The first results of this new type of estimation were used for the final calculation of year 2001 data and the revisions of data of 2000. Estimations for the other types of tips given on many different types of services were also made during the finalization of year 2001 and revision of year 2000 data. The calculations were made in the areas of catering, passenger transport and hair-dressing, using the result of a survey on tips conducted in 1997.

112. The estimation of production and turnover of drugs was based on a stable consumer demand. The starting point was to estimate the consumption of drugs by using the number of consumers, the quantity of drugs and the prices by types of drugs. The main data sources were medical and judicial data, as well as reports of the police, the tax office and the customs office. For the estimation of intermediate consumption mainly reports of the police were used.

113. In the case of prostitution the method is similar. First estimation was made for consumption by using the number of consumers, the number of cases and average prices. There are two additional data sources to the above-mentioned ones: data of the chamber of prostitutes on the one hand, and special studies on the other. For the estimation of intermediate consumption mainly reports of the police were used.

114. The calculation was made from 2000, and had an impact on the gross output, intermediate consumption, final consumption and export and import figures. (See Table 7.1)

115. In the case of **final consumption expenditure of NPISHs and government** no adjustments are made for exhaustiveness.

116. The units classified into NA sectors, which are engaged in production, are all considered to be the subject of **GFCF** estimation. The data collection system currently provides direct data on enterprises working with 5 or more employees, but the annual GFCF of non-observed units is also estimated, by applying supplementary information. The data collection covers all the required asset categories and transactions on them which are covered by GFCF. No estimation is made for the GFCE items which are negligible in the national economy and for which no information is available. For example, transactions on second-hand assets affecting the Households sector, and the value of investments by non-observed units in intangible fixed assets are not estimated at all.

117. For the figures of **exports and imports of goods and services** HCSO does not make any adjustment to ensure exhaustiveness, taking into account that data on exports and imports of goods come from customs declarations, which are considered as a full-scope data source, and data on exports and imports of services come from the balance of payments. Corrections for shuttle trade, smuggling and illegal activities have not been incorporated in the Hungarian National Accounts yet.

1.7. Balancing procedures

118. GDP estimation is made on production and expenditure side. In the early and mid 90s the results of the output approach were considered more reliable, that is why the expenditure components were adjusted in order to achieve the same GDP figures. Balancing procedure is recently made mainly on aggregate level. No detailed reconciliation procedure, such as annual IOT or SUT tables is used. The discrepancy between output and expenditure approach is explicitly shown on the expenditure side in annual publications.

1.7.1. The integration of SUT into the system of National Accounts

119. The theoretical concept and the definitions are the same for SUT/IOT and National accounts, but due to the different data sources, methodology and cross-checking possibilities data in SUT first differed from those calculated in the frame of regular National Accounts. The discrepancies are investigated, analysed and examined. On the basis of this examination a feedback is made to the system of NA and to basic statistics as well. Furthermore, the development of SUT compilation has not yet been finished, and in this work there is a close co-operation with improvements in other parts of the system of National Accounts. The new compilation process of SUT has a lot of new requirements from basic statistics in terms of availability, quality and timeliness of detailed data, so it stimulates quality improvements in basic sources.

120. Recently many developments have been made in the Hungarian System of National Accounts to improve compliance with ESA'95. In connection with this, experiences of the SUT compilation, problems in the balancing processes and their solutions all contribute to NA developments. Besides the change of base year (to 2000) several other methodological changes were introduced in the annual National Accounts for 2000-2001 to improve compliance with ESA'95.

121. Many of them were based on the SUT/IOT feedback or were tested in the SUT framework. For example:

- In the new system the gross output of restaurants includes food and beverages consumed, and not only "trade margins" on them.
- Several adjustments on the structure of households' consumption expenditure were based on the commodity flow approach.
- In the case of some special industries subcontractors' performance is accounted by gross method, as a part of intermediate consumption, and certainly as a part of gross output. This way of accounting does not affect GDP, but influences the structure of gross output and intermediate consumption.
- Major processing work on imported materials is accounted by gross method in contrast with the earlier practice (net method); this adjustment was calculated and tested in the SUT framework.

122. In ESA'95 SUT plays an important role as an integration framework. Integration can be achieved in two ways: completely or by series of revisions. In the first case there is only one simultaneous compilation process. In the second the integration means basing provisional NA calculations on the latest SUT available, and revising provisional NA with the SUT for the same year to get the definitive NA figures. The final goal of current improvements is the full integration of SUT into the system of National Accounts – by means of a consistency "bridge" between basic data sources and the calculation of GDP –, but it can only be achieved step by step.

123. GDP can be estimated by production, expenditure and income method. Theoretically each measurement should result the same estimation, but in practice the three approaches compiled independently can result three different estimates of GDP. In traditional National Accounts the reconciliation between the three approaches takes place at a global level, manually. When using SUT as an integration framework for the compilation of NA data the reconciliation among the three different approaches of GDP calculation is achieved at a detailed product level. The main difference between SUT and regular NA is the product dimension.

124. Integration is one of the strategic elements of recent improvements aiming to build a fully integrated, more standard, transparent and more reliable estimates of National Accounts figures.

1.8. Overview of the allowances for exhaustiveness

125. According to the classification of exhaustiveness adjustments, N1 and N6 cover the vast majority of adjustments in production approach. Most of the adjustments are made in the non-Financial corporations sector and the Households sector.

126. In case of small double-entry and single entry book-keeping corporations liable to corporate tax and enterprises registered to the simplified corporate tax, it can be assumed that there is a deliberate behaviour pattern to overestimate costs and underestimate revenues in order to avoid taxation, social contribution payments etc. Having some 10 years of experience in using tax returns for national accounts purposes a considerable knowledge accumulated in that field. Based on these experiences the data of all types of enterprises need to be adjusted to differing degrees.

127. In case of corporations with double-entry book-keeping researches underline the idea that small enterprises tend to sell goods and services without an invoice, so the incidence of under-reporting gross output is more characteristic than over-reporting intermediate consumption. Therefore, the gross output of small enterprises (with less than 10 employees) is adjusted (Exhaustiveness estimation for type 2 corporations). The calculation is made by expert's estimation.

128. In the case of corporations with single-entry book-keeping the picture seems to be different. This correction is needed because enterprises declare significantly higher costs than they actually have. The correction is based on a hypothesis according to which companies applying single-entry book-keeping can account – because of the more simplified regulations in accounting – some final consumption items as intermediate consumption with the intention of avoiding taxes. The calculation is made by expert's estimation, which is based on data of small-scale enterprises applying double-entry book-keeping (Exhaustiveness estimation for type 3 corporations).

129. We suppose that those enterprises which registered to simplified corporate tax also tend to avoid taxes. However, as the simplified corporate tax was introduced in 2002, we do not have enough information to make imputations.

130. Individual entrepreneurs are treated as a special category in Hungarian legislation. They have to submit personal income tax returns only, and are not covered by Act on Corporate Tax. Information can be obtained on the number of entrepreneurs from many different sources: business register, tax returns, labour force survey and other statistical surveys. The numbers are spread over a wide range. The number of individual entrepreneurs in the business register is well above that of tax returns. The reason for this is that in spite of the efforts made in updating the register there is a time lag concerning the cessation of unincorporated enterprises. Business surveys cover only enterprises with above 5 employees, therefore, a lot of individual entrepreneurs are out of the scope of surveys.

131. In national accounts unregistered domestic services provided by private persons such as cleaners, chairwomen, butlers, cooks, maids, drivers, gardeners, governesses, secretaries, tutors, au-pairs and baby-sitters are recorded in the NACE division K 74 (Other business activities) at present. These services constitute a part of the non-observed economy, official sources are of little or no use.

132. The phenomenon of unregistered educational services, as second activity of teachers, is popular and widespread in Hungary. Basic data for the estimations are derived from „Report on Hungarian public education”, published by the National Institute for Public Education every two or three years since 1996. This publication regularly reports the percentage of students participating in extra lessons after school and the proportion of paid extra lessons.

Wages in kind

133. The following items are equivalent to those estimated by the income side approach (Chapter 4) and are classified among exhaustiveness types.

Welfare services

134. Enterprises provide various social welfare services to their employees, either at reduced prices or free (for example kindergarten, subsidised meals). The subsidies on these services are valued as compensation of employees. Therefore, output is increased by total cost of social welfare services provided to employees minus the charges paid by employees.

135. These data are not directly available from corporate tax returns, but they are covered by the Labour Cost Survey. For enterprises which are observed by the Labour Cost Survey, data from that statistical survey are used. The data of other enterprises can be estimated on the basis of figures reported by observed enterprises, taking into account wages and salaries in kind declared in personal income tax returns submitted to the tax office.

Own products and services given to employees

136. In accordance with ESA95 requirements the value of own products and services given to employees are also accounted as part of gross output and wages and salaries in kind (for example free passes at transport companies or free beer in breweries).

137. These data are not directly available in from corporate tax returns, but they are covered by SBS. For enterprises which are observed by SBS, data from that statistical survey are used. The data of other enterprises can be estimated on the basis of figures reported by observed enterprises, taking into account wages and salaries in kind declared in personal income tax returns submitted to the tax office.

Purchased goods and services given to employees

138. In business accounting material costs and the costs of contracted services contain the value of those benefits in kind which are first purchased and then given by an enterprise to the employees. These items are subtracted from intermediate consumption and added to the compensation of employees.

139. These data are not directly available from corporate tax returns, but they are covered by SBS. For enterprises which are observed by SBS, data from that statistical survey are used. The data of other enterprises can be estimated on the basis of figures reported by observed enterprises, taking into account wages and salaries in kind declared in personal income tax returns submitted to the tax office.

Value of the use of passenger cars for personal purposes

140. Enterprises account outlays related to company cars within costs (material costs or costs of contracted services). However, these cars are used for personal purposes as well, which are regarded as benefits in kind according to ESA95 regulations. Consequently, the estimated costs of personal use are subtracted from intermediate consumption, and added to the compensation of employees. The estimation is made with the help of relevant personal income tax items.

141. Tips and gratitude money

Tips are calculated in the same way in NFC and HH sectors. The output has to be increased by the estimated value of tips. Results of a household survey conducted by HCSO in 1997 were the basic source to estimate the volume of tips. The adjustment is made in 4 branches:

- 5530 Restaurants
- 5540 Bars
- 6022 Taxi operation
- 9302 Hairdressing and other beauty treatment

Illegal activities

142. In 2006, the estimation of production, consumption and income deriving from illegal activities was introduced in the Hungarian National Accounts compliance with the ESA'95. (3.08). According to the proposal of Eurostat, estimations for three main scopes of illegal activities have to be compiled, namely: prostitution, drugs and smuggling. From these three scopes HCSO has made estimations for prostitutions and drugs, because these activities do not change often and significantly in short term and a lot of information is available for these items. Smuggling is a different thing. Although, it has constant elements, it is an activity that can immediately adapt to the change of market and legal regulations but these can not be measured by statistical means. It is more unlikely to find other basic information than in the case of the first two items. So till now, HCSO did not try to estimate this activity.

143. The estimation of production and turnover of drugs was based on a regular demand for data. The starting point was to estimate the consumption of drugs by using the number of consumers, the quantity of drugs and the prices by types of drugs. The main data sources were medical and judicial data, as well as reports of the police, the tax office and the customs office. For the estimation of intermediate consumption mainly reports of the police were used.

144. In the case of prostitution the method is similar. First an estimation was made for consumption by using the number of consumers, the number of cases and average prices. There are two additional data sources to the above mentioned ones: data of the chamber of prostitutes on the one hand and special studies on the other. For the estimation of intermediate consumption mainly reports of the police were used. The calculation was made from 2000 onwards, and had an impact on the gross output, intermediate consumption, final consumption and export and import figures.

For more details see Chapter 7, paragraph 41.

145. There is a widespread and tolerated illegal payment in the Hungarian health care system, called gratitude money, which goes from patients' pocket into doctors' pocket. Gratitude money donation is not covered by social security, but involves tax avoidance, thus this phenomenon is actually a part of the hidden economy.

146. Our calculations for the volume of gratitude money is based on a study of Social Research Institute (TÁRKI) published in 1999. This study summarizes the outcomes of a sample survey inquiring circa 1000 doctors and 1400 patients about the amount and frequency of both assumed and admitted gratitude money donation and about their opinion and attitude.

147. Results concerning year 1998 are revised annually using some health statistics. The number of treatment cases of outpatient services is obtained from the National Statistical Data Collection Programme, while statistics on inpatient services are reported by the National Health Insurance Fund, which data include the number of financed cases and the estimated weight numbers concerning about 740 health care events.

1.9. The transition from GDP to GNI

148. GNI calculations started in the HCSO in 1996. The definitions in ESA'95 are used to make the transition from gross domestic product to gross national income. Gross national income is obtained from GDP by deducting primary income paid to the rest of the world (compensation of employees, property income, production and import taxes paid to the EU) and adding primary income received from the rest of the world (compensation of employees, income on property and EU subsidies).

149. The main data source for the GNI transition items is the BOP compiled by the National Bank of Hungary (Magyar Nemzeti Bank, MNB).

150. It is the intention of authorities to change the main data source in the near future. A new data collection system is planned to be launched for the BOP statistics of MNB by 2008, in general terms replacing the ITRS system by direct reporting of respondents. As it is foreseen on the ground of the experience of the majority of EU member states where new BOP data collection system was introduced in the near past or will be done so in the near future, BOP current account items (except investment incomes) in the new system are to be provided mainly by national statistical institutes. Authorities will make efforts to explore other sources – meeting both national accounts and BOP needs – which can replace the current BOP data.

1.10. FISIM allocation with two types of reference rates

151. Financial Intermediation Services Indirectly Measured (FISIM) calculated according to Council Regulation No. 448/98 and split to user sectors/industries according to Commission Decision No. 1889/02 was first published by HCSO in national accounts data in October 2005. FISIM calculation this way meant that loan and deposit transactions denominated in local and in foreign currency between financial institutions were not distinguished, so we calculated a single internal and a single external reference rate.

152. Taking into account user needs, a recommendation was approved at an OECD National Accounts meeting that separate reference rates could be calculated for transactions denominated in local and in foreign currency in order to make FISIM calculation more advanced.

153. Internal and external reference rates were defined based on local currency and foreign currency transactions. We perceived that both current and constant price FISIM time series calculated from 2000 with the two types of reference rates were more suitable in national accounts than FISIM calculated by a single internal and a single external reference rate. Chain-linked volume data of FISIM calculated by the two types of reference rates also had a compensatory effect on GDP and on final consumption expenditure.

154. FISIM calculations with the two types of reference rates were based on loan, deposit and interest flow data broken down by local and foreign currencies, supplied by the National Bank of Hungary.

155. An “internal” HUF reference rate was defined based on HUF (local currency) loans and deposits and interest flows between resident financial institutions, and an “internal” DEV (foreign currency) reference rate was calculated based on DEV loans and deposits and interest flows between resident financial institutions. Two similar “external” reference rates were calculated for transactions between resident and non-resident financial intermediaries.

156. Considering that loans, deposits, and interest income and expenditure were available for the different sectors in HUF and DEV breakdown, FISIM on HUF loans and deposits and on DEV loans and deposits could be calculated. HUF and DEV FISIM were added up to equal FISIM used by different user sectors.

Table 1.7 Effect of the change of FISIM calculation on GDP (million HUF)

2000	2001	2002	2003	2004	2005
+ 31 131	+ 45 068	+ 69 905	+ 71 343	+ 118 038	+ 70 539

CHAPTER 2. THE REVISION POLICY

2.1. Revision policy

1. Current revisions of *annual accounts* and *quarterly accounts* are synchronised. Quarters in a year for which annual aggregates have already been published are only revised as part of a revision of the annual aggregates.

2. New data or improved methods can certainly become available for the period for which no further current revisions can be made after the definitive accounts have been compiled. The revisions to which this can give rise are only performed on an occasional or ad hoc basis. Occasional revisions can also be prompted by the application of new concepts (e.g. FISIM) or amended classifications.

3. Occasional revisions are not performed at any pre-determined frequency, nor are there any particular period to which these revisions have to relate. As a general rule, occasional revisions go as far back in time as possible, so as to preserve the consistency of the series.

4. The publication dates of revisions and revised estimates are adjusted to EU requirements, Hungarian user needs, and the dates of generation of more accurate basic data and more detailed new information. Accordingly, the first flash estimate is published t+45 days and is followed by a further three more detailed and accurate estimates. The new revision policy of Regional Accounts will come into effect in 2010 and that of the SUT-based final data in 2011. Currently SUT is published T+36 months.

1. Flash estimation based on the quarterly flash estimation (t+45 days)

5. Data at current prices are not available for estimations. Volume changes are estimated only.

The main indicators used for estimations:

- Volume indices of agricultural output and input
- Volume indices of industrial and construction output
- Volume change of retail sales
- Volume change of vehicle and automotive fuel sales
- Number of tourism nights by types of accommodation
- Volume change of catering
- Transport performances
- Number and volume of fixed line and mobile phone subscriptions, number of internet subscriptions
- Change in basic floor space of dwellings
- Data transmission from the National Health Insurance Fund Administration
- Institutional employment statistics

- Labour Force Survey (LFS)

2. First preliminary estimation based on quarterly data (t+70 days)

6. Data sources of production approach:

- Non-financial corporations sector:
Sub-annual business survey, quarterly (STS)
Deposit and loan data
Retail sales, monthly
First releases published in different statistical domains
- Financial corporations sector:
Quarterly reports of the Hungarian Financial Supervisory Authority (PSZÁF)
Data transmission from the National Bank of Hungary (MNB) for the allocation of FISIM across user sectors
- Government sector:
Budget reports of the Hungarian State Treasury
- Households sector:
Number of sole proprietors with licence
FISIM data on the Households sector
- Non-profit institutions sector:
estimations based on benchmark year or previous year

7. Data sources of expenditure approach:

- Household consumption:
Quarterly retail trade data (preliminary)
Quarterly HBS data (preliminary)
- Collective consumption:
Report of the Hungarian State Treasury
- Fixed capital formation:
Investment data from the quarterly business survey
- Stock formation:
Stock data from the quarterly business survey
- External trade:
Monthly external trade surveys

3. Second preliminary estimation based on preliminary annual data (t+9 months)

8. Data sources of production approach:

- Non-financial corporations sector:
Data transmissions from the tax office (APEH): profit and loss accounts, corporate tax returns, government accounting
Balance sheets of agricultural products
Questionnaire survey of agricultural services

Questionnaire on input for agricultural output

Annual business survey

Latest data from the business register

Data transmissions from the customs office and the MNB

Labour Cost Survey (previous year)

From the internet: information from the websites of major corporations and supervisory bodies

- Financial corporations sector:
 - Data transmissions from the tax office (APEH): corporate tax returns, government accounting
 - Labour Cost Survey (previous year)
 - Latest data from the business register
 - Annual report of the Hungarian Financial Supervisory Authority (PSZÁF)
 - Government sector:
 - preliminary budget reporting (realized)
 - Households sector:
 - Number of sole proprietors with licence (up-to-date data)
 - FISIM data of the Households sector (up-to-date data)
 - Sole proprietors:
 - Labour Force Survey (LFS)
 - Employment data (for previous year) of annual business survey
 - Personal income tax and simplified corporate tax data transmissions from the tax office; corporate tax returns for small enterprises
 - Non-profit institutions sector:
 - No new data
 - Net taxes on products:
 - Preliminary budget reporting (realized)
9. Data sources of expenditure approach:
- Household consumption:
 - Preliminary annual HBS
 - Preliminary retail trade data
 - Preliminary budget reporting (realized)
 - Bank and insurance reports, preliminary
 - Collective consumption:
 - Preliminary budget reporting (realized)
 - Gross capital formation:
 - Investment data from the quarterly business survey and preliminary annual investment statistics
 - Stock formation:
 - Stock data from the quarterly business survey
 - Corporate tax returns (preliminary)
 - External trade:
 - External trade surveys

4. Semi-final estimation (t+21 months)

10. Data sources of production approach:

- Non-financial corporations sector:
Supplementary set of administrative data sources
Revised set of statistical data sources, labour costs as of the reference year are available only then
Updated set of the business register
- Financial corporations sector:
Revised supplementary set of corporate tax return data
Incidentally amended data of the Hungarian Financial Supervisory Authority (PSZÁF)
Labour costs as of the reference year are available only then
Updated set of the business register
- Government sector:
Budget reporting (realized, including local governments)
Social security report
- Households sector:
Sole proprietors: new information compared to the preliminary one: revisions of personal income tax and simplified corporate tax data transmitted from the tax office; revisions of corporate tax return data for small enterprises; employment data (for the given year) of the annual business survey
- Non-profit institutions sector:
Non-profit survey results
Church survey results
- Net taxes on products:
Budget reporting (realized)
Report of the tax office (APEH)

11. Data sources of expenditure approach:

- Household consumption:
Revised set of HBS data
Revised set of retail trade data
Revised and supplemented set of corporate data
Final budget reporting (realized)
Bank and insurance reports
Non-profit survey data
- Collective consumption:
Final budget reporting (realized)
Non-profit survey data
- Gross capital formation:
Revised set of annual investment statistics and revised data of corporate tax returns
- Stock formation:
Revisions of quarterly stock survey and corporate tax return data

- External trade:
Revised set of external trade surveys

5. Last regular revision based on SUT (t+ 36 months)

12. Harmonisation with SUT prepared in the meantime.

2.2. Timetable for revising and finalizing the accounts

13. Summary of the national accounts calculation:

- 1) t+45 days (only production and expenditure of GDP)
- 2) t+70 days (only production and expenditure of GDP)
- 3) t+9 months
- 4) t+21 months
- 5) t+33 months

CHAPTER 3. THE PRODUCTION APPROACH

3.0. GDP according to the production approach

1. In Hungary, the production approach is considered to be the main estimation method for assembling GDP; it is based on the reliability analysis of data sources. The discrepancy between production and expenditure approach is shown explicitly in the annual publications (it is usually between 0.0-3.6% of GDP without great fluctuations from one year to another) as part of the changes in inventories. The balancing procedure is made on an aggregated level. At the moment there is no detailed reconciliation procedure, using for example, annual input-output tables or supply and use tables. We are aware of the recommendations of the GNI Committee about the integration of SUTs into the national accounts. The work on the integration process has already begun in the framework of a project of development based on the Norwegian SNA-NT software, but the full integration probably takes several years, according to the international experience. (See Chapter 6) Enterprises are institutional and statistical units in the NA. Breakdown of output and GVA by kind of activity therefore refer to the institutional units.

2. The data used and processed in the Hungarian National Accounts, including the compilation of production account, is linked to the institutional sectors rather than activities/branches. The importance of the different branches and institutional sectors of the Hungarian economy is shown in the following table.¹

Table 3.1 Gross domestic product by sections and by sectors, 2002 (million HUF)

NACE code	S11	S12	S13	S14	S15	S1
A	268 424	0	11 387	406 866	0	686 677
B	3 098	0	0	145	0	3 243
C	34 305	0	0	192	0	34 497
D	3 030 693	0	524	149 132	0	3 180 349
E	433 823	0	0	0	0	433 823
F	495 532	0	3 532	275 285	0	774 349
G	1 305 035	0	34	410 181	0	1 715 250
H	133 584	0	20 790	105 579	0	259 953
I	1 041 534	0	24 305	118 619	0	1 184 458
J	0	490 996	0	68 107	0	559 103
K	1 162 544	0	95 687	1 330 835	0	2 589 066
L	0	0	1 326 663	0	0	1 326 663
M	30 402	0	647 047	65 537	36 002	778 988
N	63 373	0	456 529	125 667	20 490	666 059
O	216 990	0	90 792	241 958	99 071	648 811
P	0	0	0	0	0	
Q	0	0	0	0	0	
Total	8 219 337	490 996	2 677 290	3 298 103	155 563	14 841 289
GDP						17 148 449

¹ According to all tables in the chapter, activities in section "P" are regarded as insignificant, and mainly estimated in industry "K".

3. The main aggregates are calculated in accordance with the regulation of ESA95. The output (P.1) consists of the goods and services created during the accounting period. The intermediate consumption (P.2) includes products and services, which are directly and effectively used in the production process. However, goods and services produced and consumed within the same accounting period and within the same unit are not recorded as part of the output or intermediate consumption.

3.1. The reference framework

3.1.1. Registers

3.1.1.1. The characteristics of Business Register

4. The Business Register (BR) is one of the main basic database systems of HCSO. It contains data on domestic enterprises, which are required for statistics. There is not any entry requirement (activity, revenue or labour force) for the BR. The main functions of the BR are the following:

- recording and updating the data of economic units;
- supporting the collection and process of statistical data;
- preparing a sampling frame for statistical surveys of the HCSO;
- providing statistical information about economic units for external users and
- basis for selling data.

5. The BR, which covers the whole country, is a central ORACLE database with historical data storage. Registration number of an enterprise, which is not changed during the whole life time of the economic unit, is operating as an identifier. The enterprise registration number corresponds to the identification number of the taxpayer used by the Tax Office. Access to the BR is protected by password. There is a continuous data connection between the BR and the one-window registration system.

6. The BR has been operating in an ORACLE database since 1998. It is in line with the relevant EU regulation due to the developments introduced in the years past. The methodological changes of the currently applied system were carried out by the support of internal resources. Since 1998 its application has been extended, a system for the kind of activity units and a register for local government units have been set up, and various enterprise groups have being surveyed. The BR can be considered as a modern and well-operating system compared to international standards.

3.1.1.2. Statistical sources of the Business Register

7. Enterprise registration numbers as common identifiers make possible to link together the **administrative** registers of many different state administration organs. In the frame of cooperation with administrative co-organisations, the BR – through an on-line, one-window system – continuously receives data modifications from registry court and registration offices performing the official registration of enterprises. The BR is updated weekly by regular datasets of the Tax Office (APEH), and monthly datasets arrive from the Hungarian State Treasury that keeps the records of budgetary organs.

8. In the frame of the “one-window” system 100 000 new organizations are recorded in the BR every year, while the average number of winding-ups come to 80 000. Annually, together with the Tax Office data transmission, 400 000 changes are recorded.

9. In case of organisations covered by statistical data collections, the BR is also updated by results of the survey. The statistical sources primarily modify the stratification and activity codes of the statistical data collection based on the register. At present there are several data collections on basic registration data to regularly update the register. All new enterprises, which are obliged to be registered at the registry court, provide information to the BR on the basic information questionnaire No. 1032 of NSDCP (National Statistical Data Collection Programme, or OSAP in Hungarian). Enterprises registered by Tax Office (APEH) report on the basic information supplementary APEH sheet (with technical No. 1710 of NSDCP). It is the interim register-updating questionnaire No. 1764 of NSDCP that corrects register data. Answers to several economic statistical questionnaires, especially register data sheets as well as staff and sales data on integrated economic statistical surveys constitute the sources of register variables. Data of local government units are updated on yearly basis.

3.1.1.3. Coverage of the Business Register

10. The BR covers all units with tax number to provide information for identification and contact purposes, as well as determine the scope of data suppliers, such as data on principal and secondary activities, number of employees, date of formation, number of local units and kind of activity units. In the BR distinction is made between administrative and statistical main activities.

11. The Administrative main activity is the second component of the statistical code (9th-12th digits). It is indicated by enterprise classification according to the relevant Standard Industrial Classification of All Economic Activities (TEÁOR). It is continuously updated (may change several times over a year) and harmonized with the enterprise reports. The data come from administrative sources (such as the registry court, the registration office, the Tax Office/APEH, the Hungarian State Treasury and exceptionally from the HCSO).

12. The Statistical main activity is a variable established for statistical purposes only; it is based on the sales data of organisations and is determined by HCSO for enterprises. In certain cases it differs from the administrative main activity reported by organisations. HCSO uses statistical main activities to specify coverage for statistical data collections and determine publishing purposes. It is updated once a year. Differences are only allowed in exceptional cases (e.g. change of profile, correction of improper classifications). Applied algorithms and data collections are updated each year. If the administrative main activity might be changed, the statistical main activity will be also corrected at the beginning of the subsequent year according to the change of the administrative main activity. Its sources are: statistical data collections and changes in the administrative main activities.

Table 3.2 Number of organisations in the Business Register, 2002

Industry	Number of organisations
A	58 711
B	319
C	671
D	103 598
E	839
F	94 741
G	263 502
H	86 330
I	55 500
J	31 241
K	426 145
L	5 915
M	39 560
N	31 112
O	143 826
P	167
Q	736
Total	1 342 913

13. In terms of the law, HCSO may optionally record the secondary and other activities of economic units in the BR since 2008. If the interim register-updating questionnaire or the integrated economic statistical surveys provide relevant data, they are recorded in the system – as it was the case in 2002.

14. The data on local units of enterprises have been continuously updated since 2001. All of the economic units with more than 20 employees – more than 10 employees in case of construction companies – are asked about their local units in frame of a statistical questionnaire every year. In addition the BR takes data on local units from the Hungarian Outlet Register, as well.

15. Kind of activity units are formed only by the largest enterprises, HCSO breaks down these by homogeneous activities at county level.

16. In 2006, the sector classification of the national accounts was introduced in the BR with reference date of 31 December 2005.

3.1.1.4. Register of Non-profit Organizations

17. The statistics of non-profit institutions is based on the Register of Non-Profit Institutions (RNPI), which is operated by the Social Statistics Section. The RNPI contains data from the following sources: register of the National Council of Justice of Hungary (NCJH), BR and annual HCSO surveys.

18. The register of NCJH contains social – including non-profit – organizations that are registered as legal entity and officially have not been ceased yet. The BR also contains non-profit organizations with tax number. These units take part in data collection, especially in labour force surveys (LFS).

19. By applying the RNPI, HCSO can provide accurate information about the social role and the most important economic indicators of every non profit organization. The RNPI includes data on operating or wounded-up non-profit units with court registration number. In addition to the BR

characteristics, it uses a more detailed classification system based on international method. The RNPI is not only used for organizing data collection, but also for providing information to external users.

3.1.1.5. Realization of the measurement of the data quality, and making quality report

20. HCSO aimed to improve data quality for the BR. The most important step of development is the compilation of the so-called quality report. In order to improve data quality HCSO is planning to:

- Compile a quality survey and make a quality report;
- develop data transmission between HCSO and Tax Office;
- develop data transmission between HCSO and Social Insurance System.

3.1.1.6. Non-financial corporations sector (S11)

21. In 2002, the Non-financial corporations sector gave the 56.5 percent of the total GVA at basic prices. As shown in the previous chapter by legal form code and activity code of the BR, the following enterprises belong to the Non-financial corporations sector:

Activity code:	All branches, except J and L	
Legal form:	113	Limited liability companies
	114	Joint stock companies
	12	Co-operatives
	13	Other corporations with legal entity
	2	Corporations and partnerships without legal entity
	71	State-owned business organisation
	72, 73	Other companies (e.g. terminated legal form)

22. For public corporations the 50 percent criterion is used for sector classification. The classification of non-profit institutions depends on type of their services and their main financial sources, and the 50 percent rule also prevails.

JAVA database system

23. Besides the Business Register, the compilation of the accounts of the Non-financial corporations sector is mainly based on an own-developed enterprise database system called JAVA. This database system is essentially based on corporate profit tax returns, but it integrates data coming from other data sources (e.g. statistical surveys, budgetary data and other tax declarations) in a specific way (it will be detailed in the followings). The development of the JAVA database system has started in the early nineties. Since then several technical and content changes have been incorporated.

24. The JAVA database contains individual data for compiling production accounts for the Non-financial corporations sector. These data are mainly based on taxation data. The database serves different purposes, but it is especially used in national accounts: it includes indicators for the compilation of production and income accounts. Since 1992, the database continuously follows the changes in the available data sources.

25. Individual data of the JAVA database is checked by the BR for the sake of controlling the completeness. Information of the BR is also used for determining the sector classification of the enterprises. For further details of JAVA database system see Chapter 11.

3.1.2. Financial corporations sector (S14)

26. In 2002, the gross value added of the Financial corporations sector represented 3 percent in the total value added of all industries. The sector includes the Central Bank, Other monetary institutions, Other financial intermediaries, Insurance companies and pension funds and Activities auxiliary to financial intermediation. The main data sources are tax declarations as well as data collected by the Hungarian Financial Supervisory Authority for other monetary institutions, insurance companies and pension funds. The tax declarations contain supplementary information, which is not included in the annual reports. These include, e.g., distribution of costs according to type of costs, a more detailed breakdown of income distribution items, liabilities to General government and data referring to government subsidies.

27. Other data sources are balance sheets and profit and loss accounts of the National Bank of Hungary, Credit Institutions, Savings Cooperatives and Credit Cooperatives, Building Societies, Insurance Corporations and Associations, pension and guarantee funds. From HCSO data collections the structural business statistics, the labour statistics and the labour cost survey are the most important items. In addition, we also use data from reports of central government units and local governments.

3.1.3. Government sector (S13)

28. In 2002, the General government sector gave 19% of the total GVA at basic prices. The General government sector (S.13) covers 3 types of entities:

- the whole General government sector in legal terms;
- public corporations classified in GG sector (7 corporations in 2002);
- public non-profit institutions classified in the GG sector (178 institutions in 2002);
- General government sector in legal terms consists of the following classes:

Central government;

Extra-budgetary funds;

Local government;

Social security funds.

Table 3.3 The structure of the ESA 95 GG sector

Structure of General government sector	
ESA 95 class	Entities classified in the class
Central Government	Central government in legal terms Extra-budgetary funds Public corporations classified in CG sub-sector Non-profit institutions classified in CG sub-sector
Local Government	Local Government in legal terms
SS funds	SS funds in legal terms

29. Every general government unit in legal terms is a non-market producer and classified in the GG sector in NA. However, budgetary institutions belonging to central or local government can be market producers. As they are not independent producers, they are considered as local KAUs of the central, local government and the SS funds. They remain classified in the sector, but their output is calculated on the basis of the sales revenue. The fulfilment of the 50% criterion is applied year by year for the market/ non-market distinction of the institutions.

30. The data source for General Government units in legal terms is the annual financial report of the institutions. This report is designed for administrative purposes (public accounts compiled by the Ministry of Finance are also based on this data source); so the coverage is complete. The annual financial reports are collected by the Treasury and are passed over HCSO. Data are processed on individual level and aggregated to class level by HCSO.

31. Public corporations and public non-profit institutions are classified in GG on the basis of the 50% criterion. The 50% criterion is applied year by year, but a reclassification is made when criterion is lasting for at least three years. For the reclassification of the non-profit institutions a threshold is applied (total expenditure of HUF 5 million) for avoiding classifying a number of small units in the GG sector and making the delimitation of the sector volatile.

32. The data sources for the corporations reclassified are the same as the ones applied for compilation of Non-financial corporations sector accounts: corporate profit tax return and SBS.

33. For non-profit institutions the data source is the statistical survey of HCSO.

34. Concerning the allocation of units among industries, the main rules are the following:

- Units reclassified in the sector (public corporations and public non-profit institutions) are classified by activity at unit level (each entity belongs to one industry);
- The general government units in legal terms *may* belong to one or more industries: it depends on the range of activity they perform. The classification by activity is based on the annual financial report information. This report contains the cross classification of expenditures and revenues by economic type and activity. The activity-type classification is called “classification by tasks”. This nomenclature is very detailed: it classifies the “tasks” of institutions on 6 digit level. In most cases this nomenclature is in line with the NACE nomenclature; in some exceptional cases a transformation is needed.

35. Summarized, the output data are compiled in 4 steps:

Step 1: relevant expenditure and revenue data of individual budgetary institutions are regrouped into NACE (4 digit level) categories, and they are also transformed to ESA transaction categories.

Step 2: individual data are aggregated to sub-sector level (in legal terms): the sub-sector data by activity are compiled.

Step 3: data of the reclassified units are added to the relevant class (S.1311) and to the relevant industries: ESA95 sector-sectors classified by activity are compiled.

Step 4: sector-sector data are aggregated to sector level: the S.13 sector by activity is compiled.

3.1.4. Households sector (S14)

36. In 2002, the Households sector gave 20.0% of total GVA at basic prices. The Households sector, in line with ESA95, covers the households both as consumers and producers, too.

37. According to the production approach the Households sector includes:

a) Production of sole proprietors with licence and other permission

Personal income tax declaration is one of the data sources used for calculating the production of sole proprietors. In the Households sector about 400 thousand sole proprietors fill out a supplementary questionnaire attached to the personal income tax declaration. So the sales and costs of the enterprises are recorded. HCSO receives the individual data of these supplementary questionnaires from the Tax and Financial Control Administration. For the estimation of output and intermediate consumption of this subgroup additional information is gained from the corporate profit tax declarations of small-scale corporations (with number of employees less than 10 persons) and from the report of Ministry of Finance on the expected income of sole proprietors by counties and professions in 2001.

b) Production of private individuals with tax number and unregistered production activities of households:

These are:

- agricultural production of small producers for market sale and for own final use: data sources are surveys carried out by the Agricultural Statistics Department of HCSO (see Chapter 3.7);
- own-account construction and renovation of dwellings: covers investment performed by households themselves and for own final use. Data sources are surveys carried out by the Dwellings Statistics Section of HCSO;
- owner-occupied dwellings services: the owner-occupied dwellings services are estimated by using the user-cost approach as described in Chapter 3.17;
- privately rented dwellings, letting rooms to tourists, letting garages and other premises: the privately rented dwellings estimation is made by using surveys of the Dwelling Statistics Department of HCSO, as described in Chapter 3.17. The estimation of letting rooms is based on using local government data on private accommodations and personal income tax declarations;
- part-time private teaching: the estimation is based on a model. This model uses data from the Report on Hungarian Public Education and average fees of private teachers, as described in Chapter 3.19;
- gratitude money for health care: the estimation is based on a model, which uses data from administrative sources, namely data from the National Health Insurance Fund and the Ministry of Health for number of patients by different treatments and from the research on the amount of gratitude money by different treatments;
- services as unregistered activities of artists and other entrepreneurs;
- domestic services for households: main data source is the Household Budget Survey using an indirect method as described in Chapter 3.17.

3.1.5. Non-profit institutions serving households (NPISH)

38. In 2002, the Non-profit institutions serving households sector gave 1% ((1.046%) of the total GVA at basic prices. The data sources are the following:

- statistical survey on non-profit organisation (OSAP 1158);
- statistical survey on churches (OSAP 1658);
- financial statement of political parties published in the Hungarian Official Journal.

39. As for 2002, the statistical survey on the non-profit institutions was an annual sample survey. Since 2001 the non-profit organisations have been full coverage observed in every third year (in 2000 and in 2003 the coverage was complete). In 2002, the coverage of the survey on churches was complete. (Since 2004 only the largest 14 churches have been surveyed.)

40. The non-profit organisations are classified in four different sectors of the economy:

Non-financial corporations sector;

Financial corporations sector;

NPISHs sector;

General government sector.

41. The classification of the institutions is based on a three-step procedure:

- the financial corporations are selected on the basis of their activity;
- the non-financial corporations are classified on the basis of the 50% criterion;
- the non-market units are classified in the GG sector, if they are public and the general government is financing more than 50% of their total revenue;

and finally

- the private non-market non-profit institutions and public ones financed mostly by sectors other than GG are classified into the NPISHs sector.

3.2. Valuation

42. For non-financial corporations and sole proprietors with licence and other permission the valuation according to ESA95 rules is done by converting the micro-economic/administrative data (net sales, own performance capitalised, costs of raw materials and consumables, costs of contracted services, costs of other service activities) to the corresponding ESA95 aggregates (output [P.1], intermediate consumption [P.2]). For further details, see Chapters 3.3.1 and 3.3.4.

3.2.1. Valuation of output [P.1]

43. Output is measured in general as net sales, plus changes in inventories of own-produced products and own account GFCF [P.51]. The intermediate consumption includes the consumption of goods and services as inputs by production processes. GO and GVA [B.1g] by branches is valued at basic prices, i.e. excluding taxes on products and including subsidies on products. For the calculation

of the output, adjustments are made with own social welfare services and other own products provided to employees free of charge or at reduced prices, as well as with the mineral exploration costs and with prize monies.

3.2.2. Valuation of intermediate consumption [P.2]

44. For the calculation of the intermediate consumption, adjustments are made for the use of non-life insurance services (allocation as a ratio of the premiums paid), for the goods purchased and services given to employees, for the value of the passenger cars used for personal purposes and for the cost reimbursement paid to employees.

45. Payments for life insurance are excluded from the IC calculation; they are included in the compensation of employees by the Hungarian business accounting rules.

46. The borderline between IC and GFCF is clearly defined. The Hungarian Accounting law defines a borderline (GFCF assets are used at least one year and the value of them were more than 50 000 HUF – about 200 EURO) and in national accounts this rule is used, as well. The methodological improvement on increase of limit value is in progress.

47. Major improvements/ repairs of fixed assets and purchases of software, as well are included in GFCF, not in the IC.

48. IC is valued at purchaser's prices.

49. When calculating intermediate consumption, recorded costs are considered, according to the bookkeeping rules. When goods are consumed shortly after purchasing, then, at the time of use, there is no significant difference between the recorded cost and the purchasers' price. A significant difference may result from the long storage of intermediate products before they are used in production. The extent of difference depends on valuation methods of inventories applied by enterprises (in Hungary the FIFO method is generally used). Introducing the recording of holding gains will fulfil the requirement of ESA.

3.2.3. Other valuation issues

50. Business accounting allows various types of methods for recording changes in inventories [AN.12]. FIFO is the most commonly used method by the Hungarian firms. Neither the own-produced stocks, nor the purchased stocks have yet been adjusted for holding gains. There is an ongoing work for the development of this methodology.

51. Production of private individuals with tax number and unregistered production activities of households (which are recorded under Households sector) are valued according to ESA95 rules. The relevant legal acts are described in chapters 3.7-3.22.

52. In case of financial intermediation all interest data were on accrual basis. No holding gains were recorded in the accounts of 2002.

53. In case of valuation of work-in-progress no operating surplus is estimated, values registered by enterprises (at cost level) are used for valuation, in line with accounting rules.

54. "Own-account production" of households in agriculture is valued at basic prices of similar products sold on the market (based on the lowest sales price), which is in accordance with ESA rules.

55. Value of own account construction of dwellings is also estimated in line with ESA (output is calculated not only by the sum of costs, but mixed income is also estimated).

56. Valuation of services provided by owner-occupied dwellings is based on the user cost method described in Commission Regulation (EC) No. 1722/2005.

57. Valuation of own-account production of GFCF in the Non-financial corporations sector is done at cost level in accordance with book-keeping rules, but its weight is not relevant.

58. Annual reports of government institutions are compiled on cash basis. In order to obtain accrual data necessary adjustments should be made based on the information from the annual reports. Concerning the Gross output, adjustments are done for IC, compensation of employees and revenues.

59. Concerning compensation of employees, data on wages, salaries, and social contributions paid in January of year t referring to year (t-1) are available. We have also information on wages, salaries and social contributions paid in January (t+1) referring to year t. The difference between these two figures of January is the adjustment from cash to accrual accounting.

60. Concerning revenues, the adjustment is based on information of balance sheet: change in the stock of receivables from the operational revenues of institutions.

**Table 3.4 Adjustments from cash to accrual basis for the general government in 2002
(million HUF)**

	Cash data	Adjustment	Accrual data
Intermediate consumption	1 096 444	-3 721	1 092 723
Wages and salaries	1 495 684	38 494	1 534 178
Social contributions	549 928	11 775	561 703

61. Valuation of consumption of fixed capital is described under Chapter 3.3.3.

3.2.4. Market and non-market output

62. In the Hungarian system of national accounts, the market and non-market output is calculated according to the instructions of ESA95. Three types of output are distinguished in line with paragraph 3.16 of 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 the institutional units. There are:

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

63. According to the classification of producers the output is calculated by applying two valuation principles:

- a) output valued at basic prices - for the total output of market producers and producers for own final use
- b) output calculated from the costs side – for the total output of other non-market producers

64. Classification of the institutional units is carried out according to paragraph 3.27 and Table 3.1 of the ESA regulation. The data of market and non-market output for the Hungarian economy can be seen in the following table.

Table 3.5 Market and non-market output of the Hungarian economy, 2002 (million HUF)

NACE code	National economy, total			
	P.11 Market output	P.12 Output for own final use	P.13 Other non- market output	P1 Output, total
A	1 633 544	173 200	24 869	1 831 613
B	8 072	208	0	8 280
C	85 805	1 472	0	87 277
D	13 391 610	64 745	1 615	13 457 970
E	1 165 951	37 242	0	1 203 193
F	1 811 018	166 184	9 391	1 986 593
G	3 670 651	7 463	591	3 678 705
H	532 801	349	75 134	608 284
I	2 163 096	32 218	40 133	2 235 447
J	1 094 993	1 162	0	1 096 155
K	3 042 048	970 311	183 477	4 195 836
L	0	2 895	1 750 292	1 753 187
M	164 617	410	841 934	1 006 961
N	293 581	656	768 341	1 062 578
O	901 513	3 384	400 047	1 304 944
Total	29 959 300	1 461 899	4 095 824	35 517 023

65. Concerning public **corporations**, the 50% criterion defined in paragraph 3.32 of the ESA95 is applied. The share of production costs covered by sales is checked regularly. Public corporations belong to the market producers of the Corporations sector or to the other non-market producers of the General government sector.

66. **The non-profit institutions** could be market producers and other non-market producers. Those non-profit institutions, whose sales cover more than the 50% of production costs, belong to the Corporation sector. They give the 3% of all non-profit institutions. Public non-profit institutions belong to the General government sector, while the private ones to the NPISH sector.

67. In 2002 the market and non market output data for corporations was the following:

Table 3.6 Market and non-market output for the Non-financial corporations sector and the Financial corporations sector (S11 and S12), 2002 (million HUF)

NACE code	P.11 Market output	P.12 Output for own final Use	P.13 Other non-market output	P1 Output, total
A	937 478	46 645	0	984 123
B	7 819	208	0	8 027
C	85 463	1 472	0	86 935
D	13 127 363	64 745	0	13 192 108
E	1 165 951	37 242	0	1 203 193
F	1 507 436	9 621	0	1 517 057
G	2 980 053	7 463	0	2 987 516
H	348 426	349	0	348 775
I	1 941 371	32 218	0	1 973 589
J	979 099	1 162	0	980 261
K	2 270 592	5 511	0	2 276 103
M	65 588	67	0	65 655
N	131 729	77	0	131 806
O	538 661	3 318	0	541 979
Total	26 087 029	210 098	0	26 297 127

68. **Government institutions** classified in the General government sector are basically non-market producers. But according to some of their secondary activities they can be market producers, on the basis of the 50% criterion of ESA95.

69. Every government institution is checked, and those, by which the sales cover more than 50 percent of production cost (in the current year), are filtered out. In next step the revenue ratios are checked in the previous three years. Only those government institutions stay under market producers, which fulfill the criteria for the whole period of the survey.

70. Last filtering step is to examine figures for secondary activities of the remaining government institutions. Sub-activities with a revenue ratio of less than 50 percent and sub-activities of division 75 (public administration and defence; compulsory social security) are excluded from the analysis. According to paragraph 3.65 of ESA95, public administration, defence services and compulsory social security services are always provided as other non-market services and should thus be valued accordingly.

71. The revenue of the filtered secondary activities of government institutions is equal to the value of market output. To obtain the other non-market output for the whole sector the following formula is used:

Other non-market output = output - market output - output for own final use

72. The amount of the output is derived from a cost based calculation. For output for own final use, "form 38" of government institutional reports provides data at government institutional level. The following table shows the market and non-market output of the General government sector in 2002:

**Table 3.7 Market and non-market output of the General government sector, 2002
(million HUF)**

NACE code	P.11 Market output	P.12 Output for own final use	P.13 Other non-market output	P1 Output, total
A	0	16	24 869	24 885
D	0	0	1 615	1 615
F	0	0	9 391	9 391
G	0	0	591	591
H	1151	0	75 134	76 285
I	11 786	0	40 133	51 919
K	5 766	40	183 477	189 283
L	0	2 895	1 750 292	1 753 187
M	1591	343	780 747	782 681
N	2 730	579	725 724	729 033
O	2 254	66	173 362	175 682
Total	25 278	3 939	3 765 335	3 794 552

73. In the **Households sector** the distribution of output for own final use is significant due to the agricultural production for own final consumption, the own account construction by households for own GFCF and the services of owner-occupied dwellings. The following table shows the market and non-market output of the Households sector in 2002:

Table 3.8 Market and non-market output for the Households sector, 2002 (million HUF)

NACE code	P.11 Market output	P.12 Output for own final use	P1 Output, total
A	696 066	126 539	822 605
B	253	0	253
C	342	0	342
D	264 247	0	264 247
F	303 582	156 563	460 145
G	690 598	0	690 598
H	183 224	0	183 224
I	209 939	0	209 939
J	115 894	0	115 894
K	765 690	964 760	1 730 450
M	97 438	0	97 438
N	159 122	0	159 122
O	360 598	0	360 598
Total	3 846 993	1 247 862	5 094 855

3.3. Transition from private accounting and administrative concepts to ESA95 national accounting concepts

74. This section contains description on the conceptual adjustments made to source data (from surveys, from accounting data or other data sources) according to the ESA95 concept.

3.3.1. Non-financial corporations sector (S11)

75. In case of the Non-financial corporations sector mainly corporate profit tax returns and Structural Business Surveys (SBS) contain the figures, which are used for compiling national accounts aggregates. Figures of these declarations include data derived directly from business accounting. After the necessary adjustments these are used for calculating output, intermediate consumption, value added, as well as compensation of employees.

76. The information required for making these adjustments is available from corporate tax returns, personal income tax declarations, liability and subsidy declaration forms, SBS, and exogenous data for sector S13 (taxes and subsidies on products) and S12 (insurance premiums). Each type of adjustment is explained in the following section. The amount of adjustments is showed in the next table.

77. Compilation of production accounts for the majority of enterprises is falling under the so called common calculation method: after supervision, correction and substitution of the basic data loaded to the JAVA database (for each type of enterprises there is a computer-algorithm), the indicators are calculated according to the so-called schemes. But there are some units, whose ESA aggregates are calculated by special methods:

- units terminated or transformed in the current year,
- “missing” enterprises,
- non-profit institutions classified into the Non-financial corporations sector.

78. The next table indicates the sum of administrative data, estimations, imputations according to the private accounting and administrative concepts, and adjustments made to achieve the ESA95 national accounting concepts. (The same table is shown in sections 3.7-3.23.)

Table 3.9 Calculation of gross value added in the Non-financial corporations sector (S11), 2002(millions HUF)

Total economy without agriculture and forestry (A)

Table 3.9	Net sales	Owned production capitalised	Production	Material costs	Costs of contracted services	Costs of other services	Goods purchased for resale	Value of services purchased for resale	Material type costs	Difference
S11										
Type 2	38 799 224	191 258	38 990 482	9 443 164	4 422 386	438 416	13 826 808	2 874 045	31 004 819	7 985 663
Type 3	874 875	0	874 875	266 125	122 471	13 381	258 537	0	660 515	214 360
Type 4	0	0	155 346	2 287	83 772	1 041	0	0	87 100	68 246
Type 5	83 145	303	83 447	16 540	10 682	1 572	27 120	14 993	70 906	12 541
Type 6	413 390	1 869	415 259	140 969	75 898	5 448	70 510	78 680	371 505	43 753
Type 7	103 915	54	103 969						35 782	68 187
Total			40 623 378						32 230 628	8 392 750
			Output P1						Intermediate consumption P2	Gross value added B1g
a) goods purchased for resale			-14 182 974						-14 182 974	0
b) value of services purchased for resale			-2 663 848						-2 663 848	0
c) items modifying basic prices			-844 570							-844 570
d) own social welfare services provided for employees			22 991							22 991
e) own product given to employees			1 112							1 112
f) exploration cost of natural assets			11 074							11 074
g) prize money			-46 097							
h) rents on land									-2 750	2 750
i) insurance premium correction									-60 508	60 508
j) cost reimbursement paid to employees									5 961	-5 961
k) purchased goods and services given to employees									-4 282	4 282
l) value of the use of car for personal purposes									-33 152	33 152
m) assets of small value									89 498	-89 498
n) exhaustiveness estimation for type 2 corporations			209 110							209 110
o) exhaustiveness estimation for type 3 corporations									-140 861	140 861
p) tips			11 072							11 072
q) grossing up for processing work			767 638						767 638	0
r) foods and beverages			39 219						39 219	0
s) gas supply			275 700						275 700	0
t) ad hoc (for example data cleaning)			-314 021						-306 014	-8 007
Adjustments total			-16 713 593						-16 216 373	-497 220

Calculation of gross value added in the Non-financial corporations sector (S11), 2002 (cont.) (millions HUF)

Total economy without agriculture and forestry (A)

	Output P1		Intermediate consumption P2	Gross value added B1g
Terminated or transformed companies	254 002		162 970	91 032
Missing companies	109 197		82 328	26 869
Non profit institutions	119 385		78 794	40 591
Special calculation method total	482 584		324 092	158 492
Re-classification of companies	-189		-5 765	5 576
Outward processing	-86 095		-86 095	0
Agricultural grossing up	26 658		26 658	0
				0
FISIM allocation	0		108 685	-108 685
Modification total	-59 626		43 483	-103 109
S 11 Total	24 332 743		16 381 830	7 950 913

3.3.1.1. General calculation method

79. The compilation of production accounts for the non-financial corporations includes the next steps:

- checking, adjusting and substituting the basic data loaded to the JAVA database (See Chapter 11.1)
- composing individual aggregates from individual basic data (administrative aspect) at corporation level, the corrections are made according to the ESA95 concept and the valuation principles. The calculation is made by schemes (algorithms) and by other auxiliary information (for example: disaggregating the data deriving from the budget) and by importing the data of individual output, intermediate consumption and value added into the JAVA database. These three indicators are generated by using the algorithms and also approaching the ESA95 concept.
- aggregating individual data into four-digit NACE classification, and making additional corrections (from administrative aspects) to approach the ESA95 concept and valuation theorems.

80. In the JAVA database system, several types of data are separated among companies considering their characteristics, available information sources and disposable individual data (see Chapter 11.1). Individual aggregated indicators are calculated on the basis of different calculation schemes (algorithms) according to each type of enterprises.

Enterprise types in 2002:

Type 2	Enterprises using double-entry bookkeeping
Type 3	Enterprises using single-entry bookkeeping
Type 4	Enterprises with off-shore status
Type 5	Enterprises, whose business year differs from calendar year (in the current year)
Type 6	Enterprises imputed from the SBS statistics
Type 7	Enterprises registered for Simplified Corporation Tax

81. Companies using different business year method, of which tax declaration is available for the whole business year at the time of making the final calculations – independently from the date of the switch – also belong to the type 2. For practical reasons the 12-month-period of business year, which is reflected in the tax declaration, is considered as the calendar year in the case of relevant enterprises.

82. The detailed process of measuring the output and intermediate consumption and the switch from the administrative/microeconomic aspect to the ESA95 aspect and valuation theorems are mainly presented through calculations of enterprises belonging to type 2, because these have the most exhaustive data. On the other hand these companies produce 91% of the value added of the Non-financial corporations sector. In case of other categories the available data is less detailed, therefore the calculation schemes include more estimates.

83. The total output is the sum of goods and services performed by resident producers in the current year. In the Non-financial corporations sector this item includes the production and services for market purposes and the production for own final use. The output is measured at basic prices, which means that taxes related to products and services – the balance of VAT, excise duties, customs – are not taken into consideration, but subsidies related to products and services are part of the output.

Output

84. In the Hungarian National Accounts the starting point for calculating output is the net sales and the own performance capitalised. The latter one includes the total (consolidated) amount of the capitalised value of own-account assets (GFCF) in the business year, and the change in own-produced stocks.

85. We calculate the ESA95 item “output at basic price” from the accounting categories by corrections (detailed later on).

Accounting category	ESA category
+ Net sales	Output at basic price (P1)
+ Own performance capitalised	

86. In the business year the net sales account include the counter value of contractual sales of products and services, excluding value added tax and including price supplements and additional charges less discounts, and also including products supplied under financial leasing contracts and goods sold under instalment, or deferred payment as invoiced, or the purchasers’ price of such, excluding value added tax, irrespectively of whether instalments are paid, and whether ownership is transferred or of the date of transfer when applicable.

87. Own-account investment includes own production of GFCF (including: capitalised mineral exploration, computer software, entertainment, literary and artistic originals, other intangible fixed assets) and changes in own-produced stocks.

88. Own-account production of GFCF includes e.g. own-produced machinery and equipment, vehicles, own-account construction, capitalised mineral exploration, computer software, entertainment, literary and artistic originals, other intangible fixed assets and the construction of dwellings by households, according to 25§ (7) of Act C of 2000 on Accounting: ”The following shall be shown under intellectual products: inventions, patents and industrial design of assets protected under industrial law, copyrighted software products, other intellectual property, assets without legal protection but monopolized through secrecy; know-how and production technologies, trademarks, whether purchased or created by the undertaking itself, and irrespectively of whether or not used.”

Intermediate consumption

89. Intermediate consumption consists of the value of goods and services consumed as input in the process of production, excluding the consumption of fixed capital. These inputs are purchased from other units. Intermediate consumption is valued at purchasers’ prices.

90. The starting-point for calculating intermediate consumption is the cost-data deriving from accounting. We calculate the intermediate consumption at purchasers’ prices (ESA95) from accounting categories through corrections (detailed later on).

Accounting category	ESA category
+ Material costs	Intermediate consumption (P2)
+ Costs of contracted services	
+ Costs of other service activities	
+ Costs of goods purchased for resale	
+ Value of services purchased for resale	

91. Material costs include the cost (decreased by depreciation and increased by the amount of loss in the value backmarked) of purchased raw materials used during the financial year, and the cost of animals and other livestock for breeding and fattening. Material costs are reduced by the value of any waste and recycled materials generated in the production process, by the activity or the service, and by customs charges and excise taxes refunded.

92. Costs of contracted services shall include the cost of material- and non-material-type services, including any non-deductible value added tax, used during the financial year as invoiced, paid and contracted.²

93. Costs of other service activities include the duties charged during the financial year, and not included (which may not be taken into account) in the cost of assets, administrative and service charges of authorities based on legal provisions, other administrative, service and procedural charges, bank costs (excluding interest), insurance premiums, amount of any tax, levy or product charge on goods of own production when delivered to the undertaking's own retail establishment or when utilized in its own plant, in the amount invoiced, paid or contracted (calculated) or in the amount declared.

94. Costs of goods purchased for resale include the cost (decreased by depreciation and increased by the amount of loss in value backmarked) of materials and goods sold - generally - in an unaltered form during the financial year.

95. The value of services purchased for resale includes the cost of services purchased and sold in an unaltered state, at the time of sale.

96. There are some units whose ESA aggregates are derived by **special calculation methods**:

In 2002 those companies that were terminated or transformed during 2002 had to submit a corporate profit tax declaration (when they were liquidated), in which data necessary for calculating value added were not shown. Therefore, estimation of the performance of relevant enterprises for the months they existed was based on individual data of the preceding year deriving from the JAVA database. In case of transformed enterprises the legal successor enterprise provides a tax return form for the period following the transformation.

97. "Missing" companies comprise those units, which are operating according to the Register, but there is not any information available about their performance, either in the corporate profit tax declaration, or in statistical surveys. They came up in the JAVA database in 2001 and submit – at least once – a VAT declaration in 2002. Therefore, estimation for the performance of relevant enterprises in 2002 was made and the basis of individual data of the preceding year coming from the JAVA database.

98. The gross value added of the NPIs classified into the Non-financial corporations sector is calculated by a simplified scheme: from revenues of the basic and business activities the material type costs are subtracted.

² According to the Law on Accounting, contracted services include all services other than intermediation (i.e. value of services purchased for resale) and other service activities not elsewhere classified, in particular travel operator, shipping and loading, warehousing, packing, rental services, hired labour, postal and telecommunications services, laundry and dry cleaning, consignment activities, agency, education and advanced training, advertising and promotional services, market research, publishing of books and magazines etc., hospitality services, restaurant and catering, research and experimental development, planning and design services, general contracting, auditing and accounting services.

Adjustments

a) Goods purchased for resale

99. Goods purchased for resale include the cost (decreased by depreciation and increased by the amount of loss in value backmarked) of materials and goods sold - generally - in an unaltered form during the financial year. Correction is needed, because according to ESA95 paragraph 3.60 the trade activity should be measured by the trade margins of the goods purchased for resale, therefore, the output may not include the cost of purchased goods. This correction is made in every industry, because not only the wholesale and retail trade companies in section "G" carry out trade activity. The adjustment is made on the basis of the accounting data (cost of products for resale).

b) Value of services purchased for resale

100. The value of services purchased for resale includes the cost of services purchased and sold in an unaltered state, at the time of sale. The sale of services is mainly characteristic to certain industries (for example construction), but the adjustment – except from sections "C" and "D" – is made in every industry, for the same reasons mentioned at goods purchased for resale. The correction is made on the basis of accounting data (cost of services for resale). In section "C" and "D" the output was not adjusted with the value of services purchased for resale in 2002. Problems occurred when calculations for 2001 were made: after the change in Act on Business Accounting in 2001 the difference between services purchased for resale and contracted services was not unequivocal for the enterprises. Probably some of the contracted services entered the recordings as services purchased for resale. Therefore, in the industries "C" and "D" the value of services purchased for resale was not deducted from the output. According to our examination the above problem existed in 2002, too, with smaller impact.

c) Items modifying basic price

101. Items modifying basic price can be taxes or subsidies on products. Those taxes on products, which are recorded as part of the net sales, are subtracted to get the basic price. Those subsidies on products, which are not recorded as part of the net sales, are added to get the basic price. (Sales data deriving from business accounting do not include VAT.)

102. Some of these items appear on the tax forms number 0203 (liability declaration) and number 0211 (subsidy declaration), which derive from the Tax and Financial Control Administration; and they are estimated from the data available. Items of tax on products from tax form number 0203 in 2002:

- Gambling tax
- National cultural contribution
- Environmental protection product charge

Items of subsidies on products from tax form number 0211 in 2002:

- Export subsidy for agriculture and food industry
- Agricultural market subsidy
- Subsidy on reducing the cost of agricultural production
- Subsidy to eliminate forest damages

- Market access subsidy
- Subsidy based on fixed area and yield

103. Usually there is difference between the declared and governmental sum of taxes, and subsidies. We assume that government data is more reliable, therefore, we correct the accounts of enterprises by the sum of the difference.

104. There is not any separate data on some of the items (tax and subsidy on products). These are estimated on the basis of government data. Several sectors are affected by these data, so they are distributed on the basis of the estimation among sectors. Items calculated on the basis of government data:

- Local business tax
- Tourism tax
- Individual taxes and subsidies

105. Individual taxes and subsidies are defined in various laws. These taxes / subsidies are charged on / entitled to producers of individual products (for example civil service activity of radios and televisions, construction of motorways, production of atomic energy).

106. Excise duties and consumption taxes play an important role in modifying the basic price. These are taxes on products, which are recorded as part of the net sales since the amendment of the Act on Accounting in 2001. In 2002 consumption tax was levied on the production of goods of precious metals other than silver, jewellery of precious stones, polished precious stones, passenger cars, roasted coffee and genuine coffee extracts. Excise duty was levied on:

- mineral oil,
- alcoholic products,
- beer,
- wine,
- sparkling wines,
- intermediate alcohol products,
- tobacco products.

107. By reducing these items (using SBS data) the output at basic prices can be calculated.

d) Welfare services

108. Enterprises provide their employees various social welfare services, either at reduced price or free (for example kindergarten, subsidised meals). Subsidies on these services are recorded as compensation of employees. So output has been increased by the total cost of social welfare services provided for employees excluding the charges paid by employees.

109. These data are not directly available from corporate tax returns, only in Labour Cost Surveys. For enterprises covered by Labour Cost Survey, data from the statistical survey are used. On the basis of their figures it is possible to estimate the data of other enterprises by using personal income tax figures declared by enterprises to the Tax and Financial Control Office on wages in kind. (See Chapter 4.7)

e) Own product given to employees

110. According to the ESA95 regulation the value of own products and services given to employees are also accounted as part of the output and wages in kind (for example free travelling by transport companies or free beer in breweries).

111. These data are not directly available from corporate tax returns, only in SBS. For enterprises covered by SBS, data from the statistical survey are used. On the basis of their figures reported it is possible to estimate the data of other enterprises by using personal income tax figures declared by enterprises to the Tax and Financial Control Office on wages in kind. (See Chapter 4.7)

f) Mineral exploration cost

112. Minerals are explored in order to discover new and exploitable stocks of mineral, oil or natural gas. Exploration activity can be performed by either oil- and natural gas extractive companies or kind-of-activity units for own use or for a compensation. According to the ESA95 regulation the costs of the exploration are added to the output.

g) Prize money

113. ESA95 include specific regulations for calculating output at basic prices. For example: recording of gambling, where – in accordance with the income approach – we also make corrections in the calculations at production-side approach according to ESA 4.135. The sum of corrections is estimated on the basis of the personal income tax data received on tax form number 0203.

114. We reduce the output by the sum of prize money and withholding tax (20%), as net sales include the whole sum of money like bet or buying a lottery ticket. Money spent on prizes and gambling can be divided into two parts. On the one hand there are service charges paid for gambling-organiser companies. On the other hand there are current transfers paid for the winners, which means that an operation takes place among participants in prize-drawing or gambling. The turnover of gambling- or bet-organiser enterprises contain the sum of money, which is paid by participants in games of chance, therefore, we have to reduce output by the prize-money paid for winners. Gambling-organiser companies have to deduct and pay 20% of the prize-money distributed among winners for the Tax and Financial Control Administration. In the tax form number 0203 there is an item called “personal income tax detracted for other reason”, which contain the amount of tax paid under this title in industry number 9271 (gambling and bets). We correct output by the taxable income. (Taxable income = tax divided by 0.2).

h) Rents on land

115. In case of accounting data, which are used for calculating intermediate consumption, costs of contracted services include the rents on land. This is property income according to the rules of ESA95, therefore, the amount is subtracted from costs when calculating intermediate consumption.

i) Insurance premium correction

116. In case of accounting data, which are used for calculating intermediate consumption, costs of other service activities include non-life insurance premiums. Only one part of the insurance premium (as accounting category) is considered as intermediate consumption. The sum of the other, non-life insurance premiums is divided according to ESA95 paragraph 3.70 i), and only the counter value of the insurance service is estimated as part of intermediate consumption. The estimation is based on the rate calculated from data of insurance companies. (See Chapter 3.16.3.3.3.)

j) Cost reimbursement paid to employees

117. This item comprises - instead of benefits-in-kind - the sum of money paid to employees for tools, overalls etc. used at work. These outlays are necessary for production. On the other hand they are not considered as compensation of employees, consequently we reduced "other employee benefits" by cost reimbursement paid to employees and increased intermediate consumption by that the same amount.

118. These data are not directly available from corporate tax returns, only in SBS. For enterprises covered by SBS, data from the statistical survey data are used. On the basis of their figures reported it is possible to estimate the data of other enterprises by using personal income tax figures on wages in kind. (See Chapter 4.7)

k) Purchased goods and services given to employees

119. In business accounting, material costs and costs of contracted services contain the value of those benefits-in-kind, which are purchased by the enterprise and given to employees. These items are subtracted from the intermediate consumption and added to the compensation of employees.

120. These data are not directly available from corporate tax returns, only in SBS. For enterprises covered by SBS, data from the statistical survey are used. On the basis of their figures reported it is possible to estimate the data of other enterprises by using personal income tax figures declared by enterprises to the Tax Office on wages in kind. (See Chapter 4.7)

l) Value of the use of passenger car for personal purposes

121. Enterprises record costs of company cars under material costs or costs of contracted services. However these cars are used for personal purposes, too, which are regarded as benefits-in-kind according to ESA95 regulations. Consequently, the estimated costs of personal use are subtracted from intermediate consumption, and added to the compensation of employees. The estimation is based on the relevant personal income tax items. (See Chapter 4.7)

m) Assets of small value

122. The aim of this procedure is to raise the limit of small tools in the Hungarian national accounts. (In the Hungarian book-keeping the limit of the small tools were HUF 50 000/EUR 200 before 2006, and HUF 100 000/EUR 400 from 2006). In the ESA the threshold is EUR 500 (~HUF 125 000). A calculation system was developed to eliminate this difference. The methodology for the adjustment of IC and GFCF data on small tools was developed is the following:

123. Data sources:

According to the Hungarian business bookkeeping, assets with a value of less than HUF 100 000 (from

2006) can be regarded as small tools. Their entire value can be written off in the year of acquisition and they are recorded as production cost.

Tax records provide information on the depreciation of fixed assets below the limit of small tools. Data are available from 2000.

124. Estimation method:

- The effect of change in the limit of small tools between 2005 and 2006 (from HUF 50,000 to HUF 100,000) on acquisition value was studied. The correction factors were calculated by industries using the 2006/2005 value indices of purchases of small tools from bookkeeping. These correction factors were used to adjust the time series before 2006 to the HUF 100,000 limit.
- In the next step, three-year moving averages of Euro exchange rates were calculated in order to filter out the effect of changes in exchange rates. These averages were used to adjust the upper limit to EUR 500.
- The value of IC was raised and the value of GFCF was lowered by the difference between the old and the new GFCF time series. On the whole, the difference between the results obtained according to the old and the new methods had a negative effect on the level of GDP.
- This adjustment was calculated at four-digit NACE-level for IC, and at two-digit NACE-level for GFCF in machinery and equipment.

n) Exhaustiveness estimation for type 2 corporations

125. This adjustment is necessary, because enterprises declare much lower output than they really produce. The smaller the size of an enterprise, the simpler the economic form in which an enterprise operates, the greater the possibility they try to avoid tax. This calculation is made by expert's estimation, the output data for small-scale enterprises is increased. (For further details see Chapter 3.6.)

o) Exhaustiveness estimation for type 3 corporations

126. This correction is needed, because enterprises declare much higher costs than they actually have. The correction is based on a hypothesis, according to which small size companies can record – partly due to more simplified regulations for single-entry bookkeeping – some final consumption items as intermediate consumption in order to pay less taxes. The calculation is made by experts' estimation. (For further details see Chapter 3.6.)

p) Tips

127. It is typical in the Hungarian economy, too, that consumers give tips for certain service activities. In the interest of exhaustiveness, output has to be increased by the estimated value of tips. The basic source to estimate the volume of tips a household survey conducted in 1997 by HCSO.

128. The adjustment is made in 4 branches:

- 9302 Hairdressing and other beauty treatment
- 6022 Taxi operation
- 5530 Restaurants

- 5540 Bars

129. When estimating tips and gratuities, no separate calculation is made for estimating the values of tips and gratuities given for business purposes. Amounts given for corruption purposes are not estimated, either. Tips and gratuities given by households (as consumers) are estimated only, recorded in the sales, in the output and consequently in the value added of enterprises, as well as in the final consumption expenditure of households.

130. The estimation method applied ensures that the intermediate consumption of unincorporated businesses exclude the value of tips and gratuities. Their intermediate consumption is estimated on the basis of data of small-sized businesses with legal entity, which do not include expenditure for private purposes.

q) Grossing up for processing work

131. There is a difference between business accounting and national accounting standards in terms of major processing on the imported goods. In business accounting and in profit and loss statements (recorded on net basis) there has been no change of ownership between residents and non-residents. Turnover data coming from the bookkeeping system includes only processing fees. ESA95 recommends that the cross-border movements under major processing arrangements should be recorded as trade in goods, rather than services, and should be valued on gross basis. According to the basic concept of this recording, the state of the product changes following the processing. This is an economic event, so the import and export of goods concerned can not be ignored. Based on the joint methodological improvement of Balance and Payments and National Accounts the import and export flows connected with the major processing are recorded on gross basis in accordance with the foreign trade statistics. In order to obtain consistent figures for import, intermediate consumption, exports and output, the intermediate input and output figures based on the business accounting data need to be grossed up by imputation. This adjustment is based on the following equality: the difference between the value of the export of processed goods and the value of the used imports of raw materials and semi-finished goods should be equal with the payment of the service provided by the processor. The adjustment is carried out in the Supply and Use framework - at detailed activity and product level - based on the foreign trade statistics data. In the foreign trade statistics, goods intended to be processed and sent back (abroad) after processing are shown separately in both imports and exports. As a result of this adjustment the output and the intermediate consumption are grossed up with the same amount.

r) Hotels and restaurants

132. According to ESA 3.61 the output and IC value of hotels, restaurants and cafes has to contain the value of food and beverages consumed. In business accounting a part of these is reflected in goods purchased for resale, which is subtracted from net sales when the output is calculated. To approach ESA95 regulations we have increased output and IC by the estimated value of food and beverages consumed in case of relevant activities. The correction is estimated on the basis of ratios deriving from SBS data.

s) Gas supply

133. In business accounting the value of gas resold by gas suppliers is part of the goods purchased for resale, which is subtracted from net sales when output is calculated. When calculating ESA aggregates we increase output and intermediate consumption by this amount in order to equalize supply and use (for example the value of gas recorded under individual consumption), and provide appropriate price indices for calculations at constant prices.

t) Ad-hoc (for example data correction)

134. Data errors and discrepancies can not be only committed in the correction phases (See Chapter 3.1.3) but also during the calculation of value added. They are indicated, as separate correction items in the calculations, since there is no way and enough time to make corrections in the database at that time. For this item, we estimate some balancing and expert adjustments on the basis of so-called soft information.

Modifications

- **Re-classification of private pension funds and some companies to the General government sector (S13)**

135. In the national accounts, private pension funds had been classified into the Financial corporations sector since their formation in 1998. In 2004, a Eurostat decision was made on the recording of funded pension funds. This decision underlined the adequacy of the Hungarian practice. Following the decision of the Eurostat the EU allowed a transition period (until 2007) for implementing the rule for those countries, where such institutions. As Hungary intended to take advantage of this opportunity, private pension funds – for a provisional period until 2007 – were re-classified in the Social security sub-sector of the General government sector, for 2002 as well. Classification of public companies was revised according to the rules of ESA95 and decision of the Eurostat, and so five public corporations were re-classified in the General government sector.

- **Outward processing**

136. Outward processing: in this case a resident unit purchases materials from a non-resident unit and the materials are processed by the non-resident unit outside the economic territory, and the resident unit – which is the owner of the product - sells the product abroad. So the product never crosses the border. According to the regulation of the external trade statistics, this kind of movement of the products is excluded from the external turnover. But the enterprises record these transactions in their accounts and they also make profit in their domestic territory. The HCSO – in agreement with the NBH – records these transactions on net base as export and import of services. It means that we do not record the value of the materials and products as exports and imports, only the additional services provided by the resident units as the owner of these products (like logistics or accounting services). This method was also applied for the production side estimations. The backward calculation was made until 2000.

- **Agricultural grossing up**

137. The intra-unit consumption compiled in EAA (crops used in animal husbandry and animal products used in crop output) is taken into account as the output and intermediate consumption of national accounts. Intra-corporation processed products (e.g. seeds, forage plants) are recorded as output in EAA, which is also the part of intermediate consumption. These items were grossed up in NA also.

- **FISIM allocation**

138. Financial Intermediation Services Indirectly Measured (FISIM) calculations according to 448/98 Council Regulation and split to user sectors/industries according to 1889/02 Commission Regulation was published by HCSO for the first time in the national accounts in October 2005. FISIM calculation does not mean distinguishing loan and deposit transactions between financial institutions in domestic and in foreign currency in this sense; we calculate a single internal and a single external reference rate.

139. Taking into account user needs, a recommendation was approved on the OECD National Accounts Meeting in order to make FISIM calculation more advanced. Therefore, a reference rate can be applied to calculate transactions denominated in domestic and in foreign currency separately.

140. Internal and external reference rates were defined for domestic and foreign currency transactions. Either the current or constant price FISIM time series from 2000 are more suitable in national accounts, than FISIM calculated by a single external and internal reference rate. Chain-linked FISIM calculated by two-type reference rates has a compensatory effect on GDP and on final consumption expenditures.

141. FISIM calculation with two-type reference rates was based on loans, deposits and interest flow data split into local and foreign currency, which were supplied by the National Bank of Hungary.

142. Based on HUF (local currency) loans and deposits and interest flows between resident financial institutions, an internal HUF reference rate was defined, and based on DEV (foreign currency) loans and deposits and interest flows between resident financial institutions an internal DEV reference rate were calculated. For transactions between resident and non-resident financial intermediaries two external reference rates were calculated.

143. As loans, deposits, interest incomes and expenditures were available in HUF and DEV breakdown, FISIM could be calculated on HUF loans and deposits and DEV loans and deposits. HUF and DEV FISIM were added together in order to calculate the consumption of the different user sectors.

144. FISIM was divided between industries of the Non-financial and Financial corporations sectors by their stocks of loans and deposits. FISIM was allocated to the industries of the General government, Households and Non-profit institutions serving households sectors by the proportion of their original output. Basic data of the calculation were supplied by the National Bank of Hungary.

145. According to the above mentioned regulation, the output of the National Bank of Hungary was divided between the intermediate consumption of S.122 (Other monetary financial institutions) and S.123 (Other financial intermediaries except insurance corporations and pension funds) sub-sectors.

146. Negative FISIM export was treated as positive FISIM import. For detailed description of FISIM allocation see Chapter 9.

3.3.1.2. Special calculation methods

147. In 2002, companies that were terminated or transformed during 2002 had to submit a corporate profit tax declaration (when they were liquidated), in which data necessary for calculating value added were not shown. Therefore, estimation of the performance of the relevant enterprises for the months they were in existence was made on the basis of the individual data of the preceding year deriving from JAVA database. In case of transformed enterprises, the legal successor enterprise provides a tax return form for the period after the transformation.

148. "Missing" companies comprise those units, which are operating according to the Register, but no information is available about their performance, neither in the corporate profit tax declaration, nor in the statistical surveys. They appeared in JAVA database in 2001 and gave in – at least once - VAT declaration in 2002. Therefore, the performance of the relevant enterprises in 2002 was estimated on the basis of the individual data of the preceding year deriving from the JAVA database.

149. Estimation method of non-profit institutions is described in 3.1.7 section.

**Table 3.10 Non-profit institutions classified into Non-financial corporations sector, 2002
(million HUF)**

NACE code	Output P1	Intermediate consumption P2	Gross value added B1g
E	2 550	1 715	835
I	25 700	12 524	13 176
K	11 212	9 599	1 613
M	13 567	8 787	4 780
N	9 434	6 998	2 436
O	56 922	39 171	17 751
Total	119 385	78 794	40 591

3.3.2. Financial corporations (S12)

150. For this sector see section 3.16.

3.3.3. Government sector (S13)

151. Three different data sources are used:

- a) Annual financial reports of Central government institutions;
- b) Financial statements of public corporations classified in the sector
- c) Statistical survey for public NPIs classified in the sector.

152. The accounting rules and the reporting requirements are the same for every Central government institution irrespectively of the sub-sector they belong to. They have cash-based accounting system. The annual financial report is submitted in February; it is available for the HCSO in May. HCSO receives individual reports and the ESA95 is calculated on an individual basis – except for CFC. The ESA95 aggregates of individual Central government institutions are aggregated at sub-sector level. The annual financial report fully covers the financial and non-financial transactions of the Central government institutions. The report also contains a balance sheet. The annual financial report is designed for administrative purposes. Two kinds of classifications are applied by the institutions: economic classification and classification by activity. Both classifications are very detailed, and the reports also contain a cross-classification.

153. As for economic classification, some adjustments are made, although they are very close to the ESA95 concept.

Table 3.11 Output of budgetary institutions (million HUF)

	Central government	Local government	SS funds	GG sector (in legal terms)
P.2 Intermediate consumption:				
a) Material expenses	488572	560 694	9 883	1059149
b) Adjustment due to insurance of assets	-1 624	-1 469		-3 093
c) Cost reimbursement	2 572	4 546	13	7 131
d) VAT adjustment	-23 044	-34 265	-86	-57 395
e) Accrual adjustment	-3 216	-488	-17	-3 721
f) Other	21435	10330	9 871	41636
Intermediate consumption	484695	539348	19 664	1043707
D.1 Compensation of employees:				
D.11 Wages and salaries:				
g) Regular wage and other remuneration of employees	696974	743 167	19 428	1459569
h) Cost reimbursement	-2 572	-4 546	-13	-7 131
i) Sick leave allowance	-6 284	-4 587	-82	-10 953
j) Private Pension fund contribution and social insurance supplements	-7 865	-2 684	-1	-10 550
k) Welfare services	5 791	10 736		16 527
l) Personal income tax paid by the employer	4 633	3 116	493	8 242
m) Accrual adjustment	13 645	24 771	78	38 494
n) Other remuneration of employees	-523			-523
Wages and salaries	703799	769 973	19 903	1493675
D.12 Employers' social contribution:				
D.121 Employers' actual social contribution:				
o) Actual social contribution	248443	259 885	6 413	514741
p) Pension fund contributions and social insurance supplements	7 865	2 684	1	10 550
q) Accrual adjustment	4 558	7 156	61	11 775
D.122 Imputed Social Security contribution:				
r) Sick leave benefit	6 284	4 587	82	10 953
Employers' social contribution:	267150	274 312	6 557	548019
K.1 Consumption of fixed capital	270468	318335	4648	593451
Sum of costs (P.2+D.1+K.1)	1726112	1901968	50772	3678852
of which:				
-Sum of costs of own final use	1314	1 328	4	2646
-Sum of costs of market KAUs	33 924	5 215		39 139
-Sum of costs of non-market KAUs	1690874	1895425	50768	3637067
Sales revenue of market units	20 473	4 805		25 278
P.11 Market output	20 473	4 805		25 278
P.12 Output for own final use	1314	1 328	4	2646
P.13 Non-market output	1690874	1895425	50768	3637067
P.1	1712661	1901558	50772	3664991

a) Material expenses cover goods and services purchased by the unit.

- b) Material expenses include the costs on insurance of assets. This item is split into two transactions: one part is recorded as IC and the other part as Other current transfer to the Financial corporations sector (D.71). (See Chapter 3.16.3.3.3.)
- c) The annual financial report classifies the full amount of cost reimbursements to employees as wages and salaries. Those parts, which do not represent additional incomes for employees are deducted from wages and salaries (point h) and added to IC.
- d) A VAT adjustment covers two different type of adjustment:
- d1) Calculation of non-deductible VAT.

Material expenses include VAT items as follows:

- VAT on purchased goods and services;
- VAT payments on goods and services provided for the budget

On the other hand, revenues of budgetary institutions include the following items:

VAT on goods and services provided;

VAT reimbursement.

These items are deducted from the material expenses.

Rationale behind the adjustment:

At transaction level the following equations can be established:

VAT on produced goods and services - deductible VAT on purchased goods and services = VAT paid into the budget;

Or

VAT on produced goods and services - deductible VAT on purchased goods and services = VAT reimbursed.

At aggregated level the equation is:

VAT on produced goods and services - deductible VAT on purchased goods and services = VAT paid into the budget - VAT reimbursed.

Deductible VAT on purchased goods and services = VAT on produced goods and services - VAT paid into the budget + VAT reimbursed.

Non-deductible VAT on purchased goods and services = VAT on purchased goods and services - deductible VAT on purchased goods and services = VAT on purchased goods and services -

(VAT on produced goods and services - VAT paid into the budget + VAT reimbursed) =

VAT on purchased goods and services + VAT paid into the budget - VAT on produced goods and services - VAT reimbursed.

- d2) Material costs also include VAT payments (to the government) on disposal of tangible and intangible fixed assets. This amount is deducted from the material expenses.
- e) For accrual adjustment two balance sheet items are used: the changes in the stock on other payables (related to purchased goods and services) are added and other receivables (related to services provided) are deducted from the cash-based material cost.
- f) Under Other adjustment the expenditures on goods and services recorded elsewhere and reclassified as intermediate consumption are collected.

In case of the Central Government this item covers additional costs of the Central government. These items are not recorded in the annual financial report of the Central government institutions. The data source is the Public Account. The most important items are: the cost of GG debt management, the redistribution costs of subsidies on dwellings etc.

In case of SS funds the other adjustment covers mostly the postage expenses of social transfers in cash; the annual report classifies these items in social transfers rather than material costs. Supplementary information in the annual report is available.

- g) In the annual financial report the wages and salaries are classified under Regular wage and Other remuneration of employees.
- h) See point c).
- i) Sick leave allowances paid by the employer are recorded under the other remuneration of employees in the annual report, and are reclassified in the Imputed Social Security contribution (point r).
- j) Private Pension fund contribution and social insurance supplements are reclassified to the Actual Social Security Contribution (point p).
- k) Welfare services are imputed as part of the wages and salaries in kind. These services are not purchased on the market by the employer, but they are produced by the General Government institutions themselves (ministries, local governments providing medical, sport, and kindergarten etc. services to their employees). This production is included in the output of the sector at cost level, and it is imputed into the wages and salaries of the employees consuming these services.
- l) Employers pay income tax on goods and services provided free of charge to their employees (clothing, vehicles for personal use etc.). This income tax is classified as tax in the annual report, and reclassified as part of wages and salaries in the National Accounts.
- m) Accrual adjustment: wages and salaries related to the year (t-1) are deducted, wages and salaries related to year t but paid in year (t+1) are added to the cash-data. The amounts are included in the annual financial report as supplementary data.
- n) Regular cash payments of Olympic medalists are recorded under other remuneration of employees. These flows are reclassified to D.62.
- o) The social security contributions of employers (on the basis of the annual financial statement) are classified under the actual social contribution.
- p) See point j).
- q) The same as point m).
- r) See point i).

Estimation of consumption of fixed capital

154. Concerning the institutions of central government the gross (new replacement) value of the capital stock and the condition factor were estimated by industries and by the main asset categories. The new replacement value was estimated by the revaluation-multiplier according to the book-keeping value and the ratio of the reproduction/book-keeping value. The expected service lives were determined according to the recommendations presented in the OECD Manual on Measuring Capital.

155. The compulsory survey collected data on the real estates of the local governments exhaustively. The survey contained the estimated (net) value and average condition factors of building by function of the building and other structure. The value of machinery and vehicles owned by the

local governments was estimated from the gross book-keeping values by considering the vintage structure of the assets owned by the central government.

156. The experts multiplied the existing natural data – square metres – by the actual specific construction costs in order to value the stock of dwellings. The construction costs are calculated by dwelling type. The model applied for the estimation of the dwelling stock is similar with the estimation method for accounting the dwelling investment in annual fixed capital formation. The model used for the estimation of the dwelling stock contains also the cost calculation of those dwellings which are not built any longer.

157. Assets, belong to certain sectors but being transferred to other sectors for production purposes without any alteration in the ownership status of the assets (e.g. trusteeship contracts), are considered as part of the stock owned by the sector of the units operating them temporarily, in case these units do match the criteria of being independent ones in terms of economic decisions.

158. The sector breakdown of water utilities was determined according to the results of the survey launched by the responsible Ministry. Assets of water supply and drainage managed by corporations do not appear among the other assets of the General government sector.

159. Tangible fixed assets of infrastructure like public roads, public utilities, dams and dikes were not recorded among the other assets of institutions of general government. The calculation of the gross capital stock is carried out by multiplying the natural data by the specific construction costs. The expected service lives of the infrastructural assets are experts' estimations.

160. The stock of software at replacement value is estimated from cumulated investment data of five years by a special price index developed for measuring the volume changes and the value of the stock on software. We chose the adaptation of the Canadian method to calculate the software indices in consideration of the OECD recommendation.

161. The generally accepted, model based Perpetual Inventory Method (PIM) was applied by HCSO to determine the stock value of the following years.

162. The combination of functions used for extrapolation by HCSO was the combination of normal distribution discard function and linear depreciation function.

163. The extrapolated stock is split to four main asset categories:

- Buildings, other structures (without dwellings);
- Machinery with long service life;
- Machinery with short service life;
- Vehicles.

164. Accumulated Consumption of Fixed Capital could be estimated by applying expected service lives and depreciation functions to the model for the previously fixed breakdown. Subtracting the accumulated Consumption of Fixed Capital from the value of Gross Capital Stock leads to Net Capital Stock, which concept refers to an adjusted stock value, where the actual deterioration of the stock is taken into account.

165. The estimation of CFC is calculated by sub-sectors, by type of assets and by industries. The capital consumption on fixed capital of dwellings is based on direct data sources. (See more details in the section 4.12.5.1.)

Table 3.12 The consumption of fixed capital (2002, million HUF)

Sub-sectors	CFC
S.13 General government	593 451
Of which:	
S.1311 central government	270 468
S.1313 local government	318 335
S.1314 compulsory social securities	4 648

P.11 Market output

166. This item covers the sales revenue of the KAUs. These KAUs are considered as market producers. P.12 Output for own final use: supplementary data are available in the annual financial report.

167. Corporate profit tax returns and the Structural Business Survey (SBS) are described under Chapter 3.3.1. Because the public corporations classified in GG sector are non-market units, the output is calculated on cost basis.

168. All the corporations reclassified are controlled and mostly financed by central government: they are classified in the Central government sub-sector.

**Table 3.13 The output of non-financial corporations classified into GG sector (CG sub-sector)
(million HUF)**

		Corporations reclassified		
P.2	Intermediate consumption:			
	Material costs, costs of contracted services, costs of other service activities	23851		
	Intermediate consumption	23851		
D.1	Compensation of employees:			
D.11	Wages and salaries:			
	Wages	8738		
	Other remuneration of employees	424		
	Wages and salaries	9162		
D.12	Social Security contribution:			
	Employer' social contribution	3046		
	Social Security contribution	3046		
K.2	Consumption of fixed capital	9610		
	Sum of costs (P.2+D.1+K.1)	45669		
	of which:			
	-Sum of costs of own final use	1 293		
	-Sum of costs of market KAUs			
	-Sum of costs of non-market KAUs	34766		
	Sales revenue of market units			
P.11	Market output			
P.12	Output for own final use	1 293		
P.13	Non-market output	34766		
P.1		36059		

169. The statistical survey is compiled by HCSO; the classification of transactions follows the ESA95 requirements. There is no need to apply adjustments when calculating NVA and output.

**Table 3.14 The output of non-profit institutions classified into GG sector (CG sub-sector)
(million HUF)**

		NPIs reclassified		
P.2	Intermediate consumption:			
	Material costs, costs of contracted services, costs of other service activities	49 704		
	Intermediate consumption	49 704		
D.1	Compensation of employees:			
D.11	Wages and salaries:			
	Wages	26 690		
	Other remuneration of employees	5 896		
	Wages and salaries	32 586		
	Social Security contribution:			
	Employer' social contribution	11 175		
	Social Security contribution	11 175		
K.1	Consumption of fixed capital	0		
	Sum of costs (P.2+D.1+K.1)	93465		
P.13	Other non-market output	93465		

170. The main aggregates of the total GG sector by data sources are the following:

Table 3.15 The output of GG sector (million HUF)

		GG sector (in legal terms)	Corporations reclassified	NPIs reclassified	Total GG sector
P.2	Intermediate consumption:	1043707	23851	49 704	1117262
D.1	Compensation of employees:	2 041 694	12208	43 761	2097663
D.11	Wages and salaries:	1 493 675	9162	32586	1535423
D.12	Social Security contribution:	548 019	3046	11175	562240
K.1	Consumption of fixed capital	593451	0	0	593451
	Sum of costs (P.2+D.1+K.1)	3678852	36059	93465	3808376
	of which:				
	-Sum of costs of own final use	2 646	1 293		3 939
	-Sum of costs of market KAUs	39 139			39 139
	-Sum of costs of non-market KAUs	3637067	34766	93465	3765298
	Sales revenue of market units	25 278			25 278
P.11	Market output	25 278	0		25 278
P.12	Output for own final use	2 646	1 293		3 939
P.13	Non-market output	3637067	34766	93465	3765298
P.1		3664991	36059	93465	3794515

3.3.4. Households sector (S14)

171. The personal income tax declaration is one of the main data sources used for calculating the production of sole proprietors. In 2002 about 400 000 sole proprietors filled out a supplementary questionnaire attached to the personal income tax declaration. Although it records sales and costs data, these data are not considered to be reliable either for Output or for IC. On the other hand, the number of tax declarations is used for the estimation of the number of production units, considering that the business register is uncertain in this respect (see Chapter 3.1.2).

172. It is realised that

- some sole proprietors fail to provide tax declaration, and
- the number of employees reported as supplementary data to the personal income tax declarations are not reliable, and as a consequence they are replaced by the number of employees from the Labour Force Survey,
- some sole proprietors and their employees do not work full-time (e.g. second job, pensioner).

173. The simplified formula for calculating sole proprietors' GVA applied in 2002 was the following:

Total GVA = total labour input of sole proprietors * total GVA/total labour of the reference group.

The calculation is made at four-digit level of NACE Rev.1.1 (370 activities) and by counties (NUTS III.).

174. In the estimation of **total labour input**, the number of sole proprietors with license, their employees and their helping family members are summed up. An indirect method is applied, namely the total labour input is calculated first then it is disaggregated to NACE industry and county level. The use of this kind of ‘top-down’ calculation is necessary, because reliable data are not available for the number of employees and the helping family members at four-digit level of NACE and by counties.

175. Sole proprietors can be divided into three groups according to the character of their occupation which determines their hours worked. This type of grouping is taken into account when calculating full-time equivalent labour input, as follows:

- sole proprietorship as main occupation → full-time working
- sole proprietorship as second occupation → part-time working
- sole proprietorship of pensioners → part-time working.

176. The shares of sole proprietors with main occupation, second occupation and pensioners given in the percentage of total number of sole proprietors are taken from the Business Register. In 2002 – similarly to every observed year – the ratio of main occupation was the highest, 56%, while that of second occupation was 27% and that of pensioners was 17%. These ratios are applied to the total number of sole proprietors which is equal to the number of tax declarations given in the current year.

177. As it was mentioned above, the number of employees is taken from the LFS, while that of the helping family members is derived from sole proprietors’ tax declarations.

178. Part-time working should be converted into full-time working to obtain consistent and full-time equivalent labour data. In case of employees in 2002 the full-time equivalent ratio was 0.9788. The helping family members are considered to work part-time, and their full-time equivalent ratio was 0.5 in 2002, similarly to part-time working sole proprietors. In the next step, the total employment number is broken down to NACE industries and counties on the basis of sole proprietors’ industry and county codes in their tax declaration.

179. Regarding data for output and intermediate consumption, adjustments are needed to obtain acceptable national accounts data for Output, IC and GVA generated by this sub-sector. Because of the low quality of personal income tax data, the total GVA per total labour input and the coefficients IC/Output are substituted for the corresponding data of limited liability companies with 0-10 employees. These small-scale enterprises are chosen as a reference group, because their business characteristics are similar to sole proprietors’ in terms of size and sales. However, it is likely that sole proprietors have less administrative and business costs than a micro or a small-scale enterprise in the same industry. Therefore the IC/Output ratios of small limiteds are reduced by expert estimation.

180. Information from the Ministry of Finance, i.e. the report on expectable minimum income of sole proprietors in 2001, was used in the industrial and territorial breakdown of GVA per labour in 2002. The data in this report serve as a tool for determining the smallest possible and acceptable income for auditing tax data. The income level set in this report are much lower than in the reality but its scheme by NACE and NUTS breakdown is considered to be realistic. The expectable minimum income data were increased by the following way:

181. $GVA \text{ per labour} = \text{expectable minimum income per labour input} * (\text{total GVA per total labour of small limiteds} / \text{total expectable minimum income per total labour}).$

This calculation was made at four-digit level of NACE Rev.1.1. (370 activities) and by counties (NACE III.).

182. The latest version of the directives for expectable minimum income of sole proprietors that served for tax control purposes was made in 2001, and the Ministry of Finance stopped calculating them in the following year. In 2001 the total expectable minimum GVA per total annual labour calculated from the directives was 561 000 HUF. Because of the lack of relevant data, directives of 2001 were extrapolated in the following 3 years.

183. However, the gross annual minimum wage was 684 000 HUF in 2005, which significantly exceeded the total average of the 561 000 HUF/year expectable minimum income of the Ministry of Finance. Therefore the use of the 2001 directives in 2005 would not have shown the real financial situation of the sole proprietors.

184. Consequently, it was necessary to search for up-to-date and exhaustive data sources. Out of the available data sources, the Annual Business Statistics seemed to meet mostly these requirements and from 2005 the directives of the Ministry of Finance for expectable minimum income of sole proprietors were replaced by the average income data of Annual Business Statistics.

185. The estimation method of the output and intermediate consumption of sole proprietors implicitly covers the adjustments for exhaustiveness made in the Non-financial corporations sector. For tips given to hairdressers, waiters, receptionists, taxi-drivers an explicit adjustment is made, because the estimation method of the output for sole proprietors with licence and other permission implicitly does not cover these items. The estimation method is the same as in the Non-financial corporations sector. The basic source to estimate the volume of tips was the results of a household survey conducted in 1997 by HCSO. The GVA of the private individuals with tax number and the unregistered activities of households are estimated with the help of branch specific methods. There are different estimation methods for calculating the output and intermediate consumption for these units as follows:

- modelling techniques (e.g. for owner-occupied dwelling services, gratitude money for health care, teaching);
- statistical surveys with indirect methods (domestic services for households);
- quantities and price data from statistical surveys (agricultural production of small producers for market sale and for own final use).

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

186. The output of the NPISHs is compiled on a cost basis:

Intermediate consumption (P.2)

+ Compensation of employees (D.1)

+ Consumption of fixed capital (K.1)

+ Other taxes on production (D.29)

- Other subsidies on production (D.39)

Table 3.16 The main figures for NPISHs sector (million HUF)

P.1 Output	330 489
P.2 Intermediate consumption	174 926
B.1g Gross domestic product	155 563
B1.G Gross value added	155 563
D.1 Compensation of employees	116 735
D.11 Wages and salaries	90 430
D.12 Employers' social contributions	26 305
D.29 Other taxes on production	96
D.39 Other subsidies on production	62
B.2g Gross operating surplus	38 794
K.1 Consumption of fixed capital	38 794
B1.n Net value added	116 769
P.5 Gross capital formation	20 875

3.4. The roles of direct and indirect estimation methods

187. In most cases output and intermediate consumption are measured directly, except for agriculture. The value of agricultural performance is calculated by the volume*price formula.

188. An indirect approach is used for the estimation of output and intermediate consumption of sole proprietors with licence and other permission (see Chapter 3.3.4).

189. In case of production of private individuals with tax number and the unregistered production activities of households, model based and indirect approach are also used:

- Model based approach is used for own account construction and renovation of dwellings (see Process Table NACE F, Explicit cut-off [N3]); owner-occupied dwelling services (NACE K, CFC [PIM] & Imputed dw.); gratitude money for health care (NACE N, Explicit exhaustiveness [N7]); part-time private teaching (NACE O, Explicit cut-off [N3]).
- Other indirect methods are used for agricultural production of small producers for market sale and for own final use (data is included in NACE A, Explicit cut-off [N3]), where output is calculated by volume*price by products; domestic services for households, where the Household Budget Survey data are used by benchmark and extrapolation method.
- For estimating the output of letting rooms and garages (NACE K, Explicit cut-off [N3]) administrative data sources (personal income tax declaration and records on private accommodation data from the local government) are used.

3.5. The roles of benchmarks and extrapolations

190. HCSO carried out agricultural, vine and fruit census in 2000-2001. NA estimates for agricultural production of Households sector are based on this benchmark year data, and extrapolations are made according to Economic Accounts for Agriculture (EAA) of the current year.

191. For estimation of domestic services for households, the Household Budget Survey data are used by benchmark and extrapolation method. The use of Household Budget Survey data is described in chapter 5.7.

192. When estimating market rent for private dwellings, rents deriving from the rent survey conducted in 2002 are used as benchmark data.

193. Estimation of private dwelling renovation is also made by extrapolation, data of the year 2003 questionnaire on dwelling conditions are used as benchmark data.

194. Terminated and transformed enterprises are also estimated by extrapolation (estimates for an incomplete year are based on the data of the preceding year).

3.6. The main approaches taken with respect to exhaustiveness

195. GDP calculation by production approach is exhaustive as it covers all units, which have a centre of economic interest on the economic territory of Hungary by the terminology of SNA93 or ESA95.

196. To ensure the exhaustiveness of the Hungarian national accounts certain adjustments are made in national accounts data. The estimations for non-observed economy are presented in line with Eurostat's Guidelines to *Tabular Approach to Exhaustiveness* by classifying the adjustments into 7 types of "non-exhaustiveness" for all of the three approaches of GDP calculations: output, expenditure and income. It also provides the framework for the calculation of the adjustments, by linking available compilation methods to non-exhaustiveness types. (See Appendix).

197. The exhaustive estimations of the production side concentrate on the non-Financial corporations sector and the Households sector. Most of the presumed volume of non-observed economy is based on the underreporting behaviour of small-sized enterprises, and enterprises with staff less than 10 employees.

198. Nevertheless, estimation of non-observed economy by production approach needs improvements. In connection with the project on the full integration of the SUT into the national accounts (see Chapter 6), we intend to develop estimation of non-observed economy. The new technology in the compilation of national accounts requires revision and improvement in the sources and methods used for the estimation of non-observed activities. Current sources and estimation methods are not fully able to satisfy all requirements of the new compilation technology. Combining data from both production and expenditure side in a SUT framework is a useful tool to check the consistency of data and to generate estimates for missing items including the non-observed economy, as well.

199. There is a working plan designed for the development of quality of national accounts under the financing of the Grant 2006 by Eurostat.

200. In the framework of the project we plan:

- to survey and work up relevant international and Hungarian publications and researches connected with the non-observed economy, with special regards to the methodological papers of Eurostat
- to define types of relevant non-observed activities and their nature in the Hungarian economy according to the demands of the new national accounts technology
- to work out methods for the estimation of non-observed activities in the new circumstances, suitable for execution in short term. This includes e.g. the specification of modelling methods which make the quantification of non-observed activities possible on the basis of available data systems; examination of the possible role of different surveys and opinion polls in the follow up.

- to make trial calculations for the non-observed activities for 2005
- to make an impact analysis on the effect of explicit calculation of non-observed activities

Exhaustiveness estimation for type 2 corporations

201. This adjustment is necessary, because enterprises declare much lower output than they really produce. This calculation is made by expert's estimation, the output data for small-scale enterprises is increased.

202. The present methodology was developed in 1997 and it is mainly based on business accountants' estimations. In this research enterprises of various sizes and types were studied from the point of view of their under and over-reporting aimed at minimizing or reducing the amount of payable tax.

203. It is found that:

- The less number of employees an enterprise has the less reliable their data can be.
- Applied book-keeping system (single or double-entry) – being in a close relation with the legal form of the enterprise – affects the way and the measure of income misreporting.

204. As a result, output derived from accounting data has been increased systematically by 10% since 1997 in case of small-scale enterprises (limited liability companies with less than 10 employees) applying double-entry book-keeping.

Exhaustiveness estimation for type 3 corporations

205. According to the 1997 research the other way of reducing reported income by enterprises is to over-report their costs (intermediate consumption). Therefore the intermediate consumption of enterprises applying single-entry book-keeping was decreased systematically by 20% since 1997. The number of enterprises type 3 fell to zero due to the facts that single-entry book-keeping could not be chosen newly by enterprises since 2006 and units that had started using it earlier were allowed to continue with it for only special permission.

206. Tax evasion resulted from over-reported costs still exists mainly due to the high additional taxes imposed upon labour costs. This methodology has been used in case of deposit partnerships since 2004. According to the law, they are obliged to apply double-entry book-keeping. This kind of enterprise – without legal entity – can be formed easily and it provides the most legal gaps for hiding the real number of employees and labour costs, namely by invoicing and misreporting them as running costs, which makes possible to avoid tax payments related to hidden labour costs. As a result, intermediate consumption of deposit partnerships applying double-entry book-keeping has been decreased by 20% since 2004.

207. For testing the estimations described in points n) and o) (see Chapter 3, paragraph 125-126) several experimental calculations were made in the frame of the NOE Eurostat Grant project. Results showed that it is not realizable to replace the fore-mentioned estimations in the near future e.g. next benchmark year. However, the introduction of industry-specific estimation methods in the calculations is considered as a possible way for further development.

Tips

208. It is typical also in the Hungarian economy that in case of certain service activities, consumers give tips. In the favour of exhaustiveness, output has to be increased by the estimated value of tips. The basic source to estimate the volume of tips was a household survey conducted in 1997 by HCSO. The adjustment is made in 4 branches:

- 9302 Hairdressing and other beauty treatment
- 6022 Taxi operation
- 5530 Restaurants
- 5540 Bars

Gratuities

209. There is a widespread and tolerated illegal payment in the Hungarian health care system, called gratitude money, which creeps into the doctors' pocket from the patients' pocket. Donation of gratitude money is not covered by the social security insurance, it involves tax-avoidance, so this phenomenon is actually a part of the shadow economy.

210. Our calculations for the volume of gratitude money is based on a study of the Social Research Institute (TÁRKI) published in 1999. This study summarizes the outcomes of a sample survey inquiring c. 1000 doctors and 1400 patients about the amount and the frequency of both accepted and offered donation of gratitude money and about their opinion and attitude.

211. Results concerning the year 1998 are revised yearly using health statistics. The number of treatment cases of outpatient services is obtained from the National Statistical Data Collection Program and the statistics on inpatient services are reported by the National Health Insurance Fund, which include data on the number of financed cases and estimated weight numbers concerning c. 740 health care events.

Wages in kind

212. The following items are equivalent to those estimated by the income side approach (Chapter 4) and are classified among exhaustiveness types.

a) Social welfare (cultural, health and social) services provided for employees

213. Enterprises provide various social welfare services for their employees, either at reduced price or free (for example kindergarten, subsidised meals). The subsidies on these services are valued as compensation of employees. Therefore, we have increased the output by the total cost of social welfare services provided for employees minus the charges paid by employees.

214. These data are not directly available from corporate tax returns, only in the Labour Cost Survey. For enterprises covered by the Labour Cost Survey data from the statistical survey are used. On the basis of their figures reported, it is possible to estimate these data of other enterprises by using personal income tax figures declared to the Tax and Financial Control Administration on wages in kind. (See Chapter 4.7)

b) Own product given to employees

215. According to ESA95 regulation the value of own products and services given to employees are also accounted as part of output and wages in kind (for example free passes at transport companies or free beer in breweries).

216. These data are not directly available from corporate tax returns, only in SBS. For enterprises covered by SBS, data from the statistical survey are used. On the basis of their figures reported it is possible to estimate data of other enterprises by using personal income tax figures declared to the Tax and Financial Control Administration on wages in kind. (See Chapter 4.7)

c) Purchased goods and services given to employees

217. In business accounting, material costs and costs of contracted services contain the value of those benefits in kind, which are purchased and given to the employees by the enterprise. These items are subtracted from intermediate consumption and added to the compensation of employees.

218. These data are not directly available from corporate tax returns, only in SBS. For enterprises covered by SBS, data from the statistical survey are used. On the basis of their figures reported, it is possible to estimate data of other enterprises by using personal income tax figures declared to the Tax Administration on wages in kind. (See Chapter 4.7)

d) Value of the use of passenger car for personal purposes

219. Enterprises account costs related to company cars within material costs or costs of contracted services. However, these cars are used for personal purposes, too, which are regarded as benefits in kind according to ESA95 regulations. Consequently, the estimated costs of personal use are subtracted from intermediate consumption, and added to the compensation of employees. The estimation is made on the basis of relevant personal income tax items. (See Chapter 4.7)

e) Illegal activities

220. In 2006, the estimation of production, consumption and income deriving from illegal activities was introduced in the Hungarian National Accounts compliance with the ESA'95. (3.08). According to the proposal of Eurostat, estimations for three main scopes of illegal activities have to be compiled, namely: prostitution, drugs and smuggling. From these three scopes HCSO has made estimations for prostitutions and drugs, because these activities do not change often and significantly in short term and a lot of information is available for these items. Smuggling is a different thing. Although, it has constant elements, it is an activity that can immediately adapt to the change of market and legal regulations but these can not be measured by statistical means. It is more unlikely to find other basic information than in the case of the first two items. So till now, HCSO did not try to estimate this activity.

221. The estimation of production and turnover of drugs was based on the regular data of demand. First the consumption of drugs was estimated on the basis of the following items: number of consumers, quantity of drugs and prices by type of drugs. The main data sources were medical, judicial data, reports of the police, the tax and the customs office. For the estimation of intermediate consumption, reports of the police were mainly used.

222. In case of prostitution the method is similar. For the first time, the consumption was estimated, on the basis of the following items: number of consumers, number of cases using average prices. There are two additional data sources to the above mentioned ones: the data of the chamber of prostitutes and

the special studies. For the estimation of intermediate consumption mainly reports of the police were used. The calculation was made from 2000 and had an impact on the output, intermediate consumption, final consumption and export and import figures.

For more details see Chapter 7, paragraph 41.

3.7. Agriculture, hunting and forestry (A)

223. In 2002, the gross value added of agriculture, hunting and forestry (A) amounted to HUF 686 677 million, 4.6% of the value added of all industries. It was produced by three institutional sectors: Non-financial corporations, Households and General government. In Hungary, the share of the Households sector in the agricultural value added was about 59% in 2002.

Table 3.17 Output, intermediate consumption and gross value added of agriculture, hunting and forestry (A) by branches and sectors, 2002 (million HUF)

Output					
NACE code	Industry	S11	S13	S14	Total
01	Agriculture, hunting and related service activities	927 859	22 751	805 041	1 755 650
02	Forestry, logging and related service activities	56 264	2 135	17 564	75 963
Total (A)		984 123	24 885	822 605	1 831 613

Intermediate consumption					
NACE code	Industry	S11	S13	S14	Total
01	Agriculture, hunting and related service activities	678 891	12 935	407 962	1 099 788
02	Forestry, logging and related service activities	36 808	563	7 777	45 148
Total (A)		715 699	13 498	415 739	1 144 936

Gross value added						
NACE code	Industry	S11	S13	S14	Total	GVA%
01	Agriculture, hunting and related service activities	248 968	9 815	397 079	655 862	4,4
02	Forestry, logging and related service activities	19 456	1 572	9 787	30 815	0,2
Total (A)		268 424	11 387	406 866	686 677	4,6

224. Agricultural enterprises in the Non-financial corporations and General government sectors are just like enterprises in other branches of the national economy. They usually use large agricultural land (the average is over 500 hectares) and have big animal herds. They keep records in their accounting system and are capable of providing very detailed input and output data. They are observed annually with full coverage, both by statistical surveys and by administrative data sources.

225. Small plots of households with any agricultural activity or sole proprietorships with tax number are qualified as private firms in statistical sense, if at least one of the following criteria is fulfilled referring to them:

- the area of the agricultural land is 0.15 ha or more,
- the area of vineyard/orchard is 0.05 ha or more,
- there is at least 1 head of cattle, pig, horse, sheep or goat,

- there are at least 50 heads of poultry,
- there are at least 25 heads of rabbit or small furry animals or pigeon,
- there are at least 5 bee families,
- the area for mushroom-growing is at least 50 m²,
- the area of glass-house is 100 m² or more.

226. In Hungary, the number of private firms above the agricultural threshold is about 1 million according to the Agricultural Census 2000, while c. 800 000 households with some agricultural activity were below the threshold.

227. The estimation of the production of private firms is mainly based on a representative, stratified sampling survey (5%). The larger private firms above the specific threshold are in stratum „A”, where the sampling proportion is 100%, while the below threshold in the stratum „B” is 33%.

228. For small plots of households, which are not qualified as private firms (stratum „C”) expert estimations are used, thus we can say these households are also covered by the Economic Accounts for Agriculture (EAA).

229. The main source of compiling National Accounts data for agriculture is the Economic Accounts for Agriculture (EAA), which is a satellite account compiled by the Agricultural and Environmental Statistics Department of HCSO. EAA is a well established, detailed and coherent system integrating all the available statistical data collections of HCSO (25 surveys) and the Ministry of Agriculture and Rural Development (10), administrative data (on subsidies, loans etc.) and other data sources (producer organisations, organisations of the producers and importers of agricultural inputs etc.).

230. EAA is an activity-based system and needs to be adjusted according to the institutional unit approach of the National accounts, thus the agricultural activities of enterprises not classified in industry “Agriculture” (NACE 01) are not included in the output of agriculture, only in other branches. The output and value added of enterprises classified into agriculture with non-agricultural activities is significant in the Non-financial corporations sector, and the current EAA data cover only a part of them (processing of cereals, vegetables, fruits meat and milk). There are also some agricultural secondary activities of non-agricultural enterprises, which are covered by EAA, but adjusted from agricultural industry in NA. The main data sources of adjustments are the corporate profit tax return forms and the SBS survey.

231. In order to develop National Accounts in terms of accounting, figures of Non-financial corporations sector (S11) (transactions among the intra-unit consumption and the processed products by producers) are also recorded, similarly to the Households sector. Only some parts of the intra-unit consumption are taken into account in EEA (crops used in animal husbandry and animal products used in crop output). Processed products in the intra-corporation (e.g. seeds, forage plants) are recorded as output in EAA, which are also part of the intermediate consumption. These items were grossed up in NA, as well.

232. HCSO carried out agricultural, vine & fruit census in 2000-2001. NA estimates in Households sector are based on these data of the benchmark year, and extrapolations are made according to the EAA of the current year.

233. Except for processing agricultural products, we do not take into account any other non-agricultural activities in estimating the output of agricultural private firms. Other non-farming activities of households are recorded under other industries.

Measurement of output

234. In compliance with ESA, agricultural production is regarded to be continuous, except for the production of autumn sowing, which is recorded as output only for the year when production was harvested.

235. In Hungary, calculation of the agricultural output is based on a detailed balance sheet, which is compiled for most of the agricultural products (so-called “commodity balance sheet”) by the Agricultural Statistics Department. The balance sheet contains the following items for all agricultural products (the breakdown of some items can be even more detailed depending on the nature of the product group):

Resources:

Total production
- Losses in stocks
= Usable output
+ Initial stocks
= Total available resources

Uses:

Intra-unit consumption

- for crop production (seed, manure)
- for animal husbandry (feed, eggs for hatching)
- for other use

Processing by producers

- to seed
- to feed
- to other

Own consumption (only on private farms)
Domestic sales
Sales abroad
Own-account produced fixed capital goods
Final stocks

236. The output of the agricultural activity covers – according to the EAA methodology – the usable output minus that part of intra-unit consumption which was used within the same industry (seed, eggs for hatching).

237. Gross agricultural output covers own account GFCF of animals, as well. The main source of calculation is the balance sheet of animals.

238. These balance sheets are compiled both in physical terms and in value (at producer prices) for the enterprises at unit (individual) level and for the private farms at county level. Values are obtained by multiplying the quantity data by the relevant unit values (prices). Price information is collected monthly, separately for products sold to wholesalers and processors of agricultural products and products sold directly to the consumers. Different prices are used for the valuation in the ‘Uses’ side of the commodity balances.

239. *Source of data*: annual data collection for both crop and animal products according to the headings of the above mentioned commodity balance sheet, plus the agricultural products purchased and used (in quantities), and the value of the products sold. Data collection covers all agricultural enterprises (registered in the business register).

240. Data of private farms are estimated at county level in the regional offices, supported by local experts. The estimation is based on

- the annual sample survey containing the main items of the balance sheet,
- the accumulated data from the monthly reports of enterprises on the quantities and values of agricultural products purchased for marketing or manufacturing,
- the information coming from the sample survey on local markets.

241. Output of private farms is recorded under the output of the Households sector (HS), while output of agricultural enterprises under Non-financial corporations sector (NFC) and output of state farms under the General government sector (GG).

242. The output of secondary non-agricultural activities is estimated from different sources. Processing of cereals, vegetables, fruits meat and milk by the agricultural producers is estimated on the basis of the commodity balance sheets. Balance sheets are expressed in physical terms. On the basis of industrial producer price statistics and agricultural price statistics the average margin of food processing activity per unit of raw agricultural product is estimated. The value of output is calculated by the volume*price (margin) formula.

243. Output is to be valued at basic prices. Agricultural commodity balances are compiled at producer prices. The values of product specific subsidies are estimated at product level from the detailed state budget records. When a certain type of subsidy corresponds to one or more agricultural products, an expert estimate is made on the basis of the corresponding legislation. Values are adjusted according to the accruals basis principle.

244. For more information about the main data sources for calculating agricultural output see Chapter 11.

Measurement of intermediate consumption

245. Intermediate consumption represents the value of all goods and services used as inputs in the production process, excluding fixed assets whose consumption is recorded as fixed capital consumption. The goods and services concerned are either transformed or used in the production process. Agricultural inputs may come from:

- agriculture itself (animal feeding stuffs, manure and agricultural services, etc.);
- outside agriculture (fertilizers, plant protection products, processed feeding stuffs or veterinary products)

246. The estimation of intermediate consumption is based on several data sources: statistical surveys on sales of inputs to the producers, statistical surveys on the purchases of agricultural enterprises, Ministry of Agriculture's data collections, other governmental institutions, association of producers of inputs, balance sheets of agricultural products, external trade data, Farm Accountancy Data Network (FADN), etc. Usually different data are available for the same element of IC, and they are not fully comparable. In most cases one or two sources are taken as main data source, and the others are used for checking/correcting the main data source. For more information about the main

data sources for calculating agricultural output see Chapter 11. In the table in Chapter 11, the sequence of the different data sources reflects the significance of these sources in the estimation. All data sources (including FADN) refer to the calendar year. The most important statistical surveys on inputs are: EU Farm Accountancy Data Network, Inputs of agricultural production (Non-financial corporations and GG sector) and Survey of agricultural households.

247. The third survey questionnaire also includes data on purchased intermediate consumption of agricultural households, broken down by the main categories of EAA (10 items). For more information on this data source see the description under agricultural output.

Table 3.18 Sources and methods used for estimating IC of agriculture

Description	Sources and methods
SEEDS AND PLANTING STOCK	<p><i>Sources:</i> Statistical data collections on inputs of agricultural production, balance sheets of agricultural products, FADN</p> <p><i>Method:</i> NFC and GG is taken from the full scope statistical survey, FADN is used for checking. HS is estimated from FADN by adding the estimates on inputs of uncovered small farms on the basis of farm typology data.</p>
ENERGY; LUBRICANTS	<p><i>Sources:</i> Statistical data collections on inputs of agricultural production, FADN, data of national energy balance sheet.</p> <p><i>Method:</i> NFC and GG is taken from the full scope statistical survey, FADN is used for checking. HS is calculated from FADN by adding the estimates on inputs of uncovered small farms on the basis of farm typology data. Data of Energy Centre Non-profit Co. are used for checking.</p>
FERTILISERS AND SOIL IMPROVERS	<p><i>Sources:</i> Statistical data collections on inputs of agricultural production, FADN, monthly and annual statistical data collections of the Ministry of Agriculture and Rural Development (MOARD) on the sales of fertilizers, quarterly statistical data collections on prices of fertilizers.</p> <p><i>Method:</i> NFC and GG is taken from the full scope statistical survey, FADN is used for checking. HS is calculated from FADN by adding the estimates on inputs of uncovered small farms on the basis of farm typology data. Other data are used for checking.</p>
PLANT PROTECTION PRODUCTS AND PESTICIDES	<p><i>Sources:</i> Statistical data collections on inputs of agricultural production, FADN, sales data of the Association of Chemical Industry, statistical data collection of the Ministry of Agriculture and Rural Development (MOARD) on the sales of plant protection products, quarterly statistical data collections on the prices of plant protection products.</p> <p><i>Method:</i> NFC and GG is taken from the full scope statistical survey, FADN is used for checking. HS is calculated from FADN by adding the estimates on inputs of uncovered small farms on the basis of farm typology data. Other data are used for checking</p>

VETERINARY EXPENSES	<i>Sources:</i> Statistical data collections on inputs of the agricultural production, FADN, quarterly statistical data collections on the prices of veterinary products. <i>Method:</i> NFC and GG is taken from the full scope statistical survey, FADN is used for checking. HS is calculated from FADN by adding the estimate on inputs of uncovered small farms on the basis of farm typology data. Other data are used for checking
ANIMAL FEEDINGSTUFFS	<i>Sources:</i> Statistical data collections on inputs of the agricultural production, balance sheets of agricultural products, FADN, quarterly statistical data collection on prices of feeding stuffs. <i>Method:</i> NFC and GG is taken from the full scope statistical survey, FADN is used for checking. HS is estimated from FADN by adding the estimates on inputs of uncovered small farms on the basis of farm typology data. A cross-checking is made by calculating the natural need for feeding stuff of the animal herd
MAINTENANCE OF MATERIALS	<i>Sources:</i> Statistical data collections on inputs of agricultural production, FADN. <i>Method:</i> NFC and GG is taken from the full scope statistical survey, FADN is used for checking. HS is calculated from FADN by adding the estimates on inputs of uncovered small farms on the basis of farm typology data.
MAINTENANCE OF BUILDINGS	<i>Sources:</i> Statistical data collections on inputs of agricultural production, FADN. <i>Method:</i> NFC and GG is taken from the full scope statistical survey, FADN is used for checking. HS is calculated from FADN by adding the estimates on inputs of uncovered small farms on the basis of farm typology data.
AGRICULTURAL SERVICES	<i>Sources:</i> Statistical data collections on inputs of agricultural production, FADN, statistical data collections on agricultural and forestry services <i>Method:</i> Expert judgement by taking into account all data sources.
OTHER GOODS AND SERVICES	<i>Sources:</i> Statistical data collections on inputs of agricultural production, FADN. <i>Method:</i> NFC and GG is taken from the full scope statistical survey, FADN is used for checking. HS is calculated from FADN by adding the estimates on inputs of uncovered small farms on the basis of farm typology data.

248. Intermediate consumption of secondary non-agricultural activities is estimated separately from other inputs based on the input structure of food industry.

249. Hunting and forestry have not been included in EAA, so output and intermediate consumption for these industries are estimated from their Corporate Tax Return. For more information about the main data sources used for estimating the output and intermediate consumption of hunting and forestry see Chapter 3.1.

3.8. Fishing (B)

250. In Hungary, fishing activity is in fact marginal because of the lack of sea. The section includes enterprises with main activities of river or lake fishing and fish-farming. In 2002, the gross value added of fishing amounted to HUF 3 243 million, 0.02% of gross value added of all industries. It was produced mainly by non-financial corporations and partly by households.

Table 3.19 Output, intermediate consumption and gross value added of fishing (B) by sectors, 2002 (million HUF)

Output				
NACE code	Industry	S11	S14	Total
05	Fishing, operation of fish hatcheries, etc.; related services	8 027	253	8 280
Total (B)		8 027	253	8 280

Intermediate consumption				
NACE code	Industry	S11	S14	Total
05	Fishing, operation of fish hatcheries, etc.; related services	4 929	108	5 037
Total (B)		4 929	108	5 037

Gross value added					
NACE code	Industry	S11	S14	Total	GVA %
05	Fishing, operation of fish hatcheries, etc.; related services	3 098	145	3 243	0.02
Total (B)		3 098	145	3 243	0.02

251. For more information about the main data sources used for estimation of output and intermediate consumption see Chapter 3.1.

Table 3.20 Calculation of gross value added of fishing (B), 2002 (million HUF)

Table 3.20	Net sales	Owned production capitalised	Production	Material costs	Costs of contracted services	Costs of other services	Goods purchased for resale	Value of services purchased for resale	Material type costs	Difference
S11										
2	7 578	468	8 046	3 280	962	246	1 056	102	5 646	2 400
3	288		288	82	24	6	121	0	233	55
7	23	0	23						8	15
Total			8 357						5 887	2 470
			Output P1						Intermediate consumption P2	Gross value added B1g
a) goods purch. for resale			-1 177						-1 177	0
b) services p. for resale			-102						-102	0
c) items modifying basic prices			352							352
h) rents on land									-45	45
i) insurance premium corr									-27	27
l) use of cars for personal purposes									-6,50	7
m) assets of small value									18	-18
n) exhaustiv. 2			116							116
o) exhaustiv. 3									-43	43
t) ad hoc			-1							-1
Total adjustments			-812						-1 382,72	571
Terminated or transformed c			371						254	117
Missing comp.			-9						10	-19
Total			362						264	98
Re-classification of companies			0						0	0
Outward processing			0						0	0
Agricultural grossing up			120						120	0
										0
FISIM allocation									41	-41
Total modification			120						161	-41
S 11 Total			8 027						4 929	3 098
S 14			253						108	145
B total			8 280						5 037	3 243

3.9. Mining and quarrying (C)

252. In the past few years, the importance of mining and quarrying industry decreased in the Hungarian economy. Its value added amounted to HUF 34 497 million in 2002, which gives only 0.2% of the total value added. It was the performance of the Non-financial corporations and the Households sectors.

Table 3.21 Output, intermediate consumption and gross value added of mining and quarrying (C) by branches and sectors, 2002 (million HUF)

Output				
NACE code	Industry	S11	S14	Total
10	Mining of coal and lignite; extraction of peat	15 665	30	15 695
11	Extraction of crude petrol & natural gas; related services; excl. surveying	14 069	15	14 084
12+13	Mining of uranium, thorium and metal ores	6 464	5	6 469
14	Other mining and quarrying	50 737	292	51 029
Total (C)		86 935	342	87 277

Intermediate consumption				
NACE code	Industry	S11	S14	Total
10	Mining of coal and lignite; extraction of peat	10 884	15	10 899
11	Extraction of crude petrol & natural gas; related services; excl. surveying	8 580	6	8 586
12+13	Mining of uranium, thorium and metal ores	3 357	2	3 359
14	Other mining and quarrying	29 809	127	29 936
Total (C)		52 630	150	52 780

Gross value added					
NACE code	Industry	S11	S14	Total	GVA%
10	Mining of coal and lignite; extraction of peat	4 781	15	4 796	0.0
11	Extraction of crude petrol & natural gas; related services; excl. surveying	5 489	9	5 498	0.0
12+13	Mining of uranium, thorium and metal ores	3 107	3	3 110	0.0
14	Other mining and quarrying	20 928	165	21 093	0.1
Total (C)		34 305	192	34 497	0.2

253. For more information about the main data sources used for estimation of output and intermediate consumption see Chapter 3.1.

Table 3.22 Calculation of gross value added of mining and quarrying (C), 2002, (million HUF)

Table 3.22	Net sales	Owned production capitalised	Production	Material costs	Costs of contracted services	Costs of other services	Goods purchased for resale	Value of services purchased for resale	Material type costs	Difference
S11										
2	87 140	244	87 384	20 548	20 032	1 477	5 394	7 101	54 552	32 832
3	545		545	341	74	5	4		424	121
6	383	83	466	92	26	6	75	2	201	265
7	46		46						19	27
Összesen			88 441						55 196	33 245
			Output P1						Intermediate consumption P2	Gross value added B1g
a) goods purch. for resale			-5 473						-5 473	0
b) services p. for resale										0
c) items modifying basic prices			-499							-499
d) social welfare services			36							36
e) own product given to empl.			2							2
f) exploration cost			99							99
h) rents on land									-4	4
i) insurance premium corr									-293	293
j) cost reimbursement									18	-18
k) purchased goods to empl.									-14	14
l) use of cars for personal purposes									-75	75

Calculation of gross value added of mining and quarrying (C), 2002 (cont.) (million HUF)

			Output P1					Intermediate consumption P2	Gross value added B1g
Adjustments									
m) assets of small value								60	-60
n) exhaustiv. 2			764						764
o) exhaustiv. 3								-178	178
q) processing work			2					2	0
t) ad hoc			1 036					839	197
Total adjustments			-4 033					-5 118	1 085
Terminated or transformed c			1 625					1 199	426
Missing comp.			902					970	-68
Total			2 527					2 169	358
Re-classification of companies			0					0	0
Outward processing			0					0	0
Agricultural grossing up			0					0	0
									0
FISIM allocation								383	-383
Total modification			0					383	-383
S 11 Total			86 935					52 630	34 305
S 14			342					150	192
C total			87 277					52 780	34 497

3.10. Manufacturing (D)

254. Manufacturing is a substantial activity in the Hungarian economy. The gross value added of manufacturing amounted to HUF 3 180 149 million in 2002, 21.4% of the value added of all industries. It was produced by the Non-financial corporations, General government and Households sectors. The following sub-industries are the most important according to the value added: manufacture of refined petroleum products (HUF 196 889 million), motor vehicles (HUF 174 048 million) and manufacture of pharmaceutical preparations (HUF 161 255 million). According to the output, the sequence of significance of sub-industries slightly differs, and the most important activities are: manufacture of motor vehicles (HUF 1 149 395 million), manufacture of television and radio receivers, sound or video recording or reproducing apparatus and associated goods (HUF 896 826 million) and manufacture of refined petroleum products (HUF 617 926 million). The share of General government sector in publishing, printing and reproduction of recorded media is significant. For more information about the main data sources used for estimation of output and intermediate consumption see Chapter 3.1.

**Table 3.23 Output, intermediate consumption and gross value added of manufacturing (D)
by branches and sectors, 2002**

Output (million HUF)					
NACE code	Industry	S11	S13	S14	Total
15	Manufacture of food products and beverages	2 065 149	0	24 679	2 089 828
16	Manufacture of tobacco products	86 791	0	0	86 791
17	Manufacture of textiles	217 465	0	10 200	227 665
18	Manufacture of wearing apparel; dressing and dyeing of fur	340 955	0	29 634	370 589
19	Tanning & dressing of leather; manufacture of related articles	127 699	0	4 177	131 876
20	Manufacture of wood & of products made of similar materials excl. furniture	170 536	0	25 932	196 468
21	Manufacture of paper and paper products	216 080	0	832	216 912
22	Publishing, printing and reproduction of recorded media	434 854	1 615	14 337	450 807
23	Manufacture of coke and refined petroleum products	645 964	0	0	645 964
24	Manufacture of chemicals and chemical products	860 321	0	645	860 966
25	Manufacture of rubber and plastic products	505 495	0	6 996	512 491
26	Manufacture of other non-metallic mineral products	391 128	0	8 789	399 917
27	Manufacture of basic metals	462 250	0	741	462 991
28	Manufacture of fabricated metal products, except machinery and equipment	554 827	0	45 707	600 534
29	Manufacture of machinery and equipment n.e.c.	751 485	0	31 081	782 566
30	Manufacture of office, accounting and computing machinery	462 418	0	485	462 903
31	Manufacture of electrical machinery and apparatus n.e.c.	1 373 535	0	4 522	1 378 057
32	Manufacture of radio, TV and communication equipment and apparatus	1 447 604	0	6 187	1 453 791
33	Manufacture of medical, precision and optical instruments, watches and clocks	142 427	0	15 497	157 924
34	Manufacture of motor-vehicles, trailers and semi trailers	1 655 339	0	590	1 655 929
35	Manufacture of other transport equipment	90 792	0	1 188	91 980
36	Manufacture of furniture; manufacturing n.e.c.	170 409	0	30 654	201 063
37	Recycling	18 585	0	1 374	19 959
Total (D)		13 192 108	1 615	264 247	13 457 970

Intermediate consumption (million HUF)					
NACE code	Industry	S11	S13	S14	Total
15	Manufacture of food products and beverages	1 591 823	0	10 777	1 602 600
16	Manufacture of tobacco products	50 505	0	0	50 505
17	Manufacture of textiles	168 997	0	4 273	173 270
18	Manufacture of wearing apparel; dressing and dyeing of fur	258 761	0	13 289	272 050
19	Tanning & dressing of leather; manufacture of related articles	97 301	0	1 823	99 124
20	Manufacture of wood & of products made of similar materials excl. furniture	127 741	0	11 723	139 464
21	Manufacture of paper and paper products	157 225	0	374	157 599
22	Publishing, printing and reproduction of recorded media	307 013	1 091	6 476	314 580
23	Manufacture of coke and refined petroleum products	450 707	0	0	450 707
24	Manufacture of chemicals and chemical products	558 921	0	284	559 205
25	Manufacture of rubber and plastic products	370 299	0	3 125	373 424
26	Manufacture of other non-metallic mineral products	248 942	0	3 565	252 507
27	Manufacture of basic metals	400 308	0	312	400 620
28	Manufacture of fabricated metal products, except machinery and equipment	381 963	0	20 003	401 966
29	Manufacture of machinery and equipment n.e.c.	545 404	0	13 372	558 776
30	Manufacture of office, accounting and computing machinery	431 450	0	204	431 654
31	Manufacture of electrical machinery and apparatus n.e.c.	1 111 762	0	1 904	1 113 666
32	Manufacture of radio, TV. and communication equipment and apparatus	1 262 718	0	2 535	1 265 253
33	Manufacture of medical, precision and optical instruments, watches and clocks	86 358	0	6 000	92 358
34	Manufacture of motor-vehicles, trailers and semi trailers	1 353 867	0	246	1 354 113
35	Manufacture of other transport equipment	63 464	0	509	63 973
36	Manufacture of furniture; manufacturing n.e.c.	120 269	0	13 742	134 011
37	Recycling	15 617	0	579	16 196
Total (D)		10 161 415	1 091	115 115	10 277 621

Gross value added (million HUF)						
NACE code	Industry	S11	S13	S14	Total	GVA%
15	Manufacture of food products and beverages	473 326	0	13 902	487 228	3.3
16	Manufacture of tobacco products	36 286	0	0	36 286	0.2
17	Manufacture of textiles	48 468	0	5 927	54 395	0.4
18	Manufacture of wearing apparel; dressing and dyeing of fur	82 194	0	16 345	98 539	0.7
19	Tanning & dressing of leather; manufacture of related articles	30 398	0	2 354	32 752	0.2
20	Manufacture of wood & of products made of similar materials excl. furniture	42 795	0	14 209	57 004	0.4
21	Manufacture of paper and paper products	58 855	0	458	59 313	0.4
22	Publishing, printing and reproduction of recorded media	127 841	524	7 861	136 226	0,9
23	Manufacture of coke and refined petroleum products	195 257	0	0	195 257	1.3
24	Manufacture of chemicals and chemical products	301 400	0	361	301 761	2.0
25	Manufacture of rubber and plastic products	135 196	0	3 871	139 067	0.9
26	Manufacture of other non-metallic mineral products	142 186	0	5 224	147 410	1.0
27	Manufacture of basic metals	61 942	0	429	62 371	0.4
28	Manufacture of fabricated metal products, except machinery and equipment	172 864	0	25 704	198 568	1.3
29	Manufacture of machinery and equipment n.e.c.	206 081	0	17 709	223 790	1.5
30	Manufacture of office, accounting and computing machinery	30 968	0	281	31 249	0.2
31	Manufacture of electrical machinery and apparatus n.e.c.	261 773	0	2 618	264 391	1.8
32	Manufacture of radio, TV. and communication equipment and apparatus	184 886	0	3 652	188 538	1.3
33	Manufacture of medical, precision and optical instruments, watches and clocks	56 069	0	9 497	65 566	0.4
34	Manufacture of motor-vehicles, trailers and semi trailers	301 472	0	344	302 314	2.0
35	Manufacture of other transport equipment	27 328	0	679	28 007	0.2
36	Manufacture of furniture; manufacturing n.e.c.	50 140	0	16 912	67 052	0.5
37	Recycling	2 968	0	795	3 763	0.0
Total (D)		3 030 693	524	149 132	3 180 349	21.4

Table 3.24 Calculation of gross value added of manufacturing (D), 2002 (million HUF)

Table 3.24	Net sales	Owned production capitalised	Production	Material costs	Costs of contracted services	Costs of other services	Goods purchased for resale	Value of services purchased for resale	Material type costs	Difference
S11										
2	14 399 262	59 380	14 458 642	7 453 550	1 626 831	117 739	1 523 388	294 872	11 016 380	3 442 262
3	113 687		113 687	50 229	14 962	1 356	16 689		83 236	30 451
5	39 409	312	39 721	15 465	6 041	208	9 648	972	32 334	7 387
6	144 392	206	144 598	101 477	14 195	1 307	7 372	920	125 271	19 327
7	7 281	14	7 295						3 049	4 246
Total			14 763 943						11 260 270	3 503 673
			Output P1						Intermediate consumption P2	Gross value added B1g
a) goods purch. for resale			-1 557 097						-1 557 097	0
b) services p. for resale										0
c) items modifying basic prices			-569 264							-569 264
d) social welfare services			8 595							8 595
e) own product given to empl.			329							329
f) exploration cost			10 950							10 950
h) rents on land									-612	612
i) insurance premium corr									-17 016	17 016
j) cost reimbursement									761	-761
k) purchased goods to empl.									-1 760	1 760
l) use of cars for personal purposes									-9 467	9 467

Calculation of gross value added of manufacturing (D), 2002 (cont.) (million HUF)

			Output P1					Intermediate consumption P2	Gross value added B1g
Adjustments								14 899	-14 899
m) assets of small value									
n) exhaustiv. 2			36 654						36 654
o) exhaustiv. 3								-23 054	23 054
q) processing work			738 364					738 364	0
t) ad hoc			-313 711					-305 706	-8 005
Total adjustments			-1 645 180					-1 160 688	-484 492
Terminated or transformed c			98 393					69 380	29 013
Missing comp.			39 849					30 413	9 436
Total			138 242					99 793	38 449
Re-classification of companies									0
Outward processing			-85 737					-85 737	0
Agricultural grossing up			20 840					20 840	0
									0
FISIM allocation								26 937	-26 937
Total modification			-64 897					-37 960	-26 937
S 11 Total			13 192 108					10 161 415	3 030 693
S 13			1 615					1 091	524
S 14			264 247					115 115	149 132
D total			13 457 971					10 277 621	3 180 349

3.11. Electricity, gas and water supply (E)

255. In 2002, the gross value added of electricity, gas and water supply amounted to HUF 433 823 million, 2.9% of gross value added of all industries. Only non-financial corporations were involved in electricity, gas and water supply in 2002. For more information about the main data sources used for estimation of output and intermediate consumption see Chapter 3.1.

Table 3.25 Output, intermediate consumption and gross value added of electricity, gas and water supply (E) by branches and sectors, 2002 (million HUF)

Output			
NACE code	Industry	S11	Total
40	Electricity, gas, steam and hot water supply	1 072 615	1 072 615
41	Collection, purification and distribution of water	130 578	130 578
Total (E)		1 203 193	1 203 193

Intermediate consumption			
NACE code	Industry	S11	Total
40	Electricity, gas, steam and hot water supply	705 581	705 581
41	Collection, purification and distribution of water	63 789	63 789
Total (E)		769 370	769 370

Gross value added				
NACE code	Industry	S11	Total	GVA%
40	Electricity, gas, steam and hot water supply	367 034	367 034	2.5
41	Collection, purification and distribution of water	66 789	66 789	0.5
Total (E)		433 823	433 823	2.9

Table 3.26 Calculation of gross value added of electricity, gas and water supply (E), 2002 (million HUF)

Table 3.26	Net sales	Owned production capitalised	Production	Material costs	Costs of contracted services	Costs of other services	Goods purchased for resale	Value of services purchased for resale	Material type costs	Difference
S11										
2	1 997 764	39 741	2 037 505	312 166	153 638	17 227	1 079 643	14 386	1 577 061	460 444
3	662		662	215	126	19	71		431	231
6	142	-4	137	26	29	9		12	76	61
7	61	0	61						20	41
Összesen			2 038 365	483 032					1 577 588	460 777
			Output P1						Intermediate consumption P2	Gross value added B1g
a) goods purch. for resale			-1 079 714						-1 079 714	0
b) services p. for resale			-14 398						-14 398	0
c) items modifying basic prices			-29 556							-29 556
d) social welfare services			2 662							2 662
e) own product given to empl.			222							222
f) exploration cost										0
h) rents on land									-987	987
i) insurance premium corr									-3 252	3 252
j) cost reimbursement									476	-476
k) purchased goods to empl.									-853	853
l) use of cars for personal purposes									-577	577
m) assets of small value									9 189	-9 189

Calculation of gross value added of electricity, gas and water supply (E), 2002 (cont.) (million HUF)

			Output P1						Intermediate consumption P2	Gross value added B1g
Adjustments			5 114							5 114
n) exhaustiv. 2										
o) exhaustiv. 3								-110		110
q) processing work			2					2		0
s) gas supply			275 700					275 700		
t) ad hoc			-1 131					-1 130		-1
Total adjustments			-841 099					-815 654		-25 445
Terminated or transformed c			3 291					2 082		1 209
Missing comp.			86					55		31
Non profit institution			2 550					1 715		835
Total			5 927					3 852		2 075
Re-classification of companies										0
Outward processing										0
Agricultural grossing up										0
FISIM allocation								3 584		-3 584
Total modification			0					3 584		-3 584
S 11 Total			1 203 193					769 370		433 823
E total			1 203 193					769 370		433 823

3.12. Construction (F)

256. Value added of construction amounted to HUF 774 349 million in 2002, which represented 5.2% of the total value added of industries. It was produced by the Non-financial corporations, General government and Households sectors. The share of Households sector was quite high because of the important substantial of own account construction and renovation of dwellings in Hungary. For more information about the main data sources used for estimation of output and intermediate consumption see Chapter 7.

Table 3.27 Output, intermediate consumption and gross value added of construction (F) by sectors, 2002 (million HUF)

Output					
NACE code	Industry	S11	S13	S14	Total
45	Construction	1 517 057	9 391	460 145	1 986 593
Total (F)		1 517 057	9 391	460 145	1 986 593

Intermediate consumption					
NACE code	Industry	S11	S13	S14	Total
45	Construction	1 021 525	5 859	184 860	1 212 244
Total (F)		1 021 525	5 859	184 860	1 212 244

Gross value added						
NACE code	Industry	S11	S13	S14	Total	GVA%
45	Construction	495 532	3 532	275 285	774 349	5,2
Total (F)		495 532	3 532	275 285	774 349	5,2

257. In the Business statistics there is a special annual questionnaire for the structure of construction industry by type of structure groups. The main group was Highways, streets and roads in 2002.

258. Products of construction are usually non-standard products; there are complex business arrangements between firms (for example involving extensive circle of sub-contracting).

259. In Hungary, the value of subcontracting reached 40 % of the total costs in construction in 2002.

260. The labour contracts are often atypical, they may be short-term, part-time, or informal. The reported data contain mainly the official, registered jobs.

261. The recommendations of the GNP Committee Task Force on Construction (CPNB 202) related to exhaustiveness have not been applied, yet.

262. In spite of the difficulties, some of the recommendations are included in our methodology, these are:

Taking into account the complexity of measuring the construction activity, other sources are used as well: the business register is intensely used for checking the reliability of data for NACE 45 activity. For calculating the output of the own-account construction of the Households sector, additional administrative data sources - the permit system of the local governments – are used.

263. Some recommendations are studied nowadays in order to take account specific calculations:

- to make estimations on the basis of the Supply and Use framework,
- to compare aggregates of LFS estimations of employment with registered employment;

- to apply at least 2 different data sources for estimations
- to use natural supply and demand balances of building materials, such as bricks or cement to validate construction output and adjust for any under-coverage of register-based surveys
- special questions in case of foreign trade

Table 3.28 Calculation of gross value added of construction (F), 2002 (million HUF)

Table 3.28	Net sales	Owned production capitalised	Production	Material costs	Costs of contracted services	Costs of other services	Goods purchased for resale	Value of services purchased for resale	Material type costs	Difference
S11										
2	2 237 371	17 201	2 254 572	527 005	331 260	41 684	116 253	823 868	1 840 070	414 502
3	103 477		103 477	54 850	15 084	1 659	8 872	0	80 465	23 012
4			17	0	4	0			4	13
5	350	0	350	0	87	1	222	6	316	34
6	133 915	547	134 462	29 483	18 844	841	1 279	63 554	114 001	20 461
7	3 777	1	3 778						1 276	2 502
Összesen			2 496 656						2 036 132	460 524
			Output P1						Intermediate consumption P2	Gross value added B1g
a) goods purch. for resale			-126 625						-126 625	0
b) services p. for resale			-887 427						-887 427	0
c) items modifying basic prices			-12 248							-12 248
d) social welfare services			362							362
e) own product given to empl.			28							28
f) exploration cost										0
h) rents on land									-35	35
i) insurance premium corr									-4 980	4 980
j) cost reimbursement									273	-273
k) purchased goods to empl.									-117	117
l) use of cars for personal purposes									-1 938	1 938
m) assets of small value									6 538	-6 538

Calculation of gross value added of construction (F), 2002 (cont.) (million HUF)

			Output P1						Intermediate consumption P2	Gross value added B1g
Adjustments			21 478							21 478
n) exhaustiv. 2										
o) exhaustiv. 3									-27 260	27 260
q) processing work			1 229						1 229	0
t) ad hoc			-14						-2	-12
Total adjustments			-1 003 217						-1 040 344	37 127
Terminated or transformed c			10 851						7 135	3 716
Missing comp.			12 767						9 176	3 591
Total			23 618						16 311	7 307
Re-classification of companies										0
Outward processing										0
Agricultural grossing up										0
FISIM allocation									9 426	-9 426
Total modification			0						9 426	-9 426
S 11 Total			1 517 057						1 021 525	495 532
S 13			9 391						5 859	3 532
S 14			460 145						184 860	275 285
F total			1 986 593						1 212 244	774 349

3.12.1. Own account construction and renovation of dwellings

264. Own account construction and renovation of dwellings covers investments performed by households privately and for own final use. This unregistered activity is very significant in Hungary, it is about 1/3 part of the total dwelling construction and come out at 13.5% of the total GVA in F industry.

265. Data sources:

- questionnaire of the National Statistical Data Collection Programme entitled „Detailed data on the final take-over of dwellings” (1078/01 OSAP) The process data are published on the Yearbook of Dwelling Statistics.
- Dwelling Conditions 1999., a special, stratified sample survey, which covered about 0,2% of the total dwelling stock. In the future it will be carried out in every third year.
- Dwelling construction cost model elaborated in 1999 and updated quarterly by the Dwelling statisticians in the Social Statistics Department of HCSO.

266. The gross output is considered as a value of own work contributed to privately built or renovated dwellings.

267. Quantity data of own account construction are obtained from the Dwelling Statistics Yearbook, where data can be differentiated by contractors.

268. The total floor space of the privately built dwellings is equal the average floor space multiplied by the number of new dwellings.

269. The value of own work /m² calculated on the basis of the Dwelling construction cost model. The bases of the model calculations were 28 types of dwelling models considering different dwelling types, the places of construction and the qualities of dwellings. The detailed methodology of the model is written in the Chapter GFCF of the Household sector (5.12.3.3.).

270. Bill's of quantities were examined by 6 different type of model costs considering that the own account dwelling constructions are mainly single family houses built in small towns or villages.

271. The calculated costs of each dwelling type is included both the building material cost and the labour cost. In case of the own account construction the building material costs were deducted totally and only the unskilled labour costs were taken into account

272. The value of annual renovations, major repairs, extensions of dwellings carried out by households are estimated from the data based on the Survey of dwelling conditions. Questions of this survey related to the type and costs of investments executed on existing dwellings in the time interval 1990-1999. In the questionnaire the own account works could be separated from those were made by the contractor, maintenance work was separated from major repairs according to the needs of National Accounts. Data are updated quarterly and yearly applying by the construction cost index.

273. In the case of unregistered construction activity of households the rate of Intermediate consumption/Gross output is lower than calculated in the non-financial corporate sector, taking into consideration that the materials for unskilled work are cheaper than those are necessary for professional work.

3.13. Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods (G)

274. Value added of wholesale and retail trade services amounted to HUF 1 715 250 million in 2002, which represented 11.6% of the total value added of all industries. It was produced by the Non-financial corporations, General government and Households sectors.

Table 3.29 Output, intermediate consumption and gross value added of wholesale and retail trade services (G) by branches and sectors, 2002 (million HUF)

Output					
NACE code	Industry	S11	S13	S14	Total
50	Sale, maintenance & repair of motor-vehicles, etc.; retail sale of automotive fuel	500 948	0	58 485	559 433
51	Wholesale trade and commission trade, except of motor-vehicles, etc.	1 655 413	0	25 337	1 680 750
52	Retail trade, except of motor-veh. etc.; repair of personal & hh. goods	831 155	591	606 776	1 438 522
Total (G)		2 987 516	591	690 598	3 678 705

Intermediate consumption					
NACE code	Industry	S11	S13	S14	Total
50	Sale, maintenance & repair of motor-vehicles, etc.; retail sale of automotive fuel	277 296	0	25 186	302 482
51	Wholesale trade and commission trade, except of motor-vehicles, etc.	952 328	0	10 136	962 464
52	Retail trade, except of motor-veh. etc.; repair of personal & hh. goods	452 857	557	245 095	698 509
Total (G)		1 671 957	557	280 417	1 963 455

Gross value added						
NACE code	Industry	S11	S13	S14	Total	GVA %
50	Sale, maintenance & repair of motor-vehicles, etc.; retail sale of automotive fuel	223 652	0	33 299	256 951	1.7
51	Wholesale trade and commission trade, except of motor-vehicles, etc.	703 085	0	15 201	718 286	4.8
52	Retail trade, except of motor-veh. etc.; repair of personal & hh. goods	378 298	34	361 681	740 013	5.0
Total (G)		1 305 035	34	410 181	1 715 250	11.6

275. Output of wholesale and retail trade services is measured in Hungarian NA by trade margin according to ESA95 concepts. Product specific data collection is not available regarding trade margins but quite detailed data are available about trade activities and sales (CPA categories at six-digit level).

276. Net sales are adjusted with costs of goods purchased for resale and value of services purchased for resale. No adjustments are made for holding gains, so far.

277. The recommendations of GNP Committee related to exhaustiveness have not been continuously applied, yet.

Table 3.30 Calculation of gross value added of wholesale and retail trade services (G), 2002 (million HUF)

Table 3.30	Net sales	Owned production capitalised	Production	Material costs	Costs of contracted services	Costs of other services	Goods purchased for resale	Value of services purchased for resale	Material type costs	Difference
S11										
2	13 269 360	15 374	13 284 734	451 239	915 577	101 017	10 247 707	232 705	11 948 245	1 336 489
3	299 548		299 548	54 136	23 274	2 533	184 097		264 041	35 508
4			50 895	1 550	41 650	513			43 713	7 182
5	10 149	-9	10 139	827	672	49	6 832	658	9 039	1 100
6	78 304	-44	78 260	3 876	5 358	1 225	57 764	1 996	70 219	8 041
7	8 796	3	8 799						2 134	6 665
Összesen			13 732 376						12 337 391	1 394 985
			Output P1						Intermediate consumption P2	Gross value added B1g
Adjustments										
a) goods purch. for resale			-10 496 400						-10 496 400	0
b) services p. for resale			-235 360						-235 360	0
c) items modifying basic prices			-180 965							-180 965
d) own social welfare services			1 428							1 428
e) own product given to empl.			101							101
f) exploration cost			14							14
h) rents on land									-482	482
i) insurance premium corr									-13 615	13 615
j) cost reimbursement									917	-917
k) purchased goods to empl.									-510	510
l) use of cars for personal purposes									-10 042	10 042

Calculation of gross value added of wholesale and retail trade services (G), 2002 (cont.) (million HUF)

			Output P1						Intermediate consumption P2	Gross value added B1g
Adjustments										
m) assets of small value									22 340	-22 340
n) exhaustiv. 2			53 243							53 243
o) exhaustiv. 3									-31 950	31 950
q) processing work			18 057						18 057	0
t) ad hoc			-77						30	-107
Total adjustments			-10 839 959						-10 747 015	-92 944
Terminated or transformed c			65 083						41 554	23 529
Missing comp.			25 242						19 982	5 260
Total			90 325						61 536	28 789
Re-classification of companies										0
Outward processing			-338						-338	0
Agricultural grossing up			5 112						5 112	0
FISIM allocation									25 795	-25 795
Total modification			4 774						30 569	-25 795
S 11 Total			2 987 516						1 682 481	1 305 035
S 13			591						557	34
S 14			690 598						280 417	410 181
G total			3 678 705						1 963 455	1 715 250

3.14. Hotels and restaurants (H)

278. In 2002, the gross value added of hotels and restaurants amounted to HUF 259 953 million, which represented 1.8% of the total value added of all industries. It was generated by the Non-financial corporations, General government and Households sectors. For more information about the main data sources used for estimation of output and intermediate consumption see Chapter 3.3.4.

Table 3.31 Output, intermediate consumption and gross value added of hotels and restaurants (H) by sectors, 2002

Output (million HUF)					
NACE code	Industry	S11	S13	S14	Total
55	Hotels and restaurants	348 775	76 285	183 224	608 284
Total (H)		348 775	76 285	183 224	608 284

Intermediate consumption (million HUF)					
NACE code	Industry	S11	S13	S14	Total
55	Hotels and restaurants	215 191	55 495	77 645	348 331
Total (H)		215 191	55 495	77 645	348 331

Gross value added (million HUF)						
NACE code	Industry	S11	S13	S14	Total	GVA%
55	Hotels and restaurants	133 584	20 790	105 579	259 953	1,8
Total (H)		133 584	20 790	105 579	259 953	1,8

279. According to ESA95 (paragraph 3.61), the output and IC contains the value of foods and beverages consumed. In business accounting, these are mainly reflected in goods purchased for resale, which are subtracted from net sales when output is calculated. In order to adapt ESA95 regulations, we increased output and IC by the estimated value of food and beverages consumed in case of the substantial activities.

280. For exhaustive calculations output was increased by the estimated value of tips. The basic source to estimate the volume of tips was a household survey conducted in 1997 by HCSO. Adjustment was made in two industries: 5530 "Restaurants" and 5540 "Bars".

281. The recommendations of GNP Committee related to exhaustiveness have not been continuously applied, yet.

**Table 3.32 Calculation of gross value added of hotels and restaurants (H), 2002
(million HUF)**

Table 3.32	Net sales	Owned production capitalised	Production	Material costs	Costs of contracted services	Costs of other services	Goods purchased for resale	Value of services purchased for resale	Material type costs	Difference
S11										
2	341 122	1 354	342 476	75 478	72 847	7 861	62 213	13 001	231 400	111 076
3	39 178		39 178	9 437	4 838	547	16 903	0	31 726	7 452
6	3 727	14	3 741	663	672	52	732	53	2 173	1 568
7	497	0	497						182	315
Összesen			385 892						265 480	120 412
			Output P1						Intermediate consumption P2	Gross value added B1g
a) goods purch. for resale			-79 848						-79 848	0
b) services p. for resale			-13 054						-13 054	0
c) items modifying basic prices			-3 906							-3 906
d) social welfare services			133							133
e) own product given to empl.			36							36
f) exploration cost										0
h) rents on land									-5	5
i) insurance premium corr									-956	956
j) cost reimbursement									42	-42
k) purchased goods to empl.									-30	30
l) use of cars for personal purposes									-355	355
m) assets of small value									4 010	-4 010
n) exhaustiv. 2			3 737							3 737
o) exhaustiv. 3									-4 958	4 958

Calculation of gross value added of hotels and restaurants (H), 2002 (cont.) (million HUF)

			Output P1						Intermediate consumption P2	Gross value added B1g
Adjustments			9 475							
p) tips										
q) processing work			147						147	0
r) foods and beverages			39 219						39 219	0
t) ad hoc			-66						8	-74
Total adjustments			-44 127						-55 780	11 653
Terminated or transformed c			5 609						2 598	3 011
Missing comp.			1 389						1 056	333
Total			6 998						3 654	3 344
Re-classification of companies										0
Outward processing										0
Agricultural grossing up			12						12	0
FISIM allocation									1 825	-1 825
Total modification			12						1 837	-1 825
S 11 Total			348 775						215 191	133 584
S 13			76 285						55 495	20 790
S 14			183 224						77 645	105 579
H total			608 284						348 331	259 953

3.14.1. Private accommodation activity of households

282. In Hungary, several households are involved in letting rooms, apartments and houses to tourists. This private accommodation activity is classified as H 5523 "Other provisions of lodgings" in NACE.

283. The main source of data is the questionnaire of the National Statistical Data Collection program (OSAP 1761/00) titled "Report on private accommodations". Local governments are obliged to complete this questionnaire twice a year on the basis of the compulsory registration of the private accommodation providers (the hosts).

284. Terms of this questionnaire:

Private accommodation: based on Governmental regulation No. 110/1997. (25 June), letting of flats, holiday houses, other kind buildings or parts of them (and also rooms and places which come under) for tourism (business) purposes for guests are recorded as private accommodation activity, when there are not more than 10 beds or 5 rooms available.

According to the Governmental regulation No. 110/1997 (25 June) rented *private room service* is private accommodation service provided in towns and selected holiday regions.

Rural room service is the private accommodation service provided in settlements n.e.c. as well as in farm regions.

285. These reports include data on the number of foreign and domestic tourist arrivals and tourism nights. There are also questions on capacity data, such as the number of rooms, beds and the number of hosts regarding both the rural room service and the private room service, but contains no information on the accommodation fees. Although the registration is compulsory for the hosts, the official data (45 000 hosts) show probably only 1/5 of the actual ones according to some expert assumptions.

286. The National Tourist Agency has information on tourist nights and on receipts of the registered ones, and the ratio of the unregistered letting rooms could be 50% according to their estimates. Incomes from these activities should be declared in the personal tax returns, but tax evasion is actually significant in this area. Taking the above mentioned sources as a basis, the value of private accommodation services is determined with expert estimations, since a significant proportion of these services compose a part of the NOE (Non-observed economy).

287. Intermediate consumption is calculated by means of IC/GO ratio of non-financial corporations classified in this branch, assuming that the ratio in the Households sector is smaller than in the case of corporations. The gross value added of households' private accommodation activity was HUF 23.6 billion in 2002, constituting 8.9% of the GVA in industry H.

3.15. Transport, storage and communication (I)

288. In 2002, the gross value added of transport, storage and communication was HUF 1 184 458 million constituting 8.0% of the total value added of all industries. It was produced by the Non-financial corporations, General government and Households sectors. Land transport with HUF 472 062 million and telecommunication with HUF 442 052 million have the most importance. The estimates of storage services include storage on behalf of other enterprises carried out by enterprises with storage main activity. Physical changes (e.g. wine maturation) of goods during storage are not taken into account in this industry, as the recording is not made according to local KAUs, only enterprises dealing with storage as main activity are included. However this item (i.e. physical changes of goods) is of small importance in Hungary.

289. For exhaustive calculations output was increased by the estimated value of tips. The basic source to estimate the volume of tips was a household survey conducted in 1997 by HCSO. The adjustment was made in the class 6022 "Taxi operation".

Table 3.33 Output, intermediate consumption and gross value added of transport, storage and communication (I) by branches and sectors, 2002 (million HUF)

Output					
NACE code	Industry	S11	S13	S14	Total
60	Land transport; transport via pipelines	785 719	96	187 960	973 775
61	Water transport	12 497	68	160	12 725
62	Air transport	109 846	0	189	110 035
63	Supporting and auxiliary transport activities; activities of travel agencies	250 079	51 091	13 170	314 340
64	Post and telecommunications	815 448	664	8 460	824 572
Total (I)		1 973 589	51 919	209 939	2 235 447

Intermediate consumption					
NACE code	Industry	S11	S13	S14	Total
60	Land transport; transport via pipelines	418 973	84	82 656	501 713
61	Water transport	8 303	32	68	8 403
62	Air transport	90 555	0	87	90 642
63	Supporting and auxiliary transport activities; activities of travel agencies	126 147	27 004	5 192	158 343
64	Post and telecommunications	288 077	494	3 317	291 888
Total (I)		932 055	27 614	91 320	1 050 989

Gross value added						
NACE code	Industry	S11	S13	S14	Total	GVA %
60	Land transport; transport via pipelines	366 746	12	105 304	472 062	3.2
61	Water transport	4 194	36	92	4 322	0.0
62	Air transport	19 291	0	102	19 393	0.1
63	Supporting and auxiliary transport activities; activities of travel agencies	123 932	24 087	7 978	155 997	1.1
64	Post and telecommunications	527 371	170	5 143	532 684	3.6
Total (I)		1 041 534	24 305	118 619	1 184 458	8.0

Table 3.34 Calculation of gross value added of transport, storage and communication (I), 2002 (million HUF)

Table 3.34	Net sales	Owned production capitalised	Production	Material costs	Costs of contracted services	Costs of other services	Goods purchased for resale	Value of services purchased for resale	Material type costs	Difference
S11										
2	2 704 568	35 464	2 740 032	289 963	521 541	57 200	215 155	661 340	1 745 199	994 833
3	44 536		44 536	19 576	6 729	1 157	4 439		31 901	12 635
4			1 190	548	579	22			1 149	41
5	14 857	0	14 857	82	931	1 262	10 310	717	13 302	1 555
6	7 332	23	7 355	1 724	1 697	116	497	2 700	6 734	622
7	1 609	0	1 609						706	903
Összesen			2 809 579						1 798 990	1 010 589
			Output P1						Intermediate consumption P2	Gross value added B1g
a) goods purch. for resale			-230 401						-230 401	0
b) services p. for resale			-664 757						-664 757	0
c) items modifying basic prices			-15 554							-15 554
d) social welfare services			7 271							7 271
e) own product given to empl.			243							243
f) exploration cost			11							11
h) rents on land									-340	340
i) insurance premium corr									-9 724	9 724
j) cost reimbursement									2 055	-2 055
k) purchased goods to empl.									-186	186

Calculation of gross value added of transport, storage and communication (I), 2002 (cont.) (million HUF)

			Output P1						Intermediate consumption P2	Gross value added B1g
l) use of cars for personal purposes									-2 156	2 156
m) assets of small value									7 693	-7 693
n) exhaustiv. 2			11 590							11 590
o) exhaustiv. 3									-9 118	9 118
p) tips			283							
q) processing work			280						280	0
t) ad hoc			-8						3	-11
Total adjustments			-891 042						-906 651	15 609
Terminated or transformed c			21 867						12 267	9 600
Missing comp.			7 496						5 905	1 591
Non profit			25 700						12 524	13 176
Total			55 063						30 696	24 367
Re-classification of companies										0
Outward processing			-20						-20	0
Agricultural grossing up			9						9	0
										0
FISIM allocation									9 031	-9 031
Total modification			-11						9 020	-9 031
S 11 Total			1 973 589						932 055	1 041 534
S 13			51 919						27 614	24 305
S 14			209 939						91 320	118 619
I total			2 235 447						1 050 989	1 184 458

3.16. Financial intermediation (J)

290. In 2002, the gross value added of financial intermediation (J) amounted to HUF 559 162 million. It represented 3.8% of the total value added of all industries. It was produced mainly by the Financial corporations sector. Production of the Households sector related to activities auxiliary to financial intermediation.

Table 3.35 Gross output, intermediate consumption and gross value added of financial intermediation (J) by branches and sectors, 2002 (million HUF)

Gross output				
NACE code	Industry	S12	S14	Total
65	Financial intermediation, except insurance and pension funding	672 450	0	672 450
66	Insurance and pension funding, except compulsory social security	233 693	0	233 693
67	Activities auxiliary to financial intermediation	74 118	115 894	190 012
Total (J)		980 261	115 894	1 096 155

Intermediate consumption				
NACE code	Industry	S12	S14	Total
65	Financial intermediation, except insurance and pension funding	304 024	0	304 024
66	Insurance and pension funding, except compulsory social security	142 054	0	142 054
67	Activities auxiliary to financial intermediation	43 187	47 787	90 974
Total (J)		489 265	47 787	537 052

Gross value added					
NACE code	Industry	S12	S14	Total	GVA%
65	Financial intermediation, except insurance and pension funding	368 426	0	368 426	2.5
66	Insurance and pension funding, except compulsory social security	91 639	0	91 639	0.6
67	Activities auxiliary to financial intermediation	30 931	68 107	99 038	0.7
Total (J)		490 996	68 107	559 103	3.8

3.16.1. Financial enterprises

291. 65.11 Central banking

This includes the National Bank of Hungary.

65.12 Other monetary intermediation

This sub-sector consists of deposit-collecting financial institutions.

With the exception of the central bank, the subcategory includes banks, specialised credit institutions, credit co-operatives and money market funds from the category of mutual funds.

65.2 Other financial intermediation

This subcategory contains financial intermediaries which do not collect deposits, but raise, as core activity, significant amount of other funds to place them in the money and capital markets. At present this sub-category contains the majority of financial enterprises, financial leasing companies, mutual funds with the exception of the money market funds, investment fund management companies,

venture capital companies and funds as well as security investment companies and security brokerage firms from the investment enterprises.

66 Insurance and pension funding, except compulsory social security

The subcategory contains insurance companies and insurance associations, private pension funds, voluntary mutual pension health funds and income-replacement funds.

67 Activities auxiliary to financial intermediation

This subcategory contains institutions with a core activity of an auxiliary financial service closely related to some financial intermediation activity. However, these institutions do not raise a considerable amount of funds, but establish relations between lenders and borrowers without significantly affecting their balance sheet. It also contains financial institutions that guarantee the safety of financial intermediation as their core activity.

Out of the investment enterprises, this subcategory contains security agents, stock exchanges, clearing houses, deposit insurance, institution protection and investment protection funds, other institutions engaged in financial auxiliary activities and enterprises engaged in insurance auxiliary activities.

3.16.2. Calculation method

3.16.2.1. Central banking (NACE 65.11)

292. NACE 65.11 contains only the National Bank of Hungary. The output and intermediate consumption of the central bank is recorded on the basis of the NBH aggregate profit and loss account under the National Statistical Data Collection Programme (Hungarian abbreviated form OSAP) and on the statement of operating expenditure.

Output

293. The output of the National Bank of Hungary is recorded as expenditure under Article 3.63 (c) of 2223/96 Council Regulation extended on the basis of 448/98 Council Regulation.

The calculation method was the following:

The total value of P.2 Intermediate consumption, K.1 Consumption of fixed capital, D.1 Compensation of employees, P.15 Imputed value of welfare services and P.16 Imputed value of own-produced services transferred to employees was treated as output of the Central Bank.

Output P.1 = P.2+K.1+D.1+P.15+P.16

Table 3.36 Output of Central Bank, million HUF

P.2	Intermediate consumption		10 356
K.1	Consumption of fixed capital	detailed profit and loss account of National Bank	1 865
D.1	Compensation of employees	detailed profit and loss account of National Bank	9 212
P.15	Imputed value of welfare services	Declaration of the liabilities towards the budget	57
P.16	Imputed value of own-produced services transferred to employees	Declaration of the liabilities towards the budget	63
P.1	Output	P.2+K.1+D.1+P.15+P.16	21 433

Intermediate consumption

294. Intermediate consumption covers material expenses, services used, other services, expenses related to money circulation, wages and salaries in kind and commission expenses.

Intermediate consumption P.2 = P.21+P.22+P.23+P.24-P.26+P.28

Table 3.37 Intermediate consumption of Central Bank, million HUF

P.21	Material costs	detailed profit and loss account of National Bank	347
P.22	Costs of contracted services	detailed profit and loss account of National Bank	2 643
P.23	Costs of other services	detailed profit and loss account of National Bank	21
P.24	Expenses related to money circulation	profit and loss account of National Bank	3 549
P.26	Wages and salaries in kind	Declaration of the liabilities towards the budget	34
P.28	Commission expenses	profit and loss account of National Bank	3 830
P.2	Intermediate consumption	P.21+P.22+P.23+P.24-P.26+P.28	10 356

3.16.2.2. Other monetary intermediation (NACE 65.12)

295. The account is based on data collected by the Hungarian Financial Supervisory Authority. This authority supervises commercial banks, savings co-operatives and credit co-operatives. The performance of these economic organisations is recorded in S.122 sub-sector under ESA95.

Output

296. Output data were the following in 2002:

Table 3.38 Output of other monetary intermediation, million HUF

P11	Financial activity	P.119+P.112	562 357
P119	FISIM output	own estimation	373 841
P112	Commission revenue and profit/loss of other financial transactions	Profit and loss account of credit institutions	188 516
P12	Profit/loss of other business activities	Profit and loss account of credit institutions	-1 005
P13	Items modifying basic price	Tax declaration	-8 176
P14	Capitalised own performance	Tax declaration	351
P15	Imputed value of welfare services	Tax declaration	484
P16	Imputed value of own-produced services transferred to employees	Tax declaration	3 169
P1	Output	P.11+P.12+P.13+P.14+P.15+P.16	557 180

297. Within the financial activities (P.11) item, it is important to define P.119 FISIM output.

FISIM is the financial intermediation services indirectly measured. It measures the service output of financial enterprises without an explicit fee, as their consideration is contained in the interest.

Total FISIM output of NACE 65 industry was split to various 4 digit level FISIM producing classes as other monetary intermediation, financial leasing and other credit granting based on their original breakdown of output without FISIM.

The changes caused by the implementation of the new methodology are summarised separately in Chapter 9.

In our calculation, holding gains and losses are not taken into account in the gross output of financial intermediation.

The P.112 item contains the total of commission revenues from services and profit/loss of other financial transactions.

Foreign exchange and security dealers' margins realised by financial intermediaries are part of output.

It contains payment and transaction commissions, guarantee, surety and other fees and commissions, proceeds from the sale of investment securities, proceeds from the sale of participations, profit/loss of the sale of purchased receivables and proceeds from futures transactions.

298. The P.12 Other business activities line contains the P.121 Profit/loss of other business, non-financial activities including the profit and loss of non-financial and investment services and other revenues resulting from changes in legislation. This value was negative in 2002, because this kind of expenditures exceeded the income of this kind of activities.

P.13 Items modifying basic price:

Product taxes

299.P.1363 National cultural contribution, the amount of which is taken from the “Declaration of the liabilities towards the budget” tax return forms.

300.P.1365 The local business tax is a product tax payable by financial enterprises with the exception of pension funds and insurance associations. The government statistics contain the local business tax amount of the national economy, of which we take into account an amount estimated for the sector. The local business tax calculated for the J Financial sector is divided in proportion to the output of the individual financial enterprises.

301. In terms of P.14 Capitalised own performance the data reported on the corporate profit tax returns are used.

302. Own-account GFCF shall include the total (consolidated) amount of the capitalized value of own-account assets (shown among assets) in the financial year, and the change in own-produced stocks. The value of own performance effected within the company is shown among assets (tangible assets, intangible assets). Similarly to non-financial enterprises, welfare services (P.15) and own-account services transferred to employees (P.16) are also imputed for other monetary intermediaries.

Intermediate consumption

303. The intermediate consumption of other monetary intermediaries is illustrated in the following table.

Table 3.39 Intermediate consumption of other monetary intermediation, million HUF

P21	Material costs	Tax declaration	14 612
P22	Costs of contracted services	Tax declaration	145 832
P23	Costs of other services	Tax declaration	21 292
P26	Wages and salaries in kind	Tax declaration	4 381
P27	Assets of small value	Tax declaration	1 834
P28	Commission expenses	Profit and loss account of credit institutions	53 992
P.29	Part of output of Central Bank	Profit and loss account of National Bank	18 466
P2	Intermediate consumption	P.21+P.22+P.23-P.26+P.27+P.28+P.29	251 647

304. The P.21 Material costs and P.22 Costs of contracted services derive from the corporate tax declaration.

305. The P.23 Costs of other services contain the items detailed below.

The P.231 Banking expenses are also corporate tax data. They contain those banking costs, which are recorded as fees and commissions. The P.232 Insurance services used is based on P.2321 Insurance premiums paid by enterprises which are corrected according to national account concept. This adjustment is necessary because the premiums paid to the insurance companies by the insured parties

must be divided into two parts: an amount covering the risks and the service fee. This latter amount has to be recorded as intermediate consumption under ESA95.

We do not have any direct data source for P.233 Regulatory fees. The regulatory fees can be calculated by deducting the banking expenses and insurance premium from the total of other services in the tax declaration.

306. The P.26 Wages and salaries in kind contains purchased products and services transferred to employees and the value of services of cars provided for personal use of employees, which are (on the basis of the income tax of 44% paid by the employer) multiplied by the coefficients calculated under Section 4.7.2. It is necessary because these wages and salaries in kind are recorded among the material-type costs in the profit and loss accounts of the companies, but under ESA95 these are purchased products and services transferred to the employees by the employer, but are not necessarily required for the production activities of the employers.

307. Fixed assets, rights, titles and intellectual property are recorded as P.27 Assets of small value, if the purchase or production value of each item is below HUF 50000, as they are expensed straight away, in one lump sum. In case of assets of small value the Hungarian regulation defines a lower threshold which is used in the national accounts, too. The methodological change concerning the increase of the threshold value to 500 EUR is in progress.

308. P.28 contains the commission expenses of credit institutions under ESA95. These are expenses paid by these economic organisations for the financial services of other resident or non-resident economic organisations.

309. P.291 item comprised a part of output of Central Bank according to FISIM regulation, allocated by its original breakdown of its intermediate consumption of NACE 65 without NACE 6511 National Bank.

310. Intermediate consumption P.2 = P.21+P.22+P.23-P.26+P.27+P.28+P.291

3.16.2.3. Other financial intermediation (NACE 65.2)

Output

311. The output of enterprises classified under NACE 65.2 in 2002 is illustrated in the following table:

Table 3.40 Output of other financial intermediation, million HUF

P.119	FISIM output	own estimation	5 518
P12	Other financial activity	P.121-P.122	89 320
P121	Net sales revenues	Tax declaration	272 915
P122	Value of goods purchased for resale	Tax declaration	183 595
P13	Items modifying basic price	Tax declaration	-1 431
P14	Capitalised own performance	Tax declaration	- 1
P15	Imputed value of welfare services	Tax declaration	57
P16	Imputed value of own services services transferred to employees	Tax declaration	374
P1	Output	P.119+P.12+P.13+P.14+P.15+P.16	93 837

312. The other financial intermediaries (financial leasing enterprises, other credits outside the banking system, factoring companies, securities brokerage firms trading on their own accounts, etc.)

are recorded on the basis of the corporate tax declaration of enterprises with double-entry and single-entry bookkeeping.

Accounting in 2002 was the following:

313. Total FISIM output of NACE 65 industry was split to various 4 digit level FISIM producing classes as other monetary intermediation, financial leasing and other credit granting based on their original breakdown of output without FISIM.

FISIM output is recorded for FISIM producers of NACE 65.2 and intermediate consumption for FISIM consumers.

The second component of the output was P.12 Other financial activity. These data can be extracted from the corporate tax declaration. The guidelines for completing corporate tax declarations contain the following definition for the net sales revenues of financial enterprises: interest and interest-type revenues less interest and interest-type expenses increased by revenues of other financial services, revenues of investment services and net sales revenues of non-financial and investment services.

Value of goods purchased for resale in P.122: for enterprises with double-entry bookkeeping the historic (purchase) value of materials and goods purchased and sold without any changes, i.e. the amount calculated as purchase value of goods resold under the provisions of the Accounting Act. For enterprises with single-entry bookkeeping and enterprises keeping their records on cash basis: subject to the Act on personal income tax, the expenditure relating to the purchase of goods in the current year, less the closing inventory balance of the paid stocks, increased by the opening balance of paid stocks. The purchase value of goods resold is also taken from the tax report.

A P.13 Items modifying basic price:

Product taxes

314.P.1363 National cultural contribution: the amount is taken from the “Declaration of the liabilities towards the budget” tax return forms.

315.P.1365 The local business tax is a product tax payable by financial enterprises with the exception of pension funds and insurance associations. The government statistics contain the local business tax amount of the national economy, of which we take into account an amount estimated for the sector. The local business tax calculated for the J Financial sector is divided in proportion to the output of the individual financial enterprises.

316. Under P.14 Capitalised own performance, the data reported on corporate tax declarations are recorded.

317. The output (P.1) is calculated by adding up the items listed above.

$P.1 = P.119 + P.12 + P.13 + P.14 + P.15 + P.16$

Intermediate consumption**Table 3.41 Intermediate consumption of other financial intermediation, million HUF**

P21	Material costs	Tax declaration	1 663
P22	Costs of contracted services	Tax declaration	24 288
P23	Costs of other services	Tax declaration	5 434
P24	Intermediated services	Tax declaration	4 448
P26	Wages and salaries in kind	Tax declaration	690
P27	Assets of small value	Tax declaration	82
P291	Part of output of Central Bank + FISIM consumers	own estimation	2 967
P292	FISIM consumed	FISIM calculation	3 829
P2	Intermediate consumption	P.21+P.22+P.23+P.24- P.26+P.27+ P.291+P.292	42 021

318. P.21 Material costs and P.22 Costs of contracted services used are calculated from the corporate tax declarations.

319. The P.231 Banking expenses are also corporate tax data. The P.232 Insurance services used is based on P.2321 Insurance premiums paid by enterprises which are corrected according to national account concept. This adjustment is necessary because the premiums paid to the insurance companies by the insured parties must be divided into two parts: an amount covering the risks and the service fee. This latter amount has to be recorded as intermediate consumption under ESA95.

320. We do not have any direct data source for P.233 Regulatory fees. The regulatory fees can be calculated by deducting the banking expenses and insurance premium from the total of other services in the corporate tax declarations.

321. P.24 Intermediated services item is the value of services purchased for resale (intermediated), which includes the original costs of goods and services purchased and sold in an unaltered state at the time of sale.

322. P.26 Expenses classified as in-kind wages consist of two components:

P.261 Purchased products and services transferred to employees and

P.262 Value of services of cars provided for the personal use of employees.

323. The P.26 item Wages and salaries in kind contains purchased products and services transferred to employees and the value of services of cars provided for personal use of employees, which are (on the basis 44% of the personal income tax paid by the employer) multiplied by the coefficients calculated under section 4.7.2. It is necessary because these wages and salaries in kind are recorded among the material-type expenses in the profit and loss accounts of the companies, but under ESA95 these are purchased products and services transferred to the employees by the employer, but are not necessarily required for the production activities of the employers.

324. Fixed assets, rights, titles and intellectual property are recorded as P.27 Assets of small value, if the purchase or production value of each item is below HUF 50000, as they are expensed straight away, in one lump sum. In case of assets of small value the Hungarian regulation defines a lower threshold which is used in the national accounts, too. The methodological change concerning the increase of the threshold value to 500 EUR is in progress.

325. The P.291 item comprises proportional part of output of Central Bank and P.292 item FISIM treated as intermediate consumption of FISIM consumers.

Intermediate consumption P.2 = P.21+P.22+P.23+P.24-P.26+P.27+P.291+P.292

3.16.3. Insurance

326. The organizations engaged in insurance are classified under sub-sector S.125 “Insurance companies and pension funds” in the national accounts of Hungary. This sub-sector does not contain the activities auxiliary to insurance, which are classified under sub-sector S.124.

3.16.3.1. Institutional units

327. In 2002, the S.125 sub-sector consisted of the following institutional units:

- 31 insurance companies, of which 13 were composite insurance companies, 7 life insurers and 11 non-life insurance companies.
- 37 insurance associations
- 18 private pension funds
- 82 voluntary mutual pension funds
- 37 voluntary health funds
- 23 voluntary income-replacement funds.

All of the institutional units listed above are supervised by the Hungarian Financial Supervisory Authority (hereinafter HFSA).

3.16.3.2. Main data sources

328. The statistics of insurance services are primarily based on the data reported to the supervisory authority. The statistical coverage extends to all supervised institutions, therefore the coverage in S.125 sub-sector is practically complete.

329. The annual accounts of insurance companies and pension funds are compiled on the basis of the balance sheet and profit and loss account data collected by the HFSA. The regulations applicable to the contents of the reports are gradually getting closer to the EU accounting legislation, and so statistics can follow better the accounting principles under the ESA95.

330. The corporate tax declarations contain supplementary information which is not included in the annual reports. This includes, e.g., the distribution of costs according to cost types, more detailed breakdown of the income distribution items, liabilities to the general government and data referring to government subsidies.

331. From the HCSO data collections, the labour statistics, labour cost survey and structural business statistics are the most important items. In addition, we also use data from the reports of the central government units and the local governments.

3.16.3.3. Calculation of output for insurance companies and pension funds (P1)

332. The output of insurance services is calculated on the basis of the algorithm outlined in ESA’95 Section 3.63, making a distinction between life and non-life insurance activities. We try to do our best to follow the recommendations of Task Force CPNB/336 as much as possible. The tables contain the aggregate data of insurance companies and insurance associations.

3.16.3.3.1. Life insurance

333. The output of life insurance activity is calculated on the basis of the following scheme:

Table 3.42 Output of the life insurance business, data for 2002

Note: β = TOTAL CLAIM SETTLEMENT, ACQUISITION AND MANAGEMENT COSTS OF LIFE INSURANCE / TOTAL CLAIM SETTLEMENT, ACQUISITION AND MANAGEMENT COSTS OF THE INSURANCE COMPANY. The multiplication factor is applied to composite insurance companies when no separate information is available for life insurance and non-life insurance.

definition	data source references	(million HUF)
A – INSURANCE ACTIVITY		
P.11 Insurance activity	P.111+P.112-P.113-P.115+P.116	76 992
P.111 Premiums earned	Profit and Loss statement Life business. B01.a.-01.c	204 164
P.112 Adjusted premium supplements	P.1121*P.1122	55 126
P.1121 Premium supplements	Profit and Loss statement Life business .B02+[(C01+C02+C03+C04)* β]+C05-B(11-11b)-[(C07+C09)* β]	55 862
P.1122 Adjustment coefficient: δ	1-(Balance sheet Liab. A./Balance sheet Liab. A+(C+D))	
P.113 Claims due	P.1131+P.1132	71 207
P.1131 Claims payable	Profit and Loss statement Life business. B05aa1.-B05ac.	70 736
P.1132 Changes in technical provisions against outstanding risks	Profit and Loss statement Life business. B05ba.	471
P.115 Changes in technical and actuarial reserves	BIFE É. B06.aa.+B06.ba+B06ca+B09.aa	111 072
P.116 Other insurance technical profit/loss	BIFE É. B04-B13	-19
B – OTHER ADJUSTMENTS		
P.13 Items modifying the basic price	P.1365	1 043
P.1365 Local business tax and tourism tax	Government statistics	1 043
P.14 Capitalised own performance	(29-07-01/05b)*β	0
P.15 Imputed value of welfare services	{(03-01/05n)*0.097}*β	35
P.16. Imputed value of own services transferred to employees	{(03-01/05n)*0.635}*β	229
P.1 TOTAL OUTPUT	P.11-P.13+P.14+P.15+P.16	76 214

334. P.11 “Insurance activity” is the first component of the output consisting of the following items originating from the balance sheet and profit and loss account:

335. P.111 “Premiums earned”, where the “gross premium” line of the profit and loss account is corrected with the “change in provisions of unearned premiums”. The “gross premium” contains the total amount payable under the contracts, irrespectively of the actual payments. This also includes premium revenues from active reinsurance. In 2002, no active reinsurance deals took place in the life assurance business. The output algorithm also takes into account the change in provisions for bonuses and rebates with negative sign. Changes in provisions for unexpired risks are not identified separately for Hungarian insurance corporations, they are included in provisions for unearned premiums.

336. P.112 “Adjusted premium supplements (property income attributed to policy holders)”: are the income earned from the investment of insurance technical reserves, excluding any income from the enterprise’s own funds.

The P.1121 “Premium supplements” line shows revenues from investments (i.e. received dividend and profit shares, received interest and interest-type revenues, revenues of fixed assets relating to the insurance portfolio and other investment revenues) less the expenditure of the investments (i.e., interest and interest-type expenses and other expenditure related to the investments). The result is adjusted by the the ratio “OWN FUNDS / OWN FUNDS + TECHNICAL RESERVES” calculated in line P.1122, excluding any income generated from the investment of the insurance enterprises’ own funds.

Insurance companies are obliged to record their assets at historical cost/nominal value in their balance sheets, except for “unit linked” life insurance assets, which are evaluated at market prices. Both realized and unrealized holding gains as well as losses, relating to life insurances, are shown as separate items on the insurance technical account of the profit and loss account. This item, however, shows life insurance-related holding gains/losses in a lump sum, therefore we have to separate different products of life insurance by a calculated ratio. There are two types of life insurance in Hungary: unit-linked and “traditional” non linked non participating life insurance, thus we have to split realized holding gains/losses only to these two types. We assume that the unrealized part belongs to linked life policies.

337. P.113 “Claims due”:

The P.1132 “Changes in technical provisions against outstanding risks” is added to P.1131 “Claims payable”. The gross claim payments contain compensation actually paid to the insured and contractual parties during the reporting period. Adjusting the gross claim payments with the changes in technical provisions for outstanding risks the claims occurring in the current period can be estimated. P.113 does not contain claims management expenses.

338. The P.115 “Changes in technical and actuarial reserves” contain changes of actuarial provisions (i.e. life assurance, health insurance and accident insurance provisions) and provisions related to investment units. As it mentioned above we assume that the unrealized part belongs to linked life policies. In case of realized gains/losses on linked life business the exclusion is made by pro rata to technical provisions linked life/all life. Regarding non linked, non participating life business there is no deduction from the change in technical provisions. The correction due to exclusion of holding gains/losses from insurance technical reserves is -2.298 million HUF in 2002. It is necessary to mention that this adjustment has not been a part of recent final calculation yet. This methodological improvement will be implemented in September 2009.

339. P.116 “Other insurance technical profit/loss” shows the balance of other insurance revenues and expenditure directly related to insurance policies and insurance activities.

340. P.13 “Items modifying the basic price”:

P.1365 “Local business tax” is a product tax payable by financial enterprises with the exception of private pension funds, voluntary mutual pension funds and insurance associations. The local business tax amount is available in one lump sum, which is first divided to sectors, and then the sectoral amount is calculated to industries on the basis of the individual output of the financial enterprises in the financial sector.

341. P.14 “Capitalised own performance” contains the figure reported also in the corporate tax declarations. Own-account GFCF shall include the total amount of the capitalized value of own-account assets in the financial year, and the change in own-produced stocks.

342. The P.15 “Imputed value of welfare services” is estimated on the basis of the labour cost survey data and the 44% personal income tax payable for in-kind benefits by the employers. The coefficient used for multiplying the employer’s income tax paid by companies in order to define the total value of welfare services is calculated on the basis of the welfare and cultural expenses reported by the enterprises involved in the labour cost survey and their 44% personal income tax paid by the employers of the same enterprises for in-kind benefits. (The coefficient calculation is described in detail in Section 4.7.2.2.2.)

343. A similar method is applied for calculating the P.16 “Imputed value of own services transferred to employees”, but a different coefficient is used. In this case the calculation is based on the own services and benefits transferred to employees reported by the enterprises involved in the labour cost survey, as well as their 44% personal income tax paid by the employer of the same enterprises for in-

kind benefits. Multiplying the employer's income tax paid by the individual companies with this coefficient, the total own services transferred to employees can be calculated. (The coefficient calculation is described in detail in Section 4.7.2.2.2.)

3.16.3.3.2. Non-life insurance business

344. The information required for calculating the output of the non-life insurance business is taken from the balance sheet and profit and loss account received from the HFSA using the following scheme:

Table 3.43 Output of the non-life insurance business line, data for 2002

	definition	data source references	(million HUF)
A – INSURANCE ACTIVITY			
P.11	Insurance activity	P.111+P.112-P.113-P.115+P.116	138 222
P.111	Premiums earned	Profit and Loss statement Non-life business A01.a.- A01.c	291 522
P.112	Adjusted premium supplements	P.1121*P.1122	16 706
P.1121	Premium supplements	Profit and Loss statement [(C.01+C.02+C.03+C.04)*(1-β)]- [(C.07+C.09)*(1-β)]	17 420
P.1122	Adjustment coefficient: δ	1-(Balance sheet Liab. A./Balance sheet Liab. A+(C+D)))	
P.113	Claims due	P.1131+P.1132	163 531
P.1131	Claims payable	Profit and Loss statement Non-life business. A04aa1.-A04ac.	143 509
P.1132	Changes in technical provisions against outstanding risks	Profit and Loss statement Non-life business. A04ba.	20 023
P.115	Changes in technical and actuarial reserves	Profit and Loss statement Non-life business .A05aa+A05ba+A05ca+07.	2 513
P.116	Other insurance technical profit/loss	Profit and Loss statement Non-life business .A03-A10	-3 963
B – OTHER ADJUSTMENTS			
P.13	Items modifying the basic price	P.1365	218
P.1365	Local business tax and tourism tax	Government statistics	218
P.14	Capitalised own performance	(29-07-01/05b)*(1-β)	57
P.15	Imputed value of welfare services	{{(03-01/05n)*0.097}*(1-β)}	42
P.16.	Imputed value of own services transferred to employees	{{(03-01/05n)*0.635}*(1-β)}	275
P.1	TOTAL OUTPUT	P.11-P.13+P.14+P.15+P.16	138 377

Note: 1-β the multiplication factor is applied to composite insurance companies when no separate information is available for life assurance and non-life insurance. $1-\beta = \text{TOTAL CLAIM SETTLEMENT, ACQUISITION AND MANAGEMENT EXPENSES OF LIFE ASSURANCE} / \text{TOTAL CLAIM SETTLEMENT, ACQUISITION AND MANAGEMENT EXPENSES OF THE INSURANCE COMPANY.}$

345. P.11 “Insurance activity” is the first element of the output, which consists of the following items: P.111 “Premiums earned”, where the “gross premium” line of the profit and loss account is corrected with the “change in provisions of unearned premiums”. The gross premium contains active reinsurance premium, too. In 2002, premium from active reinsurance represented 3 thousandth of the total non-life insurance premium revenues. The output algorithm also takes into account the change in provisions for bonuses and rebates with negative sign. Changes in provisions for unexpired risks are not identified separately for Hungarian insurance corporations, they are included in provisions for unearned premiums.

346. P.112 “Adjusted premium supplements (property income attributed to policy holders)” are the income earned from the investment of insurance technical reserves, excluding any income from the enterprise's own funds.

The P.1121 “Premium supplements” line shows revenues from investments (i.e. received dividend and profit shares, received interests and interest-type revenues, revenues of fixed assets relating to the insurance portfolio and other investment revenues) less the expenditure of the investments (i.e.,

interests and interest-type expenses and other expenditure related to the investments). The result is adjusted by the ratio “OWN FUNDS / OWN FUNDS + TECHNICAL RESERVES” calculated in line P.1122, excluding any income generated from the investment of the insurance enterprises’ own funds. In case of non-life insurances, on the basis of the profit and loss account, only realized holding gains/losses may be excluded, no information has so far been available on the unrealized part.

347. P.113 “Claims due”:

The P.1131 “Gross claims payable” are corrected with the P.1132 “Changes in technical provisions for outstanding risks”. In our calculations for the reference year 2002 the changes in equalisation provisions are reported in the line “Changes in insurance technical provisions” and not in “Changes in technical provisions against outstanding risks”. Since 2004 the item “claims payable” has been corrected by the item “equalisation provisions”. Claims management expenses are not included in claims incurred.

348. The P.115 “Changes in technical and actuarial reserves” line contains changes of actuarial provisions (i.e. health insurance and accident insurance provisions).

349. P.116 “Other insurance technical profit/loss” shows the balance of other insurance revenue and expenditure directly related to insurance policies and insurance activities. This item also contains the profit and loss-type amounts accounted against the Claims Security Capital. (Claims Security Capital: a fund established and regularly financed by the insurance companies covering risks in connection with compulsory motor vehicle liability insurance policies by making regular contributions for the purpose of providing compensation for damages to property or personal injuries caused by a vehicle for which the insurance obligation provided by law has not been satisfied or by an unidentified vehicle, subject to the limits laid down by legal regulation.)

350. P.13 “Items modifying the basic price”:

P.1365 “Local business tax” is payable by financial enterprises with the exception of pension funds and other non-profit organizations. The local business tax amount is available in one lump sum, which is first divided to sectors, and then the sectoral amount is calculated to the industries on the basis of the individual output of the financial enterprises in the financial sector.

351. P.14 “Capitalised own performance” contains the figure reported also in the corporate tax declarations. Own-account GFCF shall include the total amount of the capitalized value of own-account assets in the financial year, and the change in own-produced stocks.

352. The P.15 “Imputed value of welfare services” is estimated on the basis of the labour cost survey data and the 44% personal income tax payable for in-kind benefits by the employers. The coefficient used for multiplying the employer’s income tax paid by companies in order to define the total value of welfare services is calculated on the basis of the welfare and cultural expenses reported by the enterprises involved in the labour cost survey and their 44% personal income tax paid by the employers of the same enterprises for in-kind benefits. (The coefficient calculation is described in detail in Section 4.7.2.2.2.)

353. A similar method is applied for calculating the P.16 “Imputed value of own services transferred to employees”, but a different coefficient is used. In this case the calculation is based on the own services and benefits transferred to employees reported by the enterprises involved in the labour cost survey, as well as their 44% personal income tax paid by the employer of the same enterprises for in-kind benefits. Multiplying the employer’s income tax paid by the individual companies with this coefficient, the total own services transferred to employees can be calculated. (The coefficient calculation is described in detail in Section 4.7.2.2.2.)

3.16.3.3.3. Allocation of non-life insurance services to user sectors

354. Regarding non-life insurance services according to the national accounts concept total premiums should be split into a „service charge” (corresponding to the output of non-life insurance activity) and a „transfer” item (claims paid to insured). Non-life insurance services are used for intermediate consumption of resident sectors and a part of services is used for final consumption by household sector. Another part of non-life insurance services is exported. The distribution of services among user sectors is done in proportion to gross premiums written by each sector. Premiums paid by sectors to insurance enterprises are recorded in the company accounting, in the BoP and in statistical statements of the government. The households’ use of non-life insurance services is broken down into intermediate and final consumption in proportion of premiums paid by households in their capacity of being consumers on the one hand and sole proprietors and owner-occupied dwellings owners on the other hand to the total amount of premiums paid by household sector. The breakdown is based on the analysis of non-life insurance products and identification of their user.

355. The following table demonstrates the distribution of non-life insurance services.

Table 3.44. Allocation of non-life insurance services in 2002, million HUF

	Non-life insurance services, total	D.71 Net non-life insurance premiums
TOTAL	138 222	163 531
S.11	45 911	68 866
S.12	1 312	1 968
S.13	1 031	3 093
S.14	88 564	87 498
of which: P.2 of sole proprietors dwellings	28 148	
P.3 final consumption	18 188	
	27 631	
S.2 Export	1 404	2 106

3.16.3.3.4. Reinsurance

356. The following scheme is applied for the calculation of reinsurance:

Table 3.45. Calculation of reinsurance balance, 2002, million HUF

	Life	Non-life	total
I. Premium transferred to reinsurers	63 812	22 508	86 320
II. Share of reinsurers in the change of provisions for unearned premium (+/-)	1 209	37	1 246
III. Share of reinsurers in the expenditure related to claims (-)	20 534	11 598	32 132
IV. Share of reinsurers in the change of provisions for outstanding claims (+/-)	3 720	85	3 805
V. Share of reinsurers in the change of actuarial and other technical provisions (+/-)	10	1	11
VI. Reinsurance commission (-)	15 915	3 283	19 198
P.28 Reinsurance balance	22 424	7 504	29 928

357. The reinsurance balance is recorded as intermediate consumption of the insurance companies, as the use of reinsurance services. The share of re-insurers from actuarial and other technical reserves

is so small (HUF 11 million, i.e. EUR 44 thousand) that we do not calculate investment income from insurance technical reserves on transactions between direct insurers and re-insurers.

3.16.3.3.5. Pension funds

358. The calculation of the output of voluntary mutual pension funds and private pension funds is primarily based on the data of the profit and loss account and cash-flow statement contained in the supervisory report and the following scheme is applied.

Table 3.46 Output of voluntary pension funds, million HUF

definition		data source references	Data for 2002
P.11	Pension fund activity	P.111+P.112-P.113-P.115	6 523
P.111	Premiums	P.1111+P.1112	71.095
P.111	Members' contributions	A(01+06)+B(01+06)+C(01+06)	28 439
P.111	Employer's contributions,	A(02+07+08)+B(02+07+08)+C(02+07+08)	42 656
P.112	Contribution supplements	A28+B27+C27- {A(171+172)+B161+C161}+{A(23+241+242+26)+B(22+231+25)+C(22+231+25)}	31 686
P.113	Payment of services	Cash D(31+32)	14 963
P.115	Change in technical provisions	separate calculation	81 295
P.12	Revenues from non-fund	A.32	8
P.15	Imputed value of welfare	(03-01/05n)*0.097	1
P.16.	Imputed value of own services	(03-01/05n)*0.635	6
P.1	TOTAL OUTPUT	P.11+P.12+P.15+P.16	6 537

Table 3.47 Output of private pension funds, million HUF

definition		data source references	Data for 2002
P.11	Pension fund activity	P.111+P.112-P.113-P.115	10 725
P.111	Premiums	P.1111+P.1112+P.1113	105.403
P.111	1 Members' contributions	A(01+032+07)+B(01+032+07)+C(01+032+07)	101 057
P.111	2 Employer's contributions, support, donations	A(031+08+09)+B031+C(031+08+09)	2 956
P.111	3 Subsidies to unemployed members	A02+B02+C02 A30+B27+C29- {A(191+192)+B161+C181}+{A(25+261+262+28)+B(22+231+25)+C(24+251+27)}	54
P.112	Contribution supplements		37 243
P.113	Payment of services	Cash D(32+33)	218
P.115	Change in technical provisions	separate calculation	131.703
P.12	Revenues from non-fund activities	0	0
P.15	Imputed value of welfare services	(03-01/05n)*0.097	1
P.16.	Imputed value of own services transferred to employees	(03-01/05n)*0.635	6
P.1	TOTAL OUTPUT	P.11+P.12+P.15+P.16	10 733

359. The first component of the output is P.11 "Pension fund activity", consisting of the following items:

The P.111 in case of voluntary mutual pension funds "premiums" contain the amounts in the profit and loss account lines for membership contributions paid by members, employer's membership contribution, other contributions of members, received regular support, and individual donations lines

for voluntary mutual pension funds. In the case of private pension funds, the membership contributions paid by members, membership contribution-type support paid for unemployed members, supplementary membership contributions, other contributions of members, received regular support and data contained in individual donation lines are taken into account.

P.112 “Contribution supplements”:

This line contains the result of investments (interest and interest-type income less interest and interest-type expenses, dividend and profit shares received and revenues from properties kept for investment purposes less expenditure). As pension funds are non-profit organizations, there is no correction regarding property income from investment of own funds. The holding gains/losses are excluded from the data on the basis of information available from the Profit and Loss Statement.

P.113 “Payment of services”:

Our calculations are based on the following lines of the cash-flow statement: 33. “Use of provisions for services” (i.e. service expenses paid to fund members or beneficiaries in the current year), and 32 “Refund to members, beneficiaries from provisions” (i.e. liabilities to members terminating their membership in other ways and beneficiaries of deceased members).

The P.115

Since we do not have direct information concerning changes in technical provisions, this item is calculated similarly to the algorithms described in the “Methodological Manual of Pension Funds Statistics”. We presume that due to the operational principle of pension funds, deducting the pension-like payments, the necessary material type expenditures and labour costs from the total revenues and incomes, the remaining amount is equal to the sum to be considered as insurance technical provisions of pension funds. As a feedback we always compare this calculated value with the item “pension funds reserves” of financial accounts calculated by NBH. When compiling financial accounts, NBH publishes data concerning transactions and revaluations as well, from which we use the estimations concerning transactions. The difference between the results calculated by the above two methods is negligible.

360. The figure in the “Revenues from supplementary business activities” line of the profit and loss account is reported as P.12 “Revenues from non-fund activities” only for voluntary mutual pension funds. Act XCVI/1993 on voluntary mutual insurance funds provides the following definition for auxiliary business activities: ‘auxiliary business activity’ ‘shall mean the economic activities the fund performs in exchange for consideration that are related to the organization and provision of the services indicated as the fund's basic activities, with retroactive effect, above and beyond the fund's obligation to provide services.’ Act LXXXII of 1997 on private pension funds does not allow private pension funds to pursue such activities.

361. The calculation applied to P.15 “Imputed value of welfare services”, and P.16 “Imputed value of own services transferred to employees” is the same as described for other divisions of the J section.

3.16.3.3.6. Voluntary health and income-replacement funds

362. The activities of voluntary health and income-replacement funds are regulated by the same act as voluntary mutual pension funds. They have similar bookkeeping obligations and reports, thus the method of output calculation is the same as described in Section 3.16.4.3.4 for the voluntary mutual pension funds.

Table 3.48 Output of voluntary health and income-replacement funds, million HUF

	definition	data source references	Data for 2002	
			Income-replacement	Health
P.11	Insurance activity	P.111+P.112-P.113-P.115	408	1 225
P.111	Premiums	P.1111+P.1112	3 581	7 835
P.1111	Members' contributions	A(01+04)+B(01+04)+D(01+04)	884	1 387
P.1112	Employer's contributions, support, donations	A(02+05)+B(02+05)+D(02+05)	2 697	6 448
P.112	Contribution supplements	A(08+09-16)+B(07+12-22)+D(07+09-14)	48	493
P.113	Payment of services	A.14+A.15	2 989	4 629
P.115	Change in technical provisions	separate calculation	232	2 474
P.12	Revenues from non-fund activities	C.1	0	196
P.15	Imputed value of welfare services	(03-01/05n)*0.097	0	0
P.16.	Imputed value of own services transferred to employees	(03-01/05n)*0.635	0	3
P.1	TOTAL OUTPUT	P.11+P.12+ P.15+P.16	408	1 424

3.16.3.4. Calculation of intermediate consumption

363. Estimation of intermediate consumption is based on the information in the declaration on the liabilities to the government, as well as on the data of the corporate tax declarations in case of insurance companies and insurance associations and of profit and loss accounts in case of pension funds. The calculation is similar to the calculations applied in the other divisions of section J. The following tables show the data sources and data for 2002 regarding divisions.

Table 3.49 Data sources for intermediate consumption in the branch 66

Definition	Data source	
	Insurance companies	funds
P.21 Material costs	Corporate tax decl.	P&L
P.22 Costs of contracted services	Corporate tax decl.	P&L
P.23 Costs of other services	Corporate tax decl.	P&L
P.24 Value of goods and services purchased for resale	Corporate tax decl.	P&L
P.26 Expenses classified as wages in-kind	P.261+P.262	
P.261 Purchased products and services transferred to employees	Declaration of the liabilities towards the budget	
P.262 Value of services of cars provided for personal use of employees	Declaration of the liabilities towards the budget	
P.27 Assets of small value	Corporate tax decl.	P&L
P.28 Reinsurance balance	separate calculation	0
P.29 FISIM consumed	separate calculation	0
P.2 INTERMEDIATE CONSUMPTION	P.21+P.22+P.23+P.24-P.26+P.27+P.28	P.21+P.22+P.23+P.24-P.26+P.27

364. P.21 "Material costs" show the data in Line 13/a of 0229-07-01 tax declaration form of insurance companies, and the applicable item of the profit and loss account demonstrate the operation of funds. Material costs shall include the original cost of purchased raw materials used during the financial year. Material costs shall be reduced by the value of any waste and recycled materials generated in the process of production, activity or service, and by customs charges and excise taxes refunded.

365. P.22 “Costs of contracted services” show the figure in line 0229-07-01 of tax declaration form for insurance companies, less the rent on lands, and the applicable line of the profit and loss account describing the operation of funds. Contracted services shall include the original cost of material- and non-material-type services used during the financial year, including any non-deductible value added tax, used during the financial year as invoiced, paid and contracted.

366. P.23 “Costs of other services” include banking expenses, insurance service charge, asset management, custody management and other regulatory fees, supervisory expenses and expenses of various other services.

367. The P.24 “Value of goods and services purchased for resale” line includes the figures contained in the data sources indicated for insurance companies and funds. The purchasing cost of goods sold shall include the original cost (decreased by depreciation and increased by the amount of loss in value backmarked) of materials and goods sold - generally - in an unaltered form during the financial year. The value of services resold (intermediated) shall include the original cost of services purchased and sold in an unaltered state, at the time of sale.

368. P.26 “Expenses classified as wages in kind” contain the P.261 “Value of purchased products and services transferred to employees”, and P.262 “Value of services of cars provided for personal use of employees”. These expenses classified as wages in kind are recorded as material-type expenses in the accounting of the companies, therefore they have to be eliminated from the intermediate consumption. Under ESA95, they are purchased products and services transferred to the employees by the employer but they are not necessarily required for production. P.261 is estimated on the basis of the 44% personal income tax payable by employers on in-kind benefits and the data obtained from the labour cost survey. The coefficient with which the income tax paid by the employers of individual companies is multiplied to calculate the total value of products and services transferred to employees is generated on the basis of the 44% personal income tax paid by employers on reimbursed costs related to jobs and reported by the enterprises contained in the labour cost survey, other in-kind income from work, remuneration of external lecturers, tutors and language teachers, and the amount paid to such enterprises. Under P.262, we report the tax paid to the central government on company cars by financial enterprises. Multiplying the tax amount paid on company cars by the employers with the coefficient calculated from the estimated amount of use of motor vehicles for private purposes and the tax on the company car paid by the employer, we can calculate the value of services of cars provided for personal use of employees. (The calculation of the coefficient is described in detail in Section 4.7.2.2.2.)

369. Fixed assets, rights, titles and intellectual property are recorded as P.27 Assets of small value, if the purchase or production value of each item is below HUF 50000, as they are expensed straight away, in one lump sum. In case of assets of small value the Hungarian regulation defines a lower threshold which is used in the national accounts, too. The methodological change concerning the increase of the threshold value to 500 EUR is in progress.

370. The P.28 “Reinsurance balance” line contains the reinsurance balance calculated in accordance with the method described in section 3.16.4.3.3.

371. The P.29 item comprises proportional part of FISIM treated as intermediate consumption of FISIM consumers.

Table 3.50 Intermediate consumption of the branch 66, million HUF

	6601	6602	6603	6603
	insurance companies and associations	pension funds	insurance companies and associations	Income-replacement and health funds
	life business		non-life business	
Data for 2002				
P.21	1 849	117	3 544	873
P.22	33 985	6 694	50 093	0
P.23	3 132	8 405	2 500	44
P.24	2	0	4	0
P.26	354	26	454	4
P.261	220	11	264	3
P.262	134	15	191	1
P.27	68	5	194	18
P.29	510	0	927	0
P.2	46 696	15 195	79 232	931

3.16.3.5. Summary

372. On the basis of the guideline above, the following table shows the calculation of the gross value added of division 66:

Table 3.51 Gross value added of branch 66, million HUF

	Data for 2002
P.1 total	233 693
P.2 total	-142 054
B.1g total	91 639

3.16.4. Activities auxiliary to financial intermediation (NACE 67)**3.16.4.1. Activities auxiliary to financial intermediation NACE 67.1 (except insurance)**

373. This NACE category contains the following organisations: 67.11 Money and capital market regulatory authorities (Budapest Stock Exchange), 67.12 Securities agency activities (brokers, fund managers, portfolio managers, etc.) and 67.13 Other activities auxiliary to financial intermediation, including for example loan brokers transacting business in the name and on behalf of a credit institution and currency exchange activities. The category also contains deposit insurance fund, institutional protection fund, investor protection fund and guarantee fund of private pension funds.

3.16.4.1.1. Output NACE 67.1

Table 3.52 Output NACE 67.1, million HUF

P12	Other financial activity	P.121-P.122	34 034
P121	Net sales revenues	Tax declaration	118 803
P122	Value of goods purchased for resale	Tax declaration	84 769
P13	Items modifying the basic price	Tax declaration	-763
P14	Capitalised own performance	Tax declaration	690
P15	Imputed value of welfare services	Tax declaration	12
P16	Imputed value of own services transferred to employees	Tax declaration	83
P1	Output	P.12+P.13+P.14+P.15+P.16	34 056

374. The accounts of these organisations of this class can be described in the following way: Budapest Stock Exchange under 67.11 is recorded on the basis of its tax declaration figures, similarly to institutional units classified in NACE 67.12.

375. Economic organisations under 67.12 are recorded on the basis of the data of corporate tax declaration of enterprises with double-entry and single-entry bookkeeping.

376. The first component of the output was P.12 Other financial activity. These data can be extracted from the corporate tax declaration. The guidelines for completing tax declarations contain the following definition for the net sales revenues of financial enterprises: interest and interest-type revenues less interest and interest-type expenses increased by revenues of other financial services, revenues of investment services and net sales revenues of non-financial and investment services.

377. *The value of goods purchased for resale is P.122:* for enterprises with double-entry bookkeeping the historic (purchase) value of materials and goods purchased and sold without any changes, i.e. the amount calculated as purchase value of goods resold under the provisions of the Accounting Act. For enterprises with single-entry bookkeeping and enterprises keeping their records on cash basis, which are subject to the Act on personal income tax: the expenditure relating to the purchase of goods in the current year, less the closing inventory balance of the paid stocks, increased by the opening balance of paid stocks. The purchase value of goods resold is also taken from the tax report.

P.13 Items modifying basic price:

Product taxes

378. P.1363 National cultural contribution: the amount is taken from the “Declaration of the liabilities towards the budget” tax return forms.

379. P.1365 The local business tax is a product tax payable by financial enterprises with the exception of pension funds and insurance associations. In government statistics the whole amount of the local business tax of the national economy is recorded, of which we take into account an amount estimated for the sector. The local business tax calculated for the J Financial sector is divided in proportion to the output of the individual financial enterprises.

380. In terms of P.14 Capitalised own performance the data reported on corporate tax declarations are used.

381. The output (P.1) is calculated by adding up the items listed above.

$$P.1 = P.12 + P.13 + P.14 + P.15 + P.16$$

382. The majority of economic organisations under 67.13 are recorded on the basis of the methodology indicated above, based on the data of the corporate tax declarations of enterprises with single and double-entry bookkeeping.

383. The output of deposit insurance fund, institution protection fund, investor protection fund and guarantee fund of private pension funds, belonging to the same class, are recorded on the basis of the data of their annual reports received within the framework of the National Statistical Data Collection Programme.

384. The output is equal to the total operating expenditures, but we are planning to revise our accounting method, because for example the income on deposit insurance activity of the National Deposit Insurance Fund significantly exceeds the material cost, which can be recorded as intermediate consumption.

3.16.4.1.2. Intermediate consumption NACE 67.1

Table 3.53 Intermediate consumption NACE 67.1, million HUF

P21	Material costs	Tax declaration	3 002
P22	Costs of contracted services	Tax declaration	7 325
P23	Costs of other services	Tax declaration	829
P24	Intermediated services	Tax declaration	5 095
P26	Wages and salaries in kind	Tax declaration	163
P27	Assets of small value	Tax declaration	83
P292	FISIM consumed	FISIM calculation	316
P2	Intermediate consumption	P.21+P.22+P.23+P.24- P.26+P.27+P.292	16 487

385. The P.21 Material costs and P.22 Costs of contracted services derive from the tax declaration.

386. The P.231 Banking expenses are also corporate tax data. The P.232 Insurance services used are based on P.2321 Insurance premiums paid by enterprises which are corrected according to national account concept. This adjustment is necessary because the premium paid to the insurance companies by the insured parties must be divided into two parts: an amount covering the risks and the service fee. This latter amount has to be recorded as intermediate consumption under ESA95.

387. We do not have any direct data source for P.233 Regulatory fees. The regulatory fees can be calculated by deducting the banking expenses and insurance premiums from the total of other services in the corporate tax declaration.

388. A P.26 Expenses classified as wages and salaries in kind consist of two parts:

P.261 Purchased products and services transferred to employees and

P.262 Value of services of cars provided for the personal use of employees.

389. The P.26 item Wages and salaries in kind contains purchased products and services transferred to employees and the value of services of cars provided for personal use of employees, which are (on the basis of the 44% of the personal income tax paid by the employer) multiplied by the coefficients calculated under section 4.7.2. It is necessary because these wages and salaries in kind are recorded

among the material-type expenses in the profit and loss accounts of the companies, but under ESA95 these are purchased products and services transferred to the employees by the employer, but are not necessarily required for the production activities of the employers.

390. Fixed assets, rights, titles and intellectual property are recorded as P.27 Assets of small value, if the purchase or production value of each item is below HUF 50000, as they are expensed straight away, in one lump sum. In case of assets of small value the Hungarian regulation defines a lower threshold which is used in the national accounts, too. The methodological change concerning the increase of the threshold value to 500 EUR is in progress.

391. P.292 item FISIM treated as intermediate consumption of FISIM consumers.

392. Intermediate consumption P.2 = P.21+P.22+P.23+P.24-P.26+P.27+P.292.

3.16.4.2. Activities auxiliary to insurance and pension funding NACE 67.2

3.16.4.2.1. Activities of the class

393. The class includes the following activities:

- insurance agent activities
- actuary activity
- assessment of damage
- insurance investigation
- other activities auxiliary to insurance and pension funding (e.g. consultation, claim settlement)

394. The activities mentioned above require a HFSA licence. Individual contractors performing activities auxiliary to insurance belong to the Households sector (S.14), while corporate entities with or without legal entity are classified under S.124 “Financial auxiliary activities”.

3.16.4.2.2. Data sources

395. We use the data of the corporate profit tax returns and liabilities to the General government sector for calculations of the corporate entities of class 67.20 (with or without legal entity and making single or double-entry bookkeeping).

3.16.4.2.3. Output calculation method

396. The output of organisations performing activities auxiliary to insurance is calculated on the basis of the following table:

Table 3.54 Output of activities auxiliary to insurance, 2002, million HUF

	Definition	Data source references	Double	Single
P.12	Other financial activity	P.121-P.122	37 146	4 485
P.121	Sales revenues	Corporate tax declaration	37 956	4 485
P.122	Value of goods purchased for resale	Corporate tax declaration	810	0
P.13	Items modifying the basic price	P.1365	1 089	589
P.1365	Local business tax and tourism tax	Government statistics	1 089	589
P.14	Capitalised own performance	Corporate tax declaration	64	0
P.15	Imputed value of welfare services	(03-01/05n)*0.097	6	0
P.16.	Imputed value of own services transferred to employees	(03-01/05n)*0.635	39	0
P.1	TOTAL OUTPUT	P.12-P.13+P.14+P.15+P.16	36 166	3 896

397. A P.12 “Other financial activity” is the first component of the output, and it is based on P.121 “Sales revenues”. This line indicates the figure of 01b line of the 0229-07-01 tax declaration form for entities with double-entry bookkeeping and the figure of lines 01b and 04b of the 0228-06 form for entities with single-entry bookkeeping. Own-production or purchased inventories and services rendered during the contract period in the financial year are recorded (increased by price subsidies and extra charges, decreased by discounts and excluding value added tax) as net sales revenues.

398. P.122 Value of goods purchased for resale: (see: 3.16.4.4) is deducted from the sales revenues to calculate P.12.

399. The other financial activities are adjusted with P.13, P.14, P.15 and P.16 items. The content and calculation of these adjustments are the same as described for division 66 (see 3.16.4.3.1.).

3.16.4.2.4. Calculation of intermediate consumption

400. The intermediate consumption of group NACE 67.2 is calculated on the basis of the information gained from the tax declaration of companies with double- and single-entry bookkeeping. The procedure applied is similar to the methods used for the other branches of section J, i.e. we add up material expenses, material and non-material-type, as well as intermediated services and the depreciation of fixed assets below the threshold, and deduct the expenses classified as wages in kind from the total.

Table 3.55 Intermediate consumption of branch 67.2, 2002, million HUF

	Definition	Data source references	Double	single
P.21	Material costs	Corporate tax declaration	1 337	1 548
P.22	Costs of contracted services	Corporate tax declaration	9 657	0
P.23	Costs of other services	Corporate tax declaration	895	1 347
P.24	Intermediated services	Corporate tax declaration	11 981	0
P.26	Expenses classified as wages in kind	P.261+P.262	171	30
P.261	Purchased products and services transferred to employees	Declaration of the liabilities towards the budget	37	0
P.262	Value of services of cars provided for personal use of employees	Declaration of the liabilities toward the budget	134	30
P.27	Assets of small value	Corporate tax declaration	136	0
P.2	INTERMEDIATE CONSUMPTION	P.21+P.22+P.23+P.24-P.26+P.27	23 835	2 865

3.16.4.2.5. Summary

401. On the basis of the description above, the following table shows the calculation of the gross value added of the group 67.2:

Table 3.56 The gross value added of the branch 67.2, million HUF

	Data in 2002
P.1 total	40 062
P.2 total	-26.700
B.1g total	13 362

3.17. Real estate, renting and business activities (K)

402. The gross value added of real estate, renting and business activities was HUF 2 589 066 million in 2002, which constituted 17.4% of the total value added of all industries. It was produced by Non-financial corporations, General government and Households sectors. About 96% of the real estate activities of households arose from dwelling services.

Table 3.57 Output, intermediate consumption and gross value added of real estate, renting and business activities (K) by branches and sectors, 2002 (million HUF)

Output					
NACE code	Industry	S11	S13	S14	Total
70	Real estate activities	569 366	76 065	1 086 736	1 732 167
71	Renting of machinery & equipment without operator	109 524	0	10 802	120 326
72	Computer and related activities	325 321	357	57 047	382 725
73	Research and development	48 905	56 057	4 275	109 237
74	Other business activities	1 222 987	56 804	571 590	1 851 381
Total (K)		2 276 103	189 283	1 730 450	4 195 836

Intermediate consumption					
NACE code	Industry	S11	S13	S14	Total
70	Real estate activities	297 516	35 272	177 566	510 354
71	Renting of machinery & equipment without operator	30 110	0	4 394	34 504
72	Computer and related activities	154 246	129	19 726	173 901
73	Research and development	26 227	25 026	1 562	52 815
74	Other business activities	60 5 660	33 169	196 367	835 196
Total (K)		1 113 559	93 596	399 615	1 606 770

Gross value added						
NACE code	Industry	S11	S13	S14	Total	GVA %
70	Real estate activities	271 850	40 794	909 170	1 221 813	8.2
71	Renting of machinery & equipment without operator	79 414	0	6 408	85 822	0.6
72	Computer and related activities	171 275	224	37 321	208 824	1.4
73	Research and development	22 678	31 031	2 713	56 422	0.4
74	Other business activities	617 327	23 635	375 223	1 016 185	6.8
Total (K)		1 162 544	95 684	1 330 835	2 589 066	17.4

403. For more information about the main data sources used for estimation of output and intermediate consumption see Chapter 3.1.

404. The figures of research and development activities are derived from the production of institutional units classified under NACE code 73. No special methodology has been developed yet for measuring research and development services for use within the same enterprise, or carried out by units with other main activity. So the amount of HUF 66 665 million, which appears here does not contain the research and development performance of industries requiring significant inside research activities (for example pharmaceutical industry). However, in General government sector, research and development activities of educational institutions are included in section “K”, in compliance with ESA95.

Rented fixed assets accounting

405. Rented fixed assets (and operational leasing among them) are recorded in accordance with Annex II of ESA.

Operational leasing rents paid to the lessor are recorded as output (P.1) of the leasing service on her/his production account. If the lessee is a producer, then payments of rents are recorded as intermediate consumption (P.2) of the lessee. If the lessee is a consumer (Households sector), then payments of rents are classified in her/his final consumption expenditure (P.3).

406. The value of financially leased assets is excluded from intermediate consumption. When accounting for financial leasing, rents actually paid by the lessee to the lessor are divided into repayments of main and interest payment, both related to the imputed loan.

407. Financial and operational leasing is considered in Hungarian business accounting similarly to the methodology in ESA95.

408. Domestic services provided by private persons such as cleaners, chairwomen, butlers, cooks, maids, drivers, gardeners, governesses, secretaries, tutors, au-pairs and baby-sitters are taken into consideration as unregistered activities, when calculating the production account of households. The gross value added of these activities was HUF 21 billion in reference year 2002, while intermediate consumption was not accounted.

409. According to the current national accounting practice, these unregistered services are recorded under the NACE division K 74 (Other business activities). In national account calculations the current performance estimates on “domestic services provided by private persons” regard all such services in the same manner, i.e. no distinction is made between full, part-time or secondary domestic service activities and activities made by household based staff or chairpersons. Therefore, these activities are classified in sector NACE K in practice. Since these services constitute a part of the non-observed economy, official sources are of little or no use. The consumption expenditure of households on domestic and household services (COICOP code 05.6.2.) is used for cross-checking, assuming a

positive correlation between the two variables. Estimation refinements are planned in parallel with introducing the new NACE. These refinements will allow for accounting to distinguish industries properly.

410. The consumption expenditure of households is mainly based on the Household Budget Survey, which is not directly used, however. Grossing-up, adjustment and extrapolation methods are applied to get the final values in national accounts. (For the detailed methodology of the adjustment see chapter 5.7 on Expenditure approach, Household final consumption expenditure).

**Table 3.58 Calculation of gross value added of real estate, renting and business activities (K), 2002
(million HUF)**

Table 3.58	Net sales	Owned production capitalised	Production	Material costs	Costs of contracted services	Costs of other services	Goods purchased for resale	Value of services purchased for resale	Material type costs	Difference
S11										
2	3 094 044	18 950	3 112 994	241 536	584 572	77 371	538 282	768 085	2 209 846	903 148
3	176 781		176 781	53 692	36 678	4 086	21 521		115 977	60 804
4			96 261	178	35 145	344			35 667	60 594
5	16 876	0	16 876	133	2 814	43		11 820	14 810	2 066
6	33 073	-25	33 048	2 137	6 482	1 195	2 687	9 104	21 605	11 443
7	66 382	35	66 417						22 734	43 683
Összesen			3 502 377						2 420 639	1 081 738
			Output P1						Intermediate consumption P2	Gross value added B1g
a) goods purch. for resale			-562 491						-562 491	0
b) services p. for resale			-789 009						-789 009	0
c) items modifying basic prices			-19 293							-19 293
d) social welfare services			1 597							1 597
e) own product given to empl.			135							135
f) exploration cost										0
h) rents on land									-235	235
i) insurance premium corr									-8 494	8 494
j) cost reimbursement									1 262	-1 262
k) purchased goods to empl.									-613	613
l) use of cars for personal purposes									-6 817	6 817

Calculation of gross value added of real estate, renting and business activities (K), 2002 (cont.) (million HUF)

			Output P1						Intermediate consumption P2	Gross value added B1g
Adjustments										
m) assets of small value									19 353	-19 353
n) exhaustiv. 2			64 400							64 400
o) exhaustiv. 3									-35 664	35 664
q) processing work			9 176						9 176	0
t) ad hoc			-42						-42	0
Total adjustments			-1 295 527						-1 373 574	78 047
Terminated or transformed c			38 582						20 866	17 716
Missing comp.			19 428						13 079	6 349
Non profit			11 212						9 599	1 613
Total			69 222						43 544	25 678
Re-classification of companies			-189						-5 765	5 576
Outward processing										0
Agricultural grossing up			220						220	0
FISIM allocation									28 495	-28 495
Total modification			31						22 950	-22 919
S 11 Total			2 276 103						1 113 559	1 162 544
S 13			189 283						93 596	95 687
S 14			1 730 450						399 615	1 330 835
K total			4 195 836						1 606 770	2 589 066

3.17.1. Dwelling Services

411. From 2003 dwelling services are estimated by the following categories:

- actual rent for
 - local government owned dwellings
 - private dwellings
- imputed rent for
 - owner-occupied dwellings.

412. Backward calculation was made until 2000. For the preceding years dwelling services were estimated separately for local government owned dwellings and for owner-occupied dwellings.

413. In Hungary, over 90 percent of the dwellings stock is privately owned. The paid rental sector is small, representing around 6 percent. More specifically, the rental of privately owned dwellings accounts for 3 percent of the total.

Table 3.59 The distribution of occupied dwellings in Hungary by type of occupation

Year	Privately owned, owner-occupied	Privately owned, private rented	Government owned, rented
		Rented approx. market rent	Rented significantly below market rent
2002	94.7	2.6	2.7

414. The significant difference between the two different types of rentals is definitely immutable in this decade and it will not change for the ongoing years either. (It must be taken into account that the market position of dwellings is in permanent change. This is why the present situation, when most of rentals are concentrated in the capital and other major cities, may change within a definite period.)

Table 3.60 Different types of rents figures, HUF/month/m²

Year	Private	Government ³
2002	668	172

3.17.2. Valuation of rented dwellings – actual rent

3.17.2.1. Local government owned dwellings

415. The output of the services of local government owned dwellings is estimated using average rent and total square meter data of rented dwellings. Rent data cover rents paid by households and subsidies of the government. The data source is a full scope survey conducted by HCSO. Data suppliers are local governments. The intermediate consumption for maintenance and repairs is estimated using the intermediate consumption/square meter ratio of the owner-occupied dwelling services which is multiplied by the square meter data of local government owned rented dwellings.

³ Rents undergo substantial changes, a part of them are coming somewhat closer to the real market level, but an other part of them are still remaining highly subsidised. (Calculating rentals is in the competence of local governments, no direct central government regulations are in force.)

Concerning the other services relating to dwellings, the total value is distributed among the different sub-sectors using the relevant shares in square meters.

Table 3.61 Dwelling services for local government owned rented dwellings, 2002 (million HUF)

Square meter of local government owned rented dwellings (thousand square m)	7 649
Average rent m ² /month/HUF	172
Total dwelling services	15 817
Of which: CFC	13 803
Intermediate consumption	4 638
Net operating surplus	-2 623
Rent paid by the tenants	7 478

416. Rents actually paid by the tenants are recorded as final consumption expenditure of households, while subsidies are recorded as social transfer in kind from the government.

417. Local governments do not manage their dwellings directly, they have contracts with market producers for this work. This means that the market producers collect rents from the tenants and pass them on to the local governments and they organize and carry out the main renovation and major repairs on the buildings. The output of these companies is recorded within the Non-financial corporations sector.

3.17.2.2. Privately rented dwellings

418. A new estimation model was established for this item. First total square meter data of privately rented dwellings were calculated using the results of the population census. Then the average rent was calculated based on the rent survey which was carried out in 2002 and referred to 2001. These figures were extrapolated for 2002 (and the following years) by the consumer price indices. The survey was based on a regular probability sample drawn from households that rented dwellings according to the census held in 2001. The sample covered 3000 households. The question on rent was formulated so as to measure basic market rent. The survey also covered many characteristics of dwellings, and delivered data stratified according to results of the census held in 2001.

419. The estimation of intermediate consumption was based on the Household Budget Survey.

Table 3.62 Dwelling services for privately owned rented dwellings, 2002 (million HUF)

Total dwelling services	58 370
Of which: CFC	10 547
Intermediate consumption	4 415
Net operating surplus	43 408
Rent paid by the tenants	58 370

420. The yearly actualized new replacement value of the dwelling stocks is available for the estimation of CFC on rented dwellings. As there is direct information for the extrapolation of the stock, the model approach is not necessary. However, the estimation procedure follows the logic of PIM. (For more information see Chapter 4.13.5.1)

3.17.3. Valuation of owner occupied dwellings by the user cost method

421. The estimates of dwelling services in new Member States (covering rents in the rented sector as well as imputed rents in the owner-occupied sector) posed particular problems in the

implementation of the Commission Decision (95/309) on dwellings, which suggests the use of a stratification method. These problems occurred because the owner-occupied sector represents a very high proportion of total dwelling services in most new Member States. Therefore, in many new Member States, the rented sector represents a very small and non-representative share of total dwelling services.

422. In recognition of the theoretical and practical difficulties involved, work with the new Member States on a more harmonized approach in the estimation of dwelling services was started several years ago in the framework of PHARE97 and a Task Force in 2000, which concluded that the stratification method recommended by the Commission Decision on dwelling services for EU Member Countries was much more difficult to apply in most of the new Member States. Following this assessment, a task force (PHARE99) investigated the user cost method as a more appropriate method for most new Member States. This method was already an option in the Commission Decision, which could be used in specific circumstances. After testing the user cost method in selected new Member States, the method demonstrated its suitability as a more practical alternative to stratification in special cases. Hungary participated in both projects.

423. The next Task Force (PHARE99) on estimation methods for dwelling services in the new Member States came to the conclusion that when privately rented dwellings constituted less than 10% of the total dwelling stock by number and where there was a large disparity between private and other paid rents, the user-cost method may be applied as an alternative objective approach. The self-assessment method should be excluded as a suitable method for estimating imputed rent of owner-occupiers. The method was widely discussed and accepted on the NAWP in November 2002. The Commission Decision 95/309 is going to be modified according to the agreement. (Commission Decision 1722/2005 on the principles for estimating dwelling services for the purpose of Council Regulation (EC, Euratom) No. 128/2003 on the harmonisation of gross national income at market prices.)

3.17.4. Data sources and methods

3.17.4.1. Dwelling stock

424. A detailed database based on the Population Census in 2001 and the Dwelling conditions survey that contains the value, vintage structure, and expected service lives of the dwelling stock. Experts multiplied existing natural data – square meters – by actual specific construction costs. Construction costs were calculated by dwelling type. The model applied for the estimation of the dwelling stock also the cost calculation of dwellings, which are not to be built any longer.

425. The value of the building site was not considered as part of the value of the dwelling, since land is a non-produced asset and, therefore, could not be depreciated.

426. The dwelling stock was categorized by sector and age on the basis of results of the valuation. The age structure of the stock was available from data of the Population Census, though supplementary sample surveys were made, too, to support those pieces of information.

427. As there is direct information for the extrapolation of the stock, the model approach is not necessary.

428. The methodology of the sector breakdown of the dwelling stock was presented in the previously mentioned publications in details. Dwelling investments of the central government, local governments and corporations are reported on the structural questionnaire of investments. Dwelling investments cover three categories on the questionnaire:

- one-dwelling buildings,

- two- or more dwelling buildings,
- residences for communities.

429. The ratios of the values of new constructions to major repairs are set according to the results of the "Dwelling conditions 1999" questionnaire. The survey provided information on the age structure of the executed major repairs, so these proportions could be used in the extrapolation.

CFC estimation

430. For the estimation of CFC the value of the stock of dwellings estimated at new replacement cost is available by sectors and by age groups. The value of annual discards is estimated indirectly, based on the changes in stock and the investments in dwelling as the value of increases. The vintage structure of discards is estimated on the basis of the information of the annual questionnaire on annual dwelling discards (OSAP 1076).

431. The estimation of CFC is based on the expected average service live and the age by age group. (For more information see Chapter 4.12.5.1.)

Table 3.63 The value of dwelling stock and the consumption of fixed capital, 2002 (billion HUF)

	Gross value of stock	Net value of stock	CFC
Total dwellings	36 433.8	17 428.1	359.9
Owner occupied dwellings	33 994.4	16 267.9	335.6

3.17.4.2. Estimation on the values of the associated land

432. The accurate estimation of land is very difficult having in mind how much it is influenced by many different indicators of the real estate market in many dimensions. Our decision was to accept the rate given by a research institute that is specialised in the rehabilitation of many different districts in Budapest. According to the expert estimation associated land accounted for 10 percent of the newly constructed buildings. The estimated ratio between the prices of dwellings in use and newly constructed dwellings is about 1:2, which means that on average 20 percent of the net stock of dwellings should be accepted as the value of associated land.

3.17.4.3. Maintenance and repairs

433. The figures of maintenance and repairs are based on Household Budget Survey data. The questionnaire of the HBS includes two separate rows, one for regular (minor) and one for irregular (major) expenditure. The regular expenditure is surveyed every month, while the latter ones on an annual basis. Furthermore, very detailed instructions are made to interviewers. On this basis it is possible to separate minor and major (which is included in the GFCF) maintenance and repairs.

434. Expenditure on minor maintenance and repairs has to be divided into two parts: one is the small repairs made by both tenants and owners (to be recorded as final consumption expenditure) and the other is minor repairs carried out by owners only, recorded as intermediate consumption for owner-occupied dwelling services.

435. For the separation the Household Budget Survey is used. First, the expenditure on maintenance and repairs per rented dwelling is calculated using the total amount of maintenance and repairs and the number of rented dwellings. Then, assuming that the small maintenance and repairs made by owners per owner-occupied dwelling is the same as those made by the tenants in the case of the rented dwellings, the maintenance and repairs per rented dwelling is multiplied by the number of owner-occupied dwellings.

436. Then the minor maintenance and repairs made by tenants and owners are deducted from the total maintenance and repairs figures, which gives the expenditure on minor maintenance and repairs made by owners and recorded as part of the intermediate consumption of owner-occupied dwellings services.

Table 3.64 Distribution of the maintenance and repairs of the dwellings (billion HUF)

Items		2002
Total maintenance and repairs (million HUF)	(a)	96 598
Maintenance and repairs per rented dwellings (HUF)	(b)	13 828
Number of rented dwellings (million)	(c)	0.2557
Total expenditure on small maintenance and repairs of rented dwellings (million HUF)	(d)=b*c	3 535
Number of owner-occupied dwellings (million)	(e)	3.4919
Total expenditure on small maintenance and repairs of owner-occupied dwellings (million HUF)	(f)=b*e	48 285
Total expenditure on minor maintenance and repairs of owner-occupied dwellings, recorded as intermediate consumption (million HUF)	(g)=a-d-f	44 778

3.17.4.4. Insurance premiums and claims

437. The estimation of insurance of dwellings is based on reports of insurance company. The gross output has to be divided among the sectors. The data of distribution of policies between households and others is now available from the insurance companies and this share is used to estimate the total insurance on dwellings of the households. In the previous calculation it was estimated by experts. After that the insurance on owner-occupied dwellings is estimated using the share of the owner-occupied dwellings to the total dwellings stock in square meter. For the previous calculation this share was taken from the Household Budget Survey. The insurance of owner-occupied dwellings has to be recorded as intermediate consumption of imputed rent according to the user cost method and the rest of the total insurance on dwellings is recorded as consumption in COICOP 12.5.2 group.

3.17.4.5. Value of (mortgage) debt

438. This item covers all types of residential loans taken up under market conditions on owner-occupied dwellings and associated land. Data are obtained from commercial banks via the National Bank of Hungary but these data are available on a net base, i.e. interest paid has already been deducted.

3.17.4.6. Imputed real return

439. The user cost method incorporates acceptable real return on the invested capital; i.e. some return on dwelling and the associated land is estimated. This return should be related to the net value of the specific capital, net of any loans. After several estimations for finding the best rate of return, a common agreement on the application of a fixed rate, namely 2.5% was accepted. This rate was mainly indicated by experimental compilations of countries that apply in their national accounts the stratification method.

3.17.5. Detailed results of the user cost method

Table 3.65 Estimation of owner-occupied dwelling services applying the user cost method with fixed (2.5%) real ROR, million HUF

Item		2002
UC01	Consumption of fixed capital (on owner-occupied dwellings) valued at current prices	335 579
UC05	Expenditures on maintenance and repair of owner-occupied dwellings	112 486
UC08	Net insurance premiums paid by owner occupants; estimated by (UC06) - (UC07)	18 188
UC11	Average value of net stock of owner-occupied dwellings, valued in current prices; (billion HUF)	16 267.9
UC14	Average value of land associated with owner-occ. dwell. in curr. prices (billion HUF)	3 253.6
UC16	Value of net (mortgage) debt on owner-occupied dwellings and associated land; (billion HUF)	606
UC18	Net stock of dwellings and land (net of loans) - (UC11+UC14)-UC16 (billion HUF)	18 915.5
UC18/a	Fixed (2.5%) rate for real return	2.5
UC19	Imputed real return on owner-occupied dwellings and associated land - UC18*UC18/a	472 887
UC23	Imputed rental value of services of owner-occupied dwellings, (estimated thus: UC01 + UC05 +UC08 + UC19)	939 140

3.17.6. The allocation of FISIM and its effect on imputed rent

440. The allocation of FISIM had impact on the HFC figures in two ways. First, the FISIM allocated to the households as consumers were recorded (HUF 205 976 million). On the other hand the FISIM allocation had an impact on the imputed rent calculation, too. The reason is, that Hungary uses the users cost method for estimating the owner-occupied dwellings services figures and the FISIM allocated to the households as owners of dwellings became a part of the intermediate consumption so the gross output increased with the same figure.

Table 3.66 The estimation of owner-occupied dwelling services with FISIM (million HUF)

Denomination	2002
<i>Consumption of fixed capital</i>	335 294
<i>Intermediate consumption</i>	156 294
Of which:	
Net insurance	18 188
Maintenance and repair	112 486
FISIM	25 620
<i>Net operating surplus</i>	472 887
Gross output of owner-occupied dwelling services (imputed rent)	964 760

3.17.7. Plans for improvements

441. In spite of all improvements on measurement of dwelling services there are some problems, which need further investigation.

- a) Estimation method should be established for the holiday homes, garages and empty dwellings.

b) Residents owned dwellings on abroad and non-residents owned dwellings in Hungary: Presently no estimation is incorporated in the Hungarian National Accounts for these categories. Estimations for the number of dwellings purchased by non-residents are available in the Home Office, but for the “export” side it is an open question. Estimations for the import side is/will be obtained from the Republic Representative’s Office, since permission for purchase is issued by it.

3.18. Public administration and defence; compulsory social security (L)

442. In 2002, the gross value added of public administration and defence; compulsory social security (L) amounted to HUF 1 326 663 million, which represented 8.9% of the total value added of all industries.

Table 3.67 Output, intermediate consumption and gross value added of public administration and defence; compulsory social security (L), 2002 (million HUF)

Output			
NACE code	Industry	S13	Total
75	Public administration and defence; compulsory social security	1 753 187	1 753 187
Total (L)		1 753 187	1 753 187

Intermediate consumption			
NACE code	Industry	S13	Total
75	Public administration and defence; compulsory social security	426 524	426 524
Total (L)		426 524	426 524

Gross value added				
NACE code	Industry	S13	Total	GVA%
75	Public administration and defence; compulsory social security	1 326 663	1 326 663	8,9
Total (L)		1 326 663	1 326 663	8,9

443. Main data sources used for the estimation of output and intermediate consumption are described in Chapter 3.1.5, valuation in Chapter 3.2.3 and adjustments in Chapter 3.3.3.

3.19. Education (M)

444. The gross value added of education was HUF 778 988 million in 2002, which accounted for 5.2% of total value added of all industries. Each sector took part in this activity excluding financial corporations, but mostly the General government sector, with HUF 647 047 million. In the General government sector research and development activity of educational institutions is not included in costs of education and training, in accordance with ESA95. The distinction between market and non-market units and between their market and non-market output is made in line with the criteria set out in ESA95 (see Chapter 3.1).

Table 3.68 Output, intermediate consumption and gross value added of education (M) by sectors, 2002 (million HUF)

Output						
NACE code	Industry	S11	S13	S14	S15	Total
80	Education	65 655	782 681	97 438	61 187	1 006 961
Total (M)		65 655	782 681	97 438	61 187	1 006 961

Intermediate consumption						
NACE code	Industry	S11	S13	S14	S15	Total
80	Education	35 253	135 634	31 901	25 185	227 973
Total (M)		35 253	135 634	31 901	25 185	227 973

Gross value added							
NACE code	Industry	S11	S13	S14	S15	Total	GVA %
80	Education	30 402	647 047	65 537	36 002	778 988	5.2
Total (M)		30 402	647 047	65 537	36 002	778 988	5.2

Table 3.69 Calculation of gross value added of education (M), 2002 (million HUF)

Table 3.69	Net sales	Owned production capitalised	Production	Material costs	Costs of contracted services	Costs of other services	Goods purchased for resale	Value of services purchased for resale	Material type costs	Difference
S11										
2	47 005	175	47 179	3 998	13 658	1 481	4 721	8 747	32 605	14 574
3	13 287		13 287	3 838	3 522	377	829		8 565	4 722
5	72	0	72	16	23	1	1		41	31
6	178	0	179	43	43	5	25	29	145	34
7	3 119	0	3 119						1 040	2 079
Összesen			63 836						42 397	21 439
			Output P1						Intermediate consumption P2	Gross value added B1g
a) goods purch. for resale			-5 576						-5 576	0
b) services p. for resale			-8 776						-8 776	0
c) items modifying basic prices			-277							-277
d) social welfare services			29							29
e) own product given to empl.			3							3
f) exploration cost										0
h) rents on land									-2	2
i) insurance premium corr									-185	185
j) cost reimbursement									27	-27
k) purchased goods to empl.									-56	56
l) use of cars for personal purposes									-190	190
m) assets of small value									403	-403

Calculation of gross value added of education (M), 2002 (cont.) (million HUF)

			Output P1						Intermediate consumption P2	Gross value added B1g
Adjustments			1 242							1 242
n) exhaustiv. 2										
o) exhaustiv. 3									-2 987	2 987
q) processing work			9						9	0
t) ad hoc										0
Total adjustments			-13 346						-17 333	3 987
Terminated or transformed c			871						422	449
Missing comp.			552						488	64
Non profit			13 567						8 787	4 780
Total			14 990						9 697	5 293
Re-classification of companies										0
Outward processing										0
Agricultural grossing up			175						175	0
FISIM allocation									317	-317
Total modification			175						492	-317
S 11 Total			65 655						35 253	30 402
S 13			782 681						135 634	647 047
S 14			97 438						31 901	65 537
S 15			61 187						25 185	36 002
M total			1 006 961						227 973	778 988

Unregistered education activity of households⁴

445. In Hungary the phenomenon of unregistered educational services is popular and widespread. Their gross value added is estimated to be 1.6% of the national total for industry “M” (HUF 13.3 billion).

446. Since teachers who give extra lessons to students do not have to declare their activity in personal income tax returns according the current Hungarian tax rules, other sources have to be used for the estimation of output and gross value added of private teaching.

447. The Household Budget Survey includes information on education expenditures, which is though in compliance with the COICOP nomenclature (see below). Therefore, unregistered and registered private and public education services can not be separated from one another.

Table 3.70 COICOP nomenclature of education

10 Education
10.1 Pre-primary and primary education
10.2 Secondary education
10.3 Post-secondary non-tertiary education
10.4 Tertiary education
10.5 Education not definable by level

448. Basic data for the estimations derived from ”Report on Hungarian public education”, published by the National Institute for Public Education every two or three years since 1996. This publication regularly reports the percentage of students participating in extra lessons after school and the proportion of paid extra lessons.

449. The output of this activity is calculated from the number of students participating in paid extra lessons – on the basis of the report – and the well-known fees per hour of private teachers. Intermediate consumption is also estimated, taking into account that the IC/GO ratio is much less in this field than those in other sectors.

3.20. Health and social work (N)

450. The gross value added of health and social work was HUF 666 059 million in 2002, which accounted for 4.5% of the total value added of all industries. Each sector (except financial corporations) took part in this performance, but mostly the General government sector, with HUF 456 529 million. University hospitals are part of the General government sector, and their educational services are accounted in section “M”. The distinction between market and non-market units and between their market and non-market output is made in line with the criteria set out in ESA95 (see Chapter 3.1).

Table 3.71 Output, intermediate consumption and gross value added of health and social work (N) by sectors, 2002 (million HUF)

Output						
NACE code	Industry	S11	S13	S14	S15	Total
85	Health and social work	131 806	729 033	159 122	42 617	1 062 578
Total (N)		131 806	729 033	159 122	42 617	1 062 578

⁴ Unregistered activity includes activity of private individuals with tax number registered in BR (see Chapter 3.1.2.1).

Intermediate consumption						
NACE code	Industry	S11	S13	S14	S15	Total
85	Health and social work	68 433	272 504	33 455	22 127	396 519
Total (N)		68 433	272 504	33 455	22 127	396 519

Gross value added							
NACE code	Industry	S11	S13	S14	S15	Total	GVA %
85	Health and social work	63 373	456 529	125 667	20 490	666 059	4.5
Total (N)		63 373	456 529	125 667	20 490	666 059	4.5

Table 3.72 Calculation of gross value added of health and social work (N), 2002 (million HUF)

Table 3.72	Net sales	Owned production capitalised	Production	Material costs	Costs of contracted services	Costs of other services	Goods purchased for resale	Value of services purchased for resale	Material type costs	Difference
S11										
2	83 961	62	84 023	18 634	17 317	2 048	11 755	4 661	54 415	29 608
3	48 366		48 366	9 331	8 838	940	1 758	0	20 867	27 499
6	75	0	75	14	22	2	6	7	51	24
7	5 772	1	5 773						2 214	3 559
Összesen			138 237						77 547	60 690
			Output P1						Intermediate consumption P2	Gross value added B1g
a) goods purch. for resale			-13 519						-13 519	0
b) services p. for resale			-4 667						-4 667	0
c) items modifying basic prices			-433							-433
d) social welfare services			20							20
e) own product given to empl.			3							3
f) exploration cost										0
h) rents on land									-1	1
i) insurance premium corr									-815	815
j) cost reimbursement									15	-15
k) purchased goods to empl.									-3	3
l) use of cars for personal purposes									-877	877
m) assets of small value									2 594	-2 594

Calculation of gross value added of health and social work (N), 2002 (cont.) (million HUF)

			Output P1						Intermediate consumption P2	Gross value added B1g
n) exhaustiv. 2			1 709							1 709
o) exhaustiv. 3									69	-69
q) processing work										0
t) ad hoc			-2						-18	16
Total adjustments			-16 889						-17 222	333
Terminated or transformed c			850						353	497
Missing comp.			8						6	2
Non profit			9 434						6 998	2 436
Total			10 292						7 357	2 935
Re-classification of companies										0
Outward processing										0
Agricultural grossing up			166						166	0
										0
FISIM allocation									585	-585
Total modification			166						751	-585
S 11 Total			131 806						68 433	63 373
S 13			729 033						272 504	456 529
S 14			159 122						33 455	125 667
S 15			42 617						22 127	20 490
N total			1 062 578						396 519	666 059

Gratitude money

451. The structure and financing of the Hungarian health care system significantly changed in the 1990s. Although in the socialist regime health services were available for all citizens as of right and free of charge, after the change of regime the services were put on an insurance basis. Employers and employees have to pay social contributions to the Health Insurance Fund according to the rules of the new Act on Health (The principal piece of legalisation in the health branch is the new Act on Health (Act 154 of 1997) setting up the most important framework rules of health care).

452. The health sector is currently a diverse, multi-actor system, containing the state as both regulator and main owner, local governments, the National Health Insurance Fund as a financing agency, and the more and more extensive private sector. The Hungarian health care system developed a unique construction of financing, in which current, operational costs are covered by social security funds, capital expenditure is covered by the owner, while a significant part of the wages and salaries of employees in the health system is collected directly from patients' pockets. This extra donation, called gratitude money (hálapénz), is paid by patients to doctors or nurses in the hope of better treatment or as thanks for the treatment (like a tip). This slice of the health budget is not covered by social security, it involves tax-avoidance, and though illegal, is largely tolerated by authorities. Thus this phenomenon is actually a part of the NOE. The gratitude money is probably an unknown concept in those countries where the health care system is operating really on the basis of insurance. For the moment the Hungarian health care system is about to go through changes of great importance.

453. Our calculations for the volume of gratitude money is based on a study of Social Research Institute (TÁRKI) published in 1999. This study summarizes the outcomes of a sample survey inquiring circa 1000 doctors and 1400 patients about the amount and frequency of both assumed and admitted gratitude money donation and about their opinion and attitude.

454. Results concerning year 1998 are revised yearly using some health statistics. The number of treatment cases of outpatient services is obtained from the National Statistical Data Collection Programme, while the statistics on inpatient services are reported by the National Health Insurance Fund, which include data on the number of financed cases and estimated weight numbers concerning around 740 health care events.

455. The amount of gratitude money increased year by year by taking into account the consumer price index and the results from new studies. For year 2002 the estimated amount of gratitude money was HUF 49.5 billion, which represented the 6.83 % of total GVA in section "N".

3.21. Other community, social and personal service activities (O)

456. The gross value added of other community, social and personal service activities was HUF 648 811 million in 2002, which constituted 4.4% of the total value added of all industries. It was produced by all the sectors except financial corporations. The gross value added of activities of membership organisations (NACE 91) was HUF 87 355 million. It was completely the performance of non-profit institutions, the major part of which belonged to NPISH, while the rest to NFC, representing HUF 15 218 million. The distinction between market and non-market units and between their market and non-market output is made in line with the criteria set out in ESA95 (see Chapter 3.1).

Table 3.73 Output, intermediate consumption and gross value added of other community, social and personal service activities (O) by branches and sectors, 2002 (million HUF)

Output						
NACE code	Industry	S11	S13	S14	S15	Total
90	Sewage and refuse disposal, sanitation and similar activities	120 795	26 938	3 642	0	151 375
91	Activities of membership organisations n.e.c.	38 560	0	0	139 092	177 652
92	Recreational, cultural and sporting activities	331 282	141 777	73 787	87 593	634 439
93	Other service activities	51 342	6 967	283 169	0	341 478
Total (O)		541 979	175 682	360 598	226 685	1 304 944

Intermediate consumption						
NACE code	Industry	S11	S13	S14	S15	Total
90	Sewage and refuse disposal, sanitation and similar activities	53 796	23 699	1 446	0	78 941
91	Activities of membership organizations n.e.c.	23 342	0	0	66 955	90 297
92	Recreational, cultural and sporting activities	222 415	57 413	26 149	60 659	366 636
93	Other service activities	25 436	3 778	91 045	0	120 259
Total (O)		324 989	84 890	118 640	127 614	656 133

Gross value added							
NACE code	Industry	S11	S13	S14	S15	Total	GVA %
90	Sewage and refuse disposal, sanitation and similar activities	66 999	3 239	2 196	0	72 434	0.5
91	Activities of membership organizations n.e.c.	15 218	0	0	72 137	87 355	0.6
92	Recreational, cultural and sporting activities	108 867	84 364	47 638	26 934	267 803	1.8
93	Other service activities	25 906	3 189	192 124	0	221 219	1.5
Total (O)		216 990	90 792	241 958	99 071	648 811	4.4

457. In the interest of exhaustiveness output was increased by the estimated value of tips. The basic source to estimate the volume of tips was the result of a household survey conducted by HCSO in 1997. The adjustment was made in class 9302 (Hairdressing and other beauty treatment).

Table 3.74 Calculation of gross value added of other community, social and personal service activities (O), 2002 (million HUF)

Table 3.74	Net sales	Owned production capitalised	Production	Material costs	Costs of contracted services	Costs of other services	Goods purchased for resale	Value of services purchased for resale	Material type costs	Difference
S11										
2	530 049	2 846	532 895	45 767	164 150	13 064	21 241	45 176	289 398	243 497
3	34 520		34 520	10 398	8 322	697	3 234		22 651	11 869
4			6 983	11	6 395	161			6 567	416
5	1 432	0	1 432	17	114	8	106	819	1 064	368
6	11 869	1 068	12 937	1 434	28 531	690	73	303	31 031	-18 094
7	6 550	0	6 550						2 399	4 151
Összesen			595 317						353 110	242 207
			Output P1						Intermediate consumption P2	Gross value added B1g
a) goods purch. for resale			-24 653						-24 653	0
b) services p. for resale			-46 298						-46 298	0
c) items modifying basic prices			-12 926							-12 926
d) social welfare services			858							858
e) own product given to empl.			10							10
g) prize money			-46 097							-46 097
h) rents on land									-2	2
i) insurance premium corr									-1 151	1 151
j) cost reimbursement									115	-115
k) purchased goods to empl.									-140	140
l) use of cars for personal purposes									-651	651
m) assets of small value									2 401	-2 401

Calculation of gross value added of other community, social and personal service activities (O), 2002 (cont.) (million HUF)

			Output P1						Intermedia te consumptio n P2	Gross value added B1g
Adjustments										
n) exhaustiv. 2			9 063							9 063
o) exhaustiv. 3									-5 608	5 608
p) tips			1 314							
q) processing work			372						372	0
t) ad hoc			-3						6	-9
Total adjustments			-118 360						-75 610	-42 750
Terminated or transformed c			6 609						4 860	1 749
Missing comp.			1 487						1 188	299
Non profit			56 922						39 171	17 751
Total			65 018						45 219	19 799
Re-classification of companies										0
Outward processing										0
Agricultural grossing up			4						4	0
FISIM allocation									2 266	-2 266
Total modification			4						2 270	-2 266
S 11 Total			541 979						324 989	216 990
S 13			175 682						84 890	90 792
S 14			360 598						118 640	241 958
S 15			226 685						127 614	99 071
O total			1 304 944						656 133	648 811

3.22. Private households with employed persons (P)

458. In Hungary these activities are regarded as insignificant.

3.23. Treatment of extra territorial organizations and bodies (Q)

459. Except diplomatic corps there are no extraterritorial bodies in Hungary and vice versa. Hungarian embassies abroad are accounted for in the output by the central government.

460. Distinction between taxes on products and production / subsidies (ESA paragraph: 4.15-4.40)

461. The HCSO, MoF and NBH working group classified each type of taxes and subsidies into the appropriate ESA categories when the ESA accounts (including accrual adjustments) were introduced (Regulation Nr. 2516/2000 of the European Parliament and of the Council, 3. clause, paragraph (b)).

462. In the case of introducing a new type of tax / subsidy, the working group (including HCSO, MoF and NBH) classifies the new item into the appropriate ESA category.

3.24. Taxes on products (D.21)

463. Direct payments for producing or selling products / services are classified into taxes on products.

On the basis of ESA paragraph 4.22 items incurring as a result of engaging in production are classified into other taxes on production, independent of the quantity or value of the goods and services produced or sold.

Especially payments related to compensation of employees and tools used by the companies (which are managed/levied by the local/financial bodies in the Hungarian tax system) are recorded as D.29.

464. The items classified as taxes on products (D.21) in 2002 are as follows:

Table 3.75 Data sources of taxes on products

	Taxes	Data sources
D.21	Taxes on production except VAT	D.212+ D.214
	Taxes paid to Central Budget	
D.212	Taxes and duties on imports	D.212A+D.212D
D.212A	Import duties	Budget Reporting (realized), data of the Ministry of Finance's data
D.212C	Excise duties on imported products	Budget Reporting (realized), data of the Ministry of Finance's data
D.212D	Environment protection fees on imported products	Budget Reporting (realized), data of the Ministry of Environmental Protection's data
D.214	Taxes on products, except VAT and import taxes	D.214A+...+D.214L
<i>D.214A</i>	<i>Excise duties on domestic products</i>	Budget Reporting (realized), data of the Ministry of Finance's data
D.214A1	Excise duties	Budget Reporting (realized), data of the Ministry of Finance's data
D.214A2	Alcohol production duty	Budget Reporting (realized), data of the Ministry of Finance's data
D.214B	Stamp duties	Budget Reporting (realized), data of the Ministry of Finance's data
D.214C1	Duty on acquisition of property	Budget Reporting (realized), data of the Ministry of Finance's data
D.214E	Cultural contribution	Budget Reporting (realized), data of the Ministry of Cultural Heritage's data
D.214F	Gambling tax	Budget Reporting (realized), data of the Ministry of Finance's data
D.214H1	Contribution on tourism	Budget Reporting (realized), data of the Ministry of Economy and Transport's data
<i>D.214I</i>	<i>Turnover taxes</i>	<i>D.214I1+... D.214I5</i>
D.214I1	Breeding contribution	Budget Reporting (realized), data of the Ministry of Agriculture's data
D.214I2	Tax on horse-race	Budget Reporting (realized), data of the Ministry of Agriculture's data
D.214I3	Contribution on game-preserving	Budget Reporting (realized), data of the Ministry of Agriculture's data.
D.214I4	Contribution to develop fishery	Budget Reporting (realized), data of the Ministry of Agriculture's data
D.214I5	Contribution to forest maintenance	Budget Reporting (realized), data of the Ministry of Finance's data
	Taxes payable to local governments	D.214C+D.214I6+ D.214H2
D.214C2	Duty on acquisition of property	Budget Reporting (realized), data of the Ministry of Finance's data
D.214I6	Tax on company sales	Data of the Hungarian State Treasury
	Extra-budgetary funds	D.214L+D.214J
D.214L	Environmental protection fee	Budget Reporting (realized), data of the Ministry of Environment Protection's data.
D.214J	Contribution to Nuclear Fund	Budget Reporting (realized), data of the Ministry of Finance's data

Table 3.76 Taxes on products (million HUF)

	Taxes	Time adjustment	Cash data	Adjustment	Accrual data
D.21	Taxes on production except VAT		1 149 835	10 626	1 160 461
	Taxes paid to Central Budget				
D.212	Taxes and duties on imports		184 041		184 041
D.212A	Import duties		129 341		129 341
D.212C	Excise duties on imported products		41 032		41 032
D.212D	Environment protection fees on imported products		13 668		13 668
D.214	Taxes on products, except VAT and import taxes		954 476	10 626	965 102
D.214A	Excise duties on domestic products		552 973	9 563	562 536
D.214A1	Excise duties on domestic products	1 month	549 469	9 563	559 032
D.214A2	Alcohol production duty		3 504		3 504
D.214B	Stamp duties		12 397		12 397
D.214C	Duty on acquisition of property		35 915		35 915
D.214E	Cultural contribution	1 month	5 971	696	6 667
D.214F	Gambling tax	1 month	38 822	1 070	39 892
D.214H	Contribution on tourism	1 month	2 323	-655	1 668
D.214I	Turnover taxes		5 705		5 705
D.214I1	Breeding contribution		1 110		1 110
D.214I2	Tax on horse-race		8		8
D.214I3	Contribution on game-preserving		231		231
D.214I4	Contribution to develop fishery		15		15
D.214I5	Contribution to forest maintenance		4 341		4 341
	Taxes payable to local governments		289 182		289 182
D.214C	Duty on acquisition of property		35 500		35 500
D.214I1	Tax on company sales		252 603		252 603
	Extra-budgetary funds		23 585	-48	23 537
D.214L	Environmental protection fee	1 month	6 386	-48	6 338
D.214J	Contribution to Nuclear Fund		17 199		17 199

465. The data source for recording taxes and subsidies is basically the Budget Reporting (realized); it is submitted to Parliament each year.

466. Regulation Nr. 2516/2000 of the European Parliament and of the Council offers many different methods for the accrual recording of taxes. Among these we use the time adjusted cash method as regards converting the cash data of taxes and social contributions to accrual data.

467. Only taxes actually received and subsidies actually paid are recorded in this account, so our tax data are not adjusted with the amount of taxes not collected.

Our preference is influenced by the availability of backwards cash data for a long period and their use by budget reporting. Revenue and expenditure are therefore transparent and easy to obtain. This makes it easier to calculate mid- and long-term time series and ensures that back data can be calculated by the

same method. When describing the different types of taxes we will go into the details of the specific arguments for adjusting or not the cash figures of various tax types.

468. As a basic principle we use one month's time adjustment (shifting backwards) for taxes and social contributions.

469. No time adjustment is applied in case of several tax types. Examples include customs duties, where liabilities are paid 5 days after the decision is disclosed. Following the first five days of each year amounts are paid for one year only. We do not apply adjustments for taxes on sales or turnover, either, since it is not justified by either the volume of taxes or the annual change of liabilities.

470. In case of *local government taxes* we use the cash method. In respect of the most important local taxes (tax on company sales, taxes on vehicles) it is unnecessary to adjust cash figures. As for the tax on company sales taxpayers should settle their expected tax liabilities by December of the year in question. The other tax types are payable in two instalments, there is no need for adjustments.

471. Tax payments, which depend on the volume of goods or services, are recorded as taxes on products. One of the examples is consumption tax, which is levied on vehicles registered in Hungary or the volume of stewed coffee. Similarly, the excise duty is determined on the basis of the volume of fuel (tons), alcoholic beverages (hectolitre degrees) or tobacco products (boxes or 1000 pieces).

472. Stamp duties paid for administrative procedures initiated by enterprises for the production of goods have been classified under taxes on products since 2003.

473. Taxes related to the process of production or services provision are included in other taxes on products. Their order of magnitude is independent from the volume of goods produced. For example, the training contribution is proportionate to the number of employees, and the tax on vehicles depends on the number and weight of vehicles.

474. The tax revenue of the state and the revenue of the services it provides are categorised according to paragraphs 4.23/e, 4.79 and 4.80 in ESA.

475. Fines and surcharges related to tax payment are accounted for under D.75 (other current transfers) in the ESA system, since the tax types which fines concern cannot be separated in government records, only aggregate data are available.

Content of some significant tax types

Duty on acquisition of property (D.214C)

476. The liability of payment of duty on acquisition of property occurs at the time of the acquisition of an asset.

Taxpayer: the legal or natural entity who acquires movable estate (acquisition of movable estate in a narrow circle, e.g. at an administrative auction) or real estate property, an intangible asset, or a single practice of a General Practitioner.

Tax base:

- the price of an acquired asset that should not be reduced by the liabilities incurred on the asset;
- the price of the single practice of the general practitioner.

477. Duty on acquisition of property is classified into taxes on products as the group of products – for which the liabilities of payment are incurred – can be determined in an appropriate way. The payment of duties for cumulative contracts, gifts, succession are treated unitedly by the Hungarian laws, however, revenues for the latter two items are recorded as D.91.

Table 3.77. Duty on acquisition of property (million HUF) (2002)

Duty	Central government	Local government	Total
<i>Sum of property on acquisition duty</i>	40 343	39 772	80 115
of which inheritance (D.91A) (population)	3 365	3 200	6 565
gifts (D.91A) (population)	1 063	1 072	2 135
<i>duty on acquisition of property:</i>	35 915	35 500	714 15
of which: transcript of motor vehicles	5 674	5 110	10 784
transcript of real property	30 241	30 300	60 541
<i>Allocation of duty on acquisition of property (D.214C)</i>	35 915	35 500	71 415
of which: payment of companies (50%)	17 958	17 750	35 708
payment of households (50%)	17 957	17 750	35 707

478. Acquisition of real property, as well as movable property (motor vehicles and trailers), and rights of pecuniary value, for consideration and not subject to duty on inheritance or gifts, in any other way, shall be subject to a duty on onerous transfer of property.

479. The obligation to pay duties shall apply to the following rights of pecuniary value and movable property:

- a) acquisition of rights of pecuniary value related to real property, and acquisition of property through the termination of such rights;
- b) cession of the exercise of usufruct enjoyed in respect of real property;
- c) acquisition of movable property at an auction conducted by an authority;
- d) acquisition of ownership or usufruct of automobiles and trailers;
- e) acquisition of the ownership of, or rights of pecuniary value pertaining to, building structures not qualifying as real property and located on public areas.
- f) acquisition of a license for an independent medical practice.

480. If exemption applies to the subject matter of a duty (subject-oriented duty exemption), no duty need be paid.

In respect of the exemption of a person otherwise obliged to pay a duty (personal duty exemption), no duty may be claimed from the exempted party.

The following shall be granted full personal duty exemption: the State of Hungary, local governments, Hungarian State Treasury, churches, association of churches, foundations, water management companies, National Bank of Hungary.

481. The general rate of the duty on onerous transfer of property shall be 10 per cent of the market value of the property acquired, including encumbrances. The duty base for the conveyance of a license for an independent medical practice, gratuitous or otherwise, shall be the value of the license, including encumbrances, while the rate of duty shall be 10 per cent of said duty base.

482. In respect of the acquisition of title to a motor vehicle, the rate of duty shall be 10 forints for each cubic centimeter of displacement capacity of the motor vehicles engine, if the permissible maximum gross weight of the trailer is less than 2500 kg, the duty payable shall be HUF 5000; in all other cases, the duty shall be HUF 12000.

483. From the 1st of January 2008 the Tax and Financial Control Administration (APEH) gather the duties on real and movable properties (earlier: local governments). The rate of allocation of duties gathered (between central and local government) are determined in the Act on Budget.

Excise duties on imported products (D.212D)

Tax object:

- fuel and other articles originated from petroleum,
- thinner and solvent (these two groups together make up directly polluting materials),
- tire, refrigerating apparatus, cooling liquid, packaging material, battery (waste generating products).

484. The tax is due at the time of the transaction.

485. Environment protection fees levied on imported products are separated from total fee revenue in the following manner: domestic liabilities are paid to the Tax and Financial Control Administration of Hungary (APEH), and subtracting this payment from total environment protection fee revenue equals the fee revenue from imports.

Excise duties on domestic products (D.214A)

Group 1

486. The tax has to be paid on the following products:

- products manufactured from noble metal (except silver), spares of precious metal, polished precious stones and jewellerys,
- passenger cars,
- stewed coffee, coffee extract.

Time adjustment: one month.

487. Explanation: these above-mentioned items are collected by the tax office (APEH) on the basis of taxpayers' own declarations. The deadline for the submission of the declaration and for the payment is the 20th day of the month following the transaction (which is usually sales). The tax office will reimburse the possible overruns after the above-mentioned deadline.

*Group 2*Tax base:

- volume of mineral oil products,
- volume of alcohol of alcohol products in hectolitre degree,
- volume of beer in hectolitre or Balling degree,
- volume of wine, champagne or in-between alcohol products in litre,
- retail sales price and/or thousand pieces of cigarettes for tobacco products.

Time adjustment: one month.

488. Explanation: these above-mentioned items are collected by the customs office on the basis of taxpayers' own declarations. The deadline for the submission of the declaration and for the payment is the 20th day of the month following the transaction (which is usually the issuing of products into circulation by taking it out from a specific tax-storehouse). Some producers make advance payments until the 28th day of the reference month. These producers should also submit a detailed declaration by the 20th day of the month following the transaction.

Cultural contribution (D.214E)

489. The cultural contribution is a liability of payment defined in the Act XXIII of 1993. The cultural contribution (which was earlier a program only) now also covers the expenses of the Natural Cultural (separate state) Fund.

490. The rate of cultural contribution is substantially higher on products and services with lower cultural value in order to create, preserve and spread original cultural Hungarian and joint values in Hungary and abroad, as well. The liability of payment of cultural contribution will be extinguished from 2010.

491. The base for calculating the cultural contribution is the revenue (excluding VAT) or the value of design of products and services listed: 0,2%, 1%, 2%, 3%, 25% determined, filed and paid by the producer, importer, publisher, supplier or contractor (in the framework of self-assessment).

492. As the cultural contribution is paid the 20th day of the month following the current period, an accrual adjustment of one month of the revenues is applied.

Table 3.78. Cultural contribution

Rates	Description of goods and services
0,2%	e.g. hotels, offices, whole and retail trade buildings; distance and telecommunication networks and art objects etc.
1%	e.g. newspapers, books, magnetic data holders, printing machines, photochemical materials, photocopiers etc.
2%	e.g. records, CDs, tapes, amusement of fun-fairs, spreading and screening of movies and videos, nationwide and regional radio and TV (not civil) services
3%	e.g. video tape, capture of pictures or motion pictures on CD, DVD tape readable with laser (with signs – non-data and voice processing), speech capture with magnetic tape etc.
25%	production, spread and screening of porn and violent books, videos, CD-s, video games, cards etc.

Taxpayers: producers, importers, publishers, distributors, service providers, operators and contractors of products (e.g. press, video-, and tape records) and specific services provided (e.g. film, video and DVD recordings), which are subject to a cultural contribution defined in the annex of the legal rule in compliance with the effective HTime adjustment: one month.

Gambling tax (D.214F)

Taxpayer: the organizer of a game of chance.

Tax base:

- in case of drawing games the value of prizes;
- number of money-winning (gambling) and game machines;
- in case of casinos the sum of monthly net revenue of games of chance and tips.

Time adjustment: one month.

493. Explanation: the deadline for declaration and payment is the 20th day of the month or quarter following the transaction.

494. The Act XXXIV of 1991 on the organization of gambling regulates the liabilities of payment for gambling tax. For sweepstake and bookmaker games a certain percentage of gambling revenues, while for gambling and fruit machines a fixed amount is paid monthly by the operator.

495. As the gambling tax has to be admitted monthly (and it is paid in the same month), an accrual adjustment of one month is applied for the revenues.

Table 3.79. Gambling tax (1000 HUF) (2002)

Adjustment	
Revenues of sweepstake games	15 463
Revenues of bookmaker games	4 182
Revenues of gambling and fruit machines	19 177
Sum of gambling revenues – cash data	38 822
Accrual adjustment	+1 070
Accrual data	39 892

Simplified corporate tax (D.214I7)

496. In order to decrease administration expenses the simplified corporate tax was introduced for small sized enterprises in 2003 – a certain percentage of the revenue resulting from producing goods or services is paid by the companies only once in order to extinguish tax liabilities.

Taxpayer:

- private entrepreneurs;
- general (unlimited) partnerships;
- limited partnerships;
- limited liability companies;
- cooperatives and housing cooperatives;
- forest management associations;
- bailiff's office;
- law firms and notaries' offices;

497. Requirements:

- operation of company for three years (managed by the tax subjects)
- no linked enterprise / shares in other companies
- revenues (on the basis of Act on Accounting – also reported in the profit and loss account) shall not exceed HUF 25 Million (earlier: HUF 15 Million)

498. With regard to eligible taxpayers (mostly sole proprietor) to whom the Accounting Act does not apply, revenue shall also mean any valuable consideration received from others in connection with or arising out of the taxpayer's entrepreneurial (business) operations under any legal title and in any form, including value-added taxes as charged.

499. Valuable consideration shall, in particular, mean money, credit tokens (including, in particular, gift certificates, notes, bills, coupons and other similar instruments, which can be used as a payment instrument in exchange for the goods and/or services of one or more persons, or as an instrument that is accepted by one or more persons in exchange for any part of an existing liability), objects, securities, services received and transferable rights of value, and any debt or overdue liability of the taxpayer that has been cancelled, expired or assumed.

500. The tax amounts to 25% of the revenue (earlier: 15%). Advances are paid quarterly, the difference between the annual liabilities and the advances are counterbalanced on the 15th of February of the following tax year, therefore, an accrual adjustment of one month is applied within the year and of two months at the end of the year for the cash figures.

The most important local government taxes:

Duty on acquisition of property (D.214C2)

501. Its content is the same as mentioned above in respect of the Duty on acquisition of property (D.214C). The amount collected is only divided among local governments and the central government, as determined by the annual Act on Budget.

Tax on company sales (D.214I1)

502. The main purpose of the tax is to gather revenue for local governments. The tax is linked to the sales of the firm.

503. In the area of jurisdiction of local government, tax liability shall apply to business activities pursued permanently or temporarily, a commercial activity which covers production of goods and services. Taxable person shall be the entrepreneur.

504. The tax base for permanent commercial activities shall be the net sales revenue of goods / services produced, less the original costs of goods sold, the value of mediated services and material costs.

505. The revenues comprised in the tax base which were generated by the activities of a business facility located abroad are exempted, however, with regard to taxable earnings of corporations other than public service organizations abroad, the exemption applies only if taxed by the local authority in the country where the business facility is located.

506. Any entrepreneur who is engaged in permanent commercial activities in the areas of jurisdiction of more than one local government, the tax base shall be divided, with regard to the most characteristic nature of the activities performed, by the entrepreneur. For temporary commercial activities (e.g. trade fairs, circus) the tax shall be established on the basis of the number of calendar days during which the activity was performed. Any fraction of a day in which activities are performed shall be considered a full calendar day.

507. The tax base is determined by each local government separately, however, the annual tax rate shall not exceed 2% of the tax base for permanent commercial activities. As for temporary commercial activities, the tax rate shall not exceed the daily amount of HUF 5000.

508. Data source are the Budget reporting of the local governments. Cash data are applied as entrepreneurs have to pay the advances (quarterly) and the prospective amount of the annual liability (for 20th of December), as well. This kind of recording shall be a good proxy for calculating the annual accrual data.

3.25. Value added tax (D.2111)

509. A type of tax on products, which is paid in proportion to the actual value added generated, since the VAT content of the goods and services purchased for resale is reimbursed. Tax rates are 25, 12 or 0%.

510. Data sources and figures in 2002:

Table 3.80 Data sources of value added tax

	Taxes	Data sources
D.21	TAX ON PRODUCTS VAT	D.2111
	Taxes to central budget	
D.2111	Value added tax (VAT)	Budget Reporting (realized), data of the Ministry of Finance

Table 3.81 Value added tax (million HUF)

	Taxes	TAC	Cash data	Adjustment	Accrual data
D.21	TAX ON PRODUCTS VAT		1304871	36043	1340914
	Taxes to central budget				
D.2111	Value added tax (VAT)	payment: one month reimbursement: two months	1304871	36043	1340914

511. The classification of the goods and services basically corresponds to recommendations of the 6th directive. Goods and services taxed under a reduced rate are as follows: agricultural and food industrial products, transport, postal, agricultural, cultural and household services. Goods under the 0% rate are basic medicines, medicine ingredients, aid assets of handicapped and blind people and textbooks.

512. There are certain types of sales of products and provisions of services which are exempt of tax, these are called activities-based tax exemption and are listed in the annex of Act on VAT. Some examples: sale, renting and leasing of land, students' hostel provision, postal and certain financial services, renting of structures and poles serving sports purposes, experts' activities exercised by experts appointed by courts and investigating authorities, public administration and compulsory social insurance, radio and television services.

513. There is another type of tax exemption: taxpayers whose centre of economic activity or permanent residence can be found in Hungary have got the right to be exempt of the tax if their actual revenue generated by their economic activity in the previous year and during the tax year is under a certain threshold defined by law (HUF 2 million / year).

514. If taxpayers execute several activities from which some are liable to tax and other enjoy activities-based tax exemption, the VAT tax content of the goods and services purchased can be divided between two types of activities.

515. The following special regulations refer to certain economic activities:

a) *Hotels* having a relatively small amount of revenue (the amount is defined by law in HUF 4 m) have the right to pay a tax calculated by using a fix rate on the basis of their actual revenue but they cannot deduct any VAT charged on their purchases. It is not allowed for them to perform any other activities except agricultural production.

b) Taxpayers carrying out *agricultural activities* (except importation of agricultural products) do not have to meet the obligations of declaring, invoicing and settling VAT in respect of such activities. They are not obliged to pay tax on these activities but they cannot deduct VAT on their purchases either. In the case of buying up products from such agricultural producers the buyers have to pay for them a certain amount of additional compensation margin which is defined by law. The buyer has the right to record this amount as VAT paid and to deduct it from VAT payable by her/him.

c) Special taxation method can also be applied in the case of *retail trade shops*. They charge the entire VAT on goods and services sold to customers but the VAT content of the goods and services purchased are calculated on the basis of a special “theoretical good” that consists of the stored goods weighted with the respective weights of the goods in stock

d) *Organizers of auctions*: The entrepreneur purchases a certain good (e.g. a car) from a natural person who is not a taxpayer (cannot issue a VAT invoice) or from a taxpayer who also chose this special taxation method. When the entrepreneur sells the good, VAT shall certainly be paid. As compensation the total payable VAT equals the difference between the price margin realized on sales and the tax on her/his purchases.

516. Taxpayers engaged in *tourism* pay VAT on the basis of their trade margin.

517. The declaration of VAT is due monthly, quarterly or yearly depending on the turnover (sales) of the corporation.

Time adjustment: in the case of VAT *payments* a one-month time adjustment is applied because the deadline for the declaration and payment for monthly and quarterly taxpayers is the 20th day of the month following the transaction (which is sales or imports).

Concerning reimbursements: time adjustment is two months, since the tax office refunds the VAT 30 (or 45) days after the declaration.

518. Therefore an adjustment was made to cash data at the beginning of 2002 with VAT items for 2001 (– HUF 19 193 million) and amounts charged for 2002 but paid or reimbursed in 2003 (+ HUF 55 236 million).

3.26. Subsidies on products (D.31)

519. Subsidies are current unrequited payments of the government or the EU to resident producers with the aim of influencing volumes, prices or remuneration of production factors.

520. Subsidies on products are direct payments for producing, selling (exporting), utilization products, services and production factors. Specific subsidies granted to companies classified to the general government (in order to achieve economic and social-politic goals as the expenses of production exceed the sale prices – e.g. MÁV) are also recorded as subsidies on products. On the basis of ESA paragraph 4.38. the cover of particular losses of such companies and subsidies granted for developing appliances are not recorded as subsidies on products.

521. Other subsidies on production are subsidies granted as resident production units are used in the production process (ESA paragraph 4.27).

522. Main components: wages and subsidies of employees, subsidies granted for reducing pollution, interest subsidies and subsidies granted to agricultural producers (i.e. government expenses cover the following areas: consulting for improving the level of production, improvement of services, subsidies granted for cost-cutting of training and SAPS – direct expenditures of the European Union institutions – since Hungary joined the European Union in 2004)

Time adjustment: as a basic principle we use cash data or a 1 year adjustment for the agricultural subsidies on the basis of the agricultural satellite accounts.

523. Explanation: The above-mentioned EU regulation does not cover the time adjustment of subsidies to accrual data. One should drop the cash data only in the case when reliable information is available. In all other cases we should keep the cash data since better and more reliable statistics can

be produced from these. The time adjustment may be applied only to one type of subsidy (market access subsidy), since producers can ask for a subsidy that is due from a certain date.

524. HCSO classified the following items as subsidies on products (D.31.) in 2002:

Table 3.82 Data sources of subsidies on products

	Subsidies	Data sources
D.3	Subsidies on products	D.312+ D.319
	From the Central Budget	
D.312	Subsidies on exports	D.3121
D.3121	Direct subsidy on exports	D.31211
D.31211	Agricultural and food industrial export subsidy	Budget Reporting (realized), data of the Ministry of Agriculture's data.
D.319	Other subsidies on domestic products	D.3191+.... D.3199
D.3191	Individual subsidy	Budget Reporting (realized), data of the Ministry of Finance's data
D.3193	Agricultural market subsidy	Budget Reporting (realized), data of the Ministry of Agriculture's data.
D.3194	Subsidy on public service activities of radios and televisions	Budget Reporting (realized), data of the Parliament's data
D.3195	Subsidy to eliminate forest damages	Budget Reporting (realized), data of the Ministry of Agriculture's data.
<i>D.3197</i>	<i>Market access subsidy</i>	<i>D.31971 - D.31972</i>
D.31971	Market access subsidy	Budget Reporting (realized), data of the Ministry of Agriculture's data.
D.31972	Repayment of market access subsidy	Budget Reporting (realized), data of the Ministry of Agriculture's data.
D.3198	Subsidy to decrease agricultural production costs	Budget Reporting (realized), data of the Ministry of Agriculture's data.
D.3199	Subsidy based on fixed area and yields	Budget Reporting (realized), data of the Ministry of Agriculture's data.
	Subsidy payable by local governments	
D.3192	Subsidy on passenger transport	Budget Reporting (realized), data of the Local governments' data
<i>D.3196</i>	Subsidies from extra-budgetary funds	D.31963 + D.31964
D.31963	Subsidy from the cultural fund	Budget Reporting (realized), data of the Ministry of Culture's data.

Table 3.83 Subsidies on products (million HUF)

		Time adjustment	Cash data	Adjustment	Accrual data
D.31	Subsidies on products		187819	6 396	194215
	Subsidies from the central budget				
D.312	Export subsidies		4201	-2184	2017
<i>D.3121</i>	<i>Direct subsidy on exports</i>		<i>4201</i>	<i>-2184</i>	<i>2017</i>
D.31211	Agricultural and food industrial export subsidy	1 month	4201	-2184	2017
D.319	Other subsidies on domestic products		183618	8580	192198
D.3191	Individual subsidy		60968		60968
D.3193	Agricultural market subsidy	1 year	20020	5917	25937
D.3194	Subsidy on public service activities of radios and televisions		11356		11356
D.3195	Subsidy to eliminate forest damages	1 year	317	-8	309
<i>D.3197</i>	<i>Market access subsidy</i>		<i>18988</i>	<i>6282</i>	<i>25270</i>
D.31971	Market access subsidy	1 year	20405	6282	26687
D.31972	Repayment of market access subsidy		-1417		-1417
D.3198	Subsidy to decrease agricultural production costs	1 year	34493	-2783	31710
D.3199	Subsidy based on fixed area and yields	1 year	20111	-828	19283
	Subsidy payable by local governments				
D.3192	Subsidy on passenger transport		16483		16483
<i>D.3196</i>	Subsidies from extra-budgetary funds		<i>882</i>		<i>882</i>
D.31963	Subsidy from the cultural fund		882		882

Subsidy on agricultural production (D.3193)

525. Intra-annual government subsidy to manage market problems of sales of agricultural products and live animals.

526. E.g.: Subsidy promoting the production of pigs for slaughter qualified at levels S, E or U according to the SEUROP system, to basic material producers after they applied. The guiding price for pigs for slaughter was HUF 361/kg in quality classes E and S and HUF 345/kg in quality class U in carcass weight.

527. Enterprises purchasing producers' fresh milk (customs tariff number ex 0401) could apply – per processing company of producers' fresh milk – for subsidy promoting the production of qualified milk for producers. The subsidy was equal to HUF 5.20 per litre on purchases of extra quality milk from producers after 1 January 2002.

Market access subsidy (D.31971)*Repayment of market access subsidy (D.31972)*

528. Among these subsidies there are 25 various legal titles and aims.

529. The subsidy aims at encouraging producers to introduce certain measures (like quality assurance in conformity with EU regulations, quality testing, and obtaining certificates) – which are in compliance with government requirements as well – in order to improve the quality or enhance the level of processing of agricultural products such as industrial tomato, Hungarian red paprika, industrial onion, green peas or canned cucumber.

530. The reimbursement of market access subsidy (D.31972) is recorded as negative subsidy.

531. A corporation or an entrepreneur can lay a claim to this type of subsidy, if it is a member of the sectoral council that is organized by types of goods on a detailed level.

Subsidy based on fixed area and yields (D.3199)

532. Those producers registered in the land use registry can lay a claim to this subsidy, if they grow the subsidized plants on the land they own or lease – on the basis of a land lease contract – at the time of claim.

Subsidy provided by local governments on passenger transport (D.3192)

533. Social assistance benefits in kind (D.6313) are defined in paragraph 4.105 of ESA. Accordingly, subsidies on ticket sales of enterprises engaged in passenger transport and determined according to the number of persons transported are classified among social assistance benefits in kind.

534. Subsidies to enterprises carrying out transportation activities effectively – since the aim of operation of these enterprises is to transport passengers – are subsidies on products.

D.3192 Subsidy provided by local governments on passenger transport

D.3191: among individual subsidies the government subsidizes the operation of the Hungarian State Railways (MÁV), too.

CHAPTER 4. THE INCOME APPROACH

4.0. GDP according to the income approach

1. The table below shows the income components of GDP. Compensation of employees constitutes the greatest part with 45 per cent, operating surplus and mixed income represent 41 per cent.

2. Income approach is not an independent estimate of GVA in the Hungarian national accounts however all income components are estimated either directly or as a residual item.

Table 4.1 GDP by income (2002)

		Million HUF	% of GDP
D1	Compensation of employees	7 797 338	45.4
B2g	Operating surplus	5042488	29,4
B3g	Mixed income	2039061	11.9
D2	Taxes on production and imports	2 568 343	15,0
D3	Subsidies	298 781	1.7
	GDP	17148449	100.0

4.1. The reference framework

3. Income approach is not an independent estimate of GVA in the Hungarian national accounts however all income components are estimated either directly or as a residual item. The income approach denotes the calculation of GDP as the addition of its various components, consisting of compensation of employees, gross operating surplus (including consumption of fixed capital), mixed income and other taxes on production less other subsidies on production. Compensation of employees, taxes and subsidies are estimated directly using different data sources but other income components are residuals as balancing items of income generation. Therefore directly estimated component, especially compensation of employees will be described in details. They are calculated using the same industry and producer type classifications as in the production approach.

4.2. Valuation

4. The sources of information available for the estimate of GDP from the income approach generally use valuation criteria similar to those established in ESA95. However, it should be noted that in some specific cases (such as a proportion of remuneration in kind, certain taxes, and insurance transactions) some adjustments are made in the interest of correct recording in the national accounts.

4.3. Transition from private accounting and administrative concepts to ESA95 national accounting concepts

5. In the case of the Non-financial corporations sector, mainly corporate profit tax returns and Structural Business Survey (SBS) contain the figures which are the sources used for compiling national accounts aggregates. These declarations include data deriving directly from business accounting. These data can be used only after the necessary adjustments.

6. The information required for making these adjustments is available from corporate tax returns, personal income tax declarations, liability and subsidy declaration forms, SBS, and exogenous data.

7. For the General government sector, data are obtained from the annual reports of the institutions.

4.4. The roles of direct and indirect estimation method

8. Most variables of the GDP by income approach are calculated directly using administrative data sources or figures of surveys conducted by the HCSO.

- Data on other taxes and subsidies on production are calculated by using time adjusted cash data. See 4.8 and 4.9 for details.
- Wages and salaries in cash are calculated directly either from the labour force survey or from fiscal data; some elements of wages in kind are estimated on the basis of tax declarations also directly, others are estimated combining direct information and estimations. See 4.7 for details.
- Social security contribution figures are based on administrative data sources using time adjusted cash method.
- Operating surplus figures of the Non-financial and Financial corporations' sectors are residual items deriving from GDP estimates from the output side. Operating surplus of the General government sector is calculated on the basis of direct information which approach covers consumption of fixed capital. Mixed income of the Households sector is also a residual item.

4.5. The roles of benchmarks and extrapolation

9. Estimates are based on annually available data, no benchmark or extrapolation is used.

4.6. The main approaches taken with respect to exhaustiveness

10. In the case of wages and salaries, fiscal data are supplemented by estimations in order to arrive at an exhaustive estimate. See 4.7 for details.

4.7. Compensation of employees (D.1)

General definition

11. Compensation of employees includes all financial and in-kind remuneration paid to the employee by the employer in exchange for his work completed during the settlement period (ESA 95, 4.02.).

According to ESA 95, the elements of the compensation of employees are the following:

Wages and salaries in cash (D.111)

12. Components of wages and salaries:

- wages and salaries paid at regular intervals;
- wage items payable for overtime, night work, weekend work or hazardous work conditions;
- bonus based on profit or productivity, annual supplementary wages (13th month wages);
- supplements paid for commuting between home and the workplace, and reimbursement of costs that incur during the performance of responsibilities related to the job;
- wages paid on annual vacation or official holidays;
- extraordinary payments to employees leaving the company if these payments are not related to the Collective Agreement;

- housing support paid to employees in cash;
- tip and gratitude money.

Wages and salaries in-kind (D.112)

13. In-kind wages and salaries represent products and services made available to the employees free of charge or with a discount by the employer to be used to satisfy their own needs and demand, or those of the other members of their households. These products and services are not necessarily required for the production processes of the employer, therefore they represent a supplementary income of the employees.

14. The following items belong to this category:

- food and drink, including food and drink consumed on business trips, as they would have been consumed anyway;
- free meals, benefits received in the form of meal vouchers;
- homes provided to employees which are either own or leased by the employer, to be used by all members of the employee's household;
- uniforms or special clothing to be worn by the employees both at and outside work;
- vehicles or other durables made available for the personal use of employees;
- access to holiday, sports or leisure facilities for employees and their family members;
- facilities looking after the children of employees;
- shares made available to employees free of charge;
- interest amount, waived by the employer in relation to loans extended to employees at a reduced or zero interest rate.

Employers' actual social contributions (D.121)

15. The actual social security contributions of employers are the payments made by employers to the insurers (social security funds and private insurance systems) for their employees. These contributions could be regulatory, agreed, contractual or voluntary contributions relating to the insurance of risks or needs covered by the social security. Although employers pay these contributions to the insurers directly, the contributions are still accounted as part of the compensation of employees as if employers actually paid them to the employees and they contributed them to the insurers.

Employers' imputed social contributions (D.122)

16. The imputed social security contributions of employers are the social benefits that do not relate to funds and are directly paid to employees by employers without the involvement of an insurer or a separate pension fund or creating a separate fund or a reserve fund for its purpose. These items contain amounts paid under the early retirement schemes and during the sick leave period.

Table 4.2 Compensation of employees (D.1) by sectors (million HUF)

	S.11 Non-financial corporations	S.12 Financial corporations	S.13 General government	S.14 Households	S.15 Non-profit institutions serving households	S.1 Total- national economy
D.111	3 646 665	188 527	1 518 896	414 985	90 430	5 859 503
D.112	78 611	12 246	16 527	0	0	107 384
D.11	3 725 276	200 773	1 535 423	414 985	90 430	5 966 887
D.121	1 095 567	71 117	551 287	38 474	26 305	1 782 750
D.122	35 416	1 332	10 953	0	0	47 701
D.12	1 130 983	72 449	562 240	38 474	26 305	1 830 451
D.1	4 856 259	273 222	2 097 663	453 459	116 735	7 797 338

4.7.1. Non-financial corporations (S.11)

4.7.1.1. Data sources

17. The following data sources are used for the calculation of compensation of employees:

- corporate profit tax declarations, State Tax Authority (APEH), 0229 and 0228 APEH forms;
- corporate profit tax declaration of enterprises that changed to business year, 0229Ü APEH form;
- simplified corporate tax declaration, 0271 APEH form;
- declaration on tax and contribution liabilities, 0203 APEH form;
- annual economic statistical report (SBS), HCSO data collection;
- Labour Cost Survey HCSO data collection;
- data of government statistics.

4.7.1.1.1. Corporate profit tax declarations

18. Taxpayers falling under the scope of the amended Act LXXXI of 1996 on corporate profit tax, keeping their books according to the double-entry and single-entry bookkeeping, must file a tax declaration to the competent state tax authority.

19. Enterprises keep their books and prepare their reports pursuant to the provisions of Act C of 2000 on accounting. Consequently, the profit and loss account and balance sheet data of corporate profit tax declarations comply with the provisions of the Accounting Act. Of the profit and loss account data, compensation of employees includes personnel-type other expenses, pension and health insurance contributions paid by the employer, health contribution and employee contribution.

4.7.1.1.2. Corporate profit tax declaration of enterprises that changed to business year

20. Enterprises with foreign owners and double-entry book-keeping are authorised to choose business year instead of calendar year.

This special tax declaration is almost similar to that of enterprises, which make their tax declaration referring to the calendar year, but in the year of change it contains data only for a part of the year.

4.7.1.1.3. Simplified corporate tax declaration

21. By selecting the simplified corporate tax under the applicable tax legislation, the taxpayer is no longer subject to corporate profit tax. Legal entities and companies without legal entity who are no longer subject to the corporate profit tax since 1 January 2003 use this form to report their corporate profit tax and dividend tax liability in 2002.

4.7.1.1.4. Details of APEH 0203 form

22. Enterprises prepare a declaration on their tax and contribution liabilities to the state budget. This information is applied to make estimates, and payroll taxes may be cleared from vocational training and rehabilitation contribution, classified as other production tax, while employer's contribution can be accounted as a separate item under social security contributions.

4.7.1.1.5. The annual economic statistical report

23. Under the National Statistical Data Collection Programme the enterprises involved in the survey are obliged to supply information. Each enterprise with more than 49 employees must prepare a full report. Compensation of employees is estimated on the basis of the "*reimbursed costs*", "*own and purchased products*" received from the employer and "*welfare and social benefits*" indicators reported on the questionnaire.

4.7.1.1.6. Labour Cost Survey

24. The framework of employment statistical data collections is set out in Act XLVI of 1993 on statistics. The employment statistical system has been harmonised with the Eurostat requirements for the last few years. This is why monthly and annual employment reports have been integrated into economic statistics, the employment statistical indicators have been modified and extended, and the definitions have been clarified. The item "wage" defined in the Law on Accounting is identical to the "salary" item applied in the labour cost survey, so the figures are comparable.

4.7.1.1.7. Government statistics

25. Since 2000, social security contributions, employer's contributions, contributions to sickness benefit, pensions under early retirement scheme, taxes and supports have been accounted on accrual basis compared to the declaration-based data used before. This also means that the data of government statistics are accepted as final data, and information originating from other data sources is adjusted.

4.7.1.2. Compensation of employees

26. For compiling the compensation of employees, we primarily rely on the data of corporate profit tax declarations. Enterprises are obliged to pay corporate profit tax on the basis of their income generated from their business activities. The corporate profit tax declarations contain the most important data of the profit and loss account and balance sheet. These data comply with the provisions of the Accounting Act, as the enterprises keep their books and prepare their reports under the provisions of Act C of 2000 on accounting.

27. In 2002, approximately 200,000 enterprises with double-entry bookkeeping, 100,000 enterprises with single-entry bookkeeping and 24,000 enterprises subject to simplified corporate tax submitted tax declarations to the tax authority.

28. The HCSO's own data collection covers a more limited group of enterprises, primarily larger enterprises (depending on the number of employees). In the case of these enterprises, the indicators of employment statistical data and economic statistical report are compared to the data of their corporate profit tax declarations.

29. In terms of the comparison of payroll and personnel-type expenses, the reasons of the largest positive and negative differences are investigated individually.

30. The indicators of employment statistics and economic statistics accounted as compensation of employees are also compared to the payroll and personnel-type expenses indicated in the corporate profit tax declarations for each enterprise. If the indicators are higher than 20% of the payroll and personnel-type expenses, the reasons of the biggest differences are investigated for each company too. These comparisons help us to eliminate errors, including cases when the reporting enterprise does not specify the indicator in a figure rounded to HUF thousand in the questionnaire or the tax declaration.

4.7.1.2.1. Schematic accounting of compensation of employees

31. Calculating compensation of employees, Payroll expenses (D.1111) in line with ESA95 and national law on Accounting categories are taken from the tax declaration. D.11121 Other personnel-type expenses are also taken from the tax declaration, but these items contain other items as well which have to be treated either as wages and salaries in kind or as social security contributions according to ESA 95.

Table 4.3 Compensation of employees in 2002, scheme

COMPENSATION OF EMPLOYEES in 2002		Data source references
D.11	Wages and salaries	D.111+D.112
D.111	Wages and salaries in cash	D.1111+D.1112
D.1111	Payroll expenses	JAC0M016
D.1112	Personnel-type expenses	D.11121-D.11122-D.11123-D.11125-D.11126-D.11127
D.11121	Other personnel-type expenses	JAC0M017
D.11122	Reimbursed costs	PHAF023 (JAJ0M045*1,578)
D.11123	Amount paid for the period of sick leave	(LALA064+LALA072+LALA045) – D.11124
D.11124	Contribution to sickness benefit expenses	Government statistics
D.11125	Contribution to the voluntary mutual insurance fund	LALA026
D.11126	Amounts paid for pension under early retirement schemes	LALA056
D.11127	Representation, business gifts	(JAJ0M087) / 0,44
D.112	Wages and salaries in kind	D.1121+...+D.1125
D.1121	Value of own and purchased products received from the employer	PHAF007 + PHAF008 (JAJ0M045*0,425, or 0,197)
D.1122	Imputed value of welfare services	PHAF009 (JAJ0M045*1,178)
D.1123	Interest difference on preferential loans	(JAJ0M088(total industries -92 industry))*0,5
D.1124	Representation, business gift	D.11127
D.1125	Use of personal motor vehicles for private purposes	JAJ0M050*3,937
D.12	Employers social contribution	D.121+D.122
D.121	Employers actual social contribution	D.1211+...+D.1214
D.1211	To Social Security Funds	JAC0M094 – (JAJ0M017+JAJ0M061+JAJ0M013)
D.1212	Employer contribution	JAJ0M017
D.1213	Contribution to voluntary mutual insurance fund	D.11125
D.1214	Contribution to sickness benefit payments	D.11124
D.122	Employers imputed social contribution	D.1221+D.1222
D.1221	Amounts paid for pension under early retirement schemes	D.11126
D.1222	Amounts paid for the period of sick leave (HR)	D.11123
D.1	TOTAL COMPENSATION OF EMPLOYEES	D.11+D.12

D.111 Wages and salaries in cash

D.1111 Payroll expenses

32. Under the provisions of the Accounting Act, payroll expenses are all payments relating to the business year that represent remuneration of workers, employees and members, accounted as wages or hourly fees under the effective legal provisions, including also payments made to private individual

shareholders (members) for their personal involvement, amounts to individuals having a contract with the company involving work, accounted as payroll expenses in the business year (including also bonuses, awards accounted and approved for the business year, as well as 13th month's salary), which comply with wages in statistical accounting in terms of their components, irrespective of whether personal income tax is payable on such amounts or not, or the amounts are subject to social security contributions or not.

33. Out of the tax declaration data relating to profit and loss accounts, *payroll expenses* are also accounted here.

JAC0M016 = identifier of payroll expenses (0229, 0228 and 0229Ü APEH forms)

D.11121 Other personnel-type expenses, according to the Law on Accounting

34. Other personnel-type expenses include amounts paid to private individuals and accounted under the titles other than payroll expenses or contractual fees, including also the non-deductible VAT on such amounts, and the personal income tax payable (paid) by the contractor on such amounts.

35. Other personnel-type payments:

- meal, holiday, travel, housing, life and pension insurance contributions to employees (including pensioners too), supplementary contributions to private pension funds or employees, membership contribution paid to voluntary and mutual insurance funds, (are accounted as Effective Social Security Contributions, D121) and all other contributions paid by the employer to the employee or on the employee's behalf,
- housing support, including also the assumed interest rate and management cost,
- jubilee bonus,
- reimbursed employee commitments,
- supplement to mining wages,
- tangible awards,
- wage supplement to employees with changed working abilities,
- sickness benefit contributions accounted as Effective Social Security Contributions, D.121,
- supplementary sickness benefit payable by the employer,
- welfare and cultural expenses,
- base wages paid after military or civil service,
- remuneration to individuals contributing to agricultural activities,
- all amounts classified as social expenditure,
- contribution paid for the use of own cars for business purposes,
- daily allowance paid for the term of official business trips,

- innovation and related intermediary fees,
- fees subject to copyright, writer's and other copyright protection,
- purchase price and usage fee of patents and inventions ,
- amounts paid by the employer for the term of the sick leave (maximum 15 working days, 80% of the average wages established in the Labour Code), accounted as Imputed Social Security Contributions, D122,
- employer's contribution to pension under early retirement scheme, accounted as Imputed Social Security Contributions, D.122,
- severance pay,
- reimbursement of costs of uniforms and working clothes and formal clothing,
- reimbursed cost of, e.g. usage of tools, are accounted as intermediate consumption, P2,
- amounts accounted under the title of representation, accounted as wages and salaries in kind,, D.112,
- personal income tax payable for in-kind benefits (44% PIT and tax on company cars).

JAC0M017 = identifier of other personnel-type expenses (0229, 0228 and 0229Ü APEH forms)

D.11122 Reimbursed costs

36. Corporations can also compensate employees in cash – as cost reimbursement – for tools, overalls utilized during production activities. However, these expenditures are not compensation of employees.

37. Employers obliged to pay a 44 percent (employer's) PIT (personal income tax) rate on costs accounted as other personnel-type expenses.

38. At compiling non-financial corporation accounts D.11121 payments (Other personnel-type expenses) were decreased, while P.2 (intermediate consumption) was increased by cost reimbursement accounts.

39. HCSO Business Statistics Reports deliver annual corporate data on items accounted as other personnel-type expenses, like work tools, equipment, uniforms, shoes, etc. provided exclusively or primarily to employees in cash instead of providing them in kind.

40. Annual Business statistics reports are covering enterprises with more than 49 employees. Therefore, smaller enterprises do not directly provide data on occasional cost reimbursement amounts. However, unsurveyed enterprises were supposed to pay cost reimbursements, too.

41. As a first step, a multiplier as an average was estimated, then, cost reimbursements were calculated by using this multiplier for those 44 percent PIT (personal income tax) paying enterprises which did not submit annual business statistics reports.

42. To produce an average multiplier, data were provided by those enterprises only, from which HCSO had collected cost reimbursement data and PIT payments of 44 percent.

Multiplier: PHAF023 / JAJ0M045=22 228 005 / 14 086 028 = 1,578 where,

PHAF023 is a variable for HCSO Business Statistics Report – reimbursed cost,
JAJ0M045 is a variable for 44% personal income tax obligation of corporation.

43. By using multipliers, cost reimbursements are estimated for only those enterprises, which do not declare such data for the HCSO, but have 44 percent PIT (personal income tax) declarations, so they have supposedly such payments

44. Cost reimbursement estimation: corporate (44 percent) PIT paid x 1.578

D.112 Wages and salaries in kind

45. Wages and salaries in kind are products and services granted by the employers free of charge or at a reduced price and other benefits which are supplementary income components for the employees. These products and services and other benefits are not necessary by all means in the employer's production process, and employees would have to pay market price for them if they bought them themselves.

46. Wages and salaries in kind item consists of the value of own produced products and services, the value of purchased products and services, welfare services, interest difference on preferential loans, use of personal motor vehicles for private purposes and representation and business gifts.

47. According to the Law on Taxes 44% personal income tax has to be paid on wages and salaries in kind. In our estimation procedures four items are distinguished as described below.

D.11211 Value of own products and services received from the employer

48. The annual economic statistical report (SBS) provides information on the value of own products and services given to employees by the enterprises.

49. For those enterprises which are not in the SBS survey but reported personal income tax on in kind benefits, a benchmark estimates were done based on the of Labour Cost Survey(LCS) data for 2000. This coefficient was applied in 2002.

The aggregate indicator available for enterprises is compared to.

Coefficient of own produced products and services: LALA068/JAJ0M045=0. 425

Where LALA068=benefit from own products

JAJ0M045= personal income tax paid by the enterprise

D.11212 Value of purchased products and services transferred from the employer

50. The annual economic statistical survey contains the purchase value of products and services transferred to employees less reimbursements (PHAF008), with which the intermediate consumption of the enterprise is reduced and in-kind wages and salaries are increased.

51. Similarly to the estimate of own products, for those enterprises which are not in the SBS survey but reported personal income tax on in kind benefits, benchmark estimates were done. These data are not included in the LCS, therefore estimates for those enterprises which are not in the SBS survey but reported personal income tax on in kind benefits, benchmark estimates were done based on the SBS 1999 data.

Coefficient for estimating purchased products and services:

$$\text{PHAF008/JAJOM045}=0.197$$

Where PHAF008 = purchase value of products and services transferred to employees less reimbursements

JAJOM045= personal income tax paid by the enterprise

D.1122 Estimated value of welfare services

52. The value of social, welfare and in-kind benefits of employees less reimbursements is available from the annual economic statistical report (SBS) (PHAF009). Welfare services increase both the output and the D.112 In-kind wages and salaries.

53. For those enterprises which are not in the SBS survey but reported personal income tax on in kind benefits, benchmark estimates were done based on the Labour Cost Survey(LCS) data for 2000. This coefficient was applied in 2002.

Coefficient used for estimating welfare services:

$$\text{LALA013/JAJOM045}=1.178$$

Where LALA013 = value of social, welfare and in-kind benefits of employees less reimbursements

JAJOM045 = personal income tax paid by the enterprise

D.1123 Interest difference of preferential loans

54. In order to estimate the interest difference of preferential loans, we relied on the personal income tax deducted under other titles, which contains the interest difference on preferential loans, tax-free payments, contribution substitution in one lump sum, utilization of common condominium property and tax on income from prizes. The tax deducted on prizes is declared in the 92 industry – entertainment, culture and sport, and it represents approximately 60% of the total tax deducted under other titles, therefore this industry is left out from the estimate.

D.1124 Representation, business gifts

55. The APEH 0203 declaration contains 44% personal income tax paid on representation and business gifts (JAJOM084). Dividing the tax paid by enterprises by 0.44, we receive the tax base amount of the given enterprise. The “other personnel-type expenses” are reduced by the amount of representation and business gifts.

D.1125 Use of personal motor vehicles for private purposes

56. Since 1995 the value of use of personal motor vehicles for private purposes has been calculated from the tax paid under such a title using the company car tax paid by the enterprise and a coefficient supported with detailed calculations. $\text{JAJOM050} \times 3.937$

The procedures used for estimating this indicator will have to be reviewed on the basis of the legal regulations changing in 2004.

D.121 Employer's actual social contributions*D.1211 Contributions to Social Security Funds*

57. They include pension and health insurance contributions, as well as and health contributions, corrected to the accrual-based data of the government statistics.

58. Out of the profit and loss account data of corporate profit tax declarations, payroll taxes contain the contributions established by enterprises on the basis of the number of employees and the payroll and other personnel-type expenses and paid in the same way as taxes.

59. The employer's contribution, vocational training contribution and rehabilitation contribution are deducted from the payroll taxes.

Employer's contribution increasing *D.121 Actual social security contributions* is accounted in a separate line.

D.1212 Employer's contribution

60. The data available from APEH 0203 declaration are corrected to the accrual-based data of the government statistics.

D.1213 Employer's contribution to voluntary mutual insurance fund

61. Out of the data reported in the Labour Cost Survey, the "other personnel-type expenses" are reduced with the amounts paid to voluntary mutual insurance funds and private pension funds for employees, and they are accounted as "*Actual social contribution*".

LALA026 = identifier of supplementary insurance scheme (Labour Cost Survey, HCSO data collection)

D.1214 Contribution to sickness benefit expenses

62. The closing accounts contain the contribution to sickness benefit expenses as a separate item. The "other personnel-type expenses are first reduced with the corrected accrual-based data, and then they are accounted as "*Actual social contribution*".

D.122 Employer's imputed social contributions*D.1221 Amounts paid for pension under early retirement schemes*

63. The indicator available from employment statistics is corrected in order to receive the accrual-based data of government statistics as a result. The "other personnel-type expenses" are reduced with the amount paid for pension under early retirement scheme, and then it is accounted as "*Imputed social contribution*".

LALA056 = identifier of early retirement schemes (Labour Cost Survey, HCSO data collection)

D.1222 Amount paid for the term of sick leave

64. The contribution to amounts paid for the term of sick leaves and sickness benefits is contained in one amount, in one line, in the employment cost figure. The Labour-Cost-Survey data are first

adjusted with the contribution to the sickness benefit expenses (D.11124; Government statistics) reported in the closing accounts as a separate item, and then they are accounted as “*Imputed social contribution*”.

The following identifiers are used from the Labour Cost Survey HCSO, data collection:

LALA064 sickness payments

LALA072 supplementary sickness payment in case of accident at work

LALA045 supplementary sickness insurance scheme

4.7.1.2.2. Accounting of compensation of employees according to types of enterprises

65. Data of corporate tax declarations, simplified corporate tax declarations and on tax and social security contribution liabilities are transmitted to HCSO by the State Tax Authority and they are stored in a JAVA database. In this database each enterprise-type is stored separately, e.g. (2) enterprise-type refers to only those enterprises with double book-keeping which are not off-shore companies, are not accounting according to business year or they are not taken into account in SBS statistics.

Table 4.4 Accounting of compensation of employees according to types of enterprises (million HUF)

	(2) CORPORATE TAX29	(3) CORPORATE TAX28	(4) Off-shore	(5) Business years	(6) SBS Stat.	(7) Simplified corporate tax	Total JAVA database
D.11	3 006 148	101 213	2 341	7 756	65 283	69 979	3 252 720
D.111	2 930 932	98 567	2 331	7 602	64 698	69 979	3 174 109
D.112	75 216	2 646	10	154	585	0	78 611
D.12	1 048 031	30 874	449	2 782	17 054	0	1 099 190
D.121	1 013 087	30 871	449	2 691	16 676	0	1 063 774
D.122	34 944	3	0	91	378	0	35 416
D.1	4 054 179	132 087	2 790	10 538	82 337	69 979	4 351 910

(2) Enterprises with double-entry bookkeeping

Out of the economic units with double-entry bookkeeping those which do not belong to the other types of enterprises (4, 5, 6). Enterprises with double-entry bookkeeping are legal entities, economic organizations without legal entity, educational associations and co-operatives with over HUF 50 million net sales from business activities.

(3) Enterprises with single-entry bookkeeping

Economic units with single-entry bookkeeping: enterprises, economic organizations without legal entity, educational associations and co-operatives with less than HUF 50 million net sales revenues from business activities in two subsequent years, irrespective of the number of employees or the balance sheet total.

(4) Off-shore enterprise

A limited liability company or company limited by shares performing business activities abroad, but registered within Hungary with a registered office in Hungary.

(5) Enterprises changing to business year

From 1 January 2001, the Accounting Act allows companies owned by foreign shareholders to change from calendar years to business years adjusting to their parent company. In the year of change their tax declaration contains only the activities of the incomplete year (from 1 January to the start of the business year). If the enterprise is subject to performance statistical data supply, it is reclassified into No. 6 enterprise group. For the other enterprises, the annual compensation of employees is calculated with the multiplication of the monthly figure.

(6) Enterprises substituted from performance statistics

These are enterprises, whose tax declarations were not received by the HCSO in a given year due to some reason, and they filled in their annual economic statistical reports. Economic organizations established for the mandatory employment of prison inmates, supervised by the Ministry of Justice and non-profit companies established for the employment of prison inmates do not fall under the scope of the Companies Act, therefore information about such companies is only available from the economic statistical report.

(7) Enterprises submitting a simplified corporate tax declaration

Legal entities, organizations without legal entity which are from 1 January 2003 no longer subject to corporate profit tax.

4.7.1.2.3. Corrections**Table 4.5 Database and corrections (million HUF)**

S.11	D.11	D.12	D.1
JAVA Database	3 252 720	1 099 190	4 351 910
Correction due to small limited liability companies	218 352	0	218 352
Corrections due to enterprises with single-entry bookkeeping	146 315	0	146 315
Corrections due to terminated and missing enterprises	71 152	23 247	94 399
Corrections due to tips	10 821		10 821
Non-profit organizations classified in the non-Financial corporations sector	25 916	8 546	34 462
Database and corrections together	3 725 276	1 130 983	4 856 259

66. Corrections due to small limited liability companies and enterprises with single-entry bookkeeping

The correction items calculated according to the methodology described in relation to the production of non-financial enterprises are accounted here as compensation of employees.

The corrections are divided between “*D.111 Wages and salaries in cash*”, and “*D.121 Actual social security contribution*” based on the average proportion of social security contribution and payroll expenses.

67. Corrections due to terminated and missing enterprises

In 2002, we received the declarations of enterprises terminating their activities from the Tax and Financial Control Administration according to registration numbers. As the details of the tax declarations did not enable to use the data directly for accounting compensation of employees, their payroll expenses and social security contributions were estimated on the basis of their accounting data of the previous year.

68. Only those companies are considered missing which had a declaration in the previous year, are not contained among the terminated or transformed companies, and did not submit a zero declaration either. However, they have VAT declarations, indicating that they operated in the current year, too. Their payroll expenses and social security contributions are estimated on the basis of their previous year's data.

69. Corrections due to tips

Tips are estimated on the basis of the information of the HCSO's own data collection titled “Service usage and purchasing habits”.

70. Non-profit organizations classified in the non-financial sector

The basic data originate from the representative survey of the HCSO Social Statistics Department in

2002. The Social Statistics Department extrapolated the survey data. (Until 2000, this survey was a fully comprehensive survey, but in 2001 and in 2002 it was a representative one.)

71. Non-profit organizations were classified into the non-financial sector according to the following criteria:

- based on their activity, non-profit organizations involved in enterprise promotion and chambers of contractors,
- on the basis of the 50% rule under ESA95, according to which if revenues cover more than 50% of the production costs, the organizational unit is classified into the manufacturing and not the non-financial sector.

72. In total, 1 784 organizations were reclassified in 2002.

73. The questionnaire applicable to non-profit organizations contains payroll expenses, other personnel-type expenses, social security contribution and health contribution data, which were supplemented with the estimated amount of employer's contribution. In 2002, employer's contribution was 3% of the payroll expenses.

4.7.2. Financial corporations sector (S.12)

Table 4.6 Compensation of employees in the financial sector, according to sub-sectors in 2002 (million HUF)

		65	66	67	J branch
		Financial intermediation	Insurance,- pension fund	Financial supplementary activity	Total financial intermediation
D.111	Wages and salaries in cash	143.160	34.776	10 591	188.527
D.112	Wages and salaries in benefits	9.995	1 625	626	12 246
D.11	Wages and salaries	153.155	36 401	11 217	200.773
D.121	Actual social security contribution	54.438	13.243	3 436	71.117
D.122	Imputed social security contribution	1 001	299	32	1 332
D.12	Social security contribution	55.439	13.542	3 468	72.449
D.1	Compensation of employees	208.594	49.943	14.685	273.222

4.7.2.1. Data Sources

74. We used the following data sources for compiling the compensation of employees.

- A/ Corporate tax declarations (0229 and 0228 APEH forms)
- B/ Declaration on tax and contribution liabilities (0203 APEH form)
- C/ Labour Cost Survey for 2002 (HCSO data collection)
- D/ Government statistics data
- E/ Profit and loss account data of supervisory reports

Ad/A Corporate tax declarations (0229 and 0228 APEH forms)

75. Out of the profit and loss account data of financial enterprises submitting corporate tax declarations, the amount of payroll expenses, other personnel-type expenses and wage contribution paid into the Social Security Funds constitute the compensation of employees without vocational training or rehabilitation contribution.

Ad/B Declaration on tax and contribution liabilities (0203 APEH form)

76. In-kind benefits (welfare service, representation, business gifts, interest difference on preferential loans, etc.) are estimated, and the wage contributions paid to the Social Security Funds without vocational training or rehabilitation contribution, as well as the employer's contribution are calculated on the basis of the information gained from the declarations of financial enterprises on their tax and contribution liabilities to the state budget.

Ad/C Labour Cost Survey for 2002 (HCSO data collection)

77. Data are taken from the employment statistics data collection to calculate the amount paid for sick leave, the amounts contributed to the employee's pension funds and the amount of early retirement pension.

In addition, the data of the Labour Cost Survey are used to estimate in-kind benefits in the financial sector, including the imputed value of welfare services, own and purchased products and services transferred to employees, and the income generated based on the estimated use of company cars for private purposes. The method applied for this estimate will be described in detail below.

Ad/D Government statistics data

78. The Government statistics provide data on social security contributions, contributions to cover sickness benefit, early retirement pensions and employer's contributions on accrual basis, therefore our data originating from other sources are adjusted to the figures of government statistics.

Ad/E Profit and loss account data of supervisory reports

79. The profit and loss account data of financial enterprises contained in their annual reports submitted to the Hungarian Financial Supervisory Authority (HFSA) are used for the calculation of the compensation of employees in pension funds and voluntary mutual insurance funds, because these non-profit organizations are not subject to corporate income tax.

The data of supervisory reports can also be used to verify the personnel-type expenses of credit institutions and other financial enterprises reported in their corporate tax declarations.

4.7.2.2. Accounting of compensation of employees

80. We shall not describe the calculation method separately because, apart from a few exceptions described in the next section, it is identical with the method applied to non-financial enterprises (see point 4.7.2.). The contents of the data used are also identical, thus similar corrections are applied to accounting data in the interest of the change to ESA categories.

4.7.2.2.1. Financial and non-financial enterprises account compensation of employees with the following differences:

- The costs of assets, absolutely necessary for work are usually not accounted among the personnel-type expenses of financial intermediaries, therefore no costs are reimbursed either.
- All the enterprises of the financial sector keep their books according to the rules of double-entry and single-entry bookkeeping, and prepare their reports by calendar years, as under Section 11 of Act C of 2000 on Accounting, enterprises engaged in financial activities cannot change to business year and, under the applicable tax regulations they cannot be "enterprises pursuing their activities abroad" (off-shore) or are not eligible to EVA (simplified corporate tax) either.

- There are some slight differences in the methodology of estimating in-kind benefits too.

4.7.2.2.2. In-kind benefit estimates in the financial sector

81. Under the provisions of ESA 1995, benefits not recorded among personnel expenses in the administrative data which represent an income for the employees should be imputed among compensation of employees.

82. The in-kind benefits on which employers must pay 44% tax are defined under Section 69 (1) of the amended Act CXVII of 1995 on Personal income tax, effective in 2002. In-kind benefits are that part of the value of assets transferred to employees (products, services, etc.), which is not reimbursed to the payer by the private individual, as well as land benefits. This concept is similar to a statistical concept, therefore it represents a sufficient basis for estimating the missing items of in-kind benefits.

83. As under the provisions of Section 70 (1) of the above Act, any income generated from the private use of the payer's motor vehicle licensed for traffic and equipped with a registration number is also an in-kind benefit, and as the tax on such income is a separate item in the tax declaration too, we can prepare a separate estimate for it.

84. We reviewed the following items among in-kind benefits:

- a) Value of own products and services transferred to employees
- b) Value of purchased products and services transferred to employees
- c) Imputed value of welfare services
- d) Interest difference on preferential loans
- e) Income generated from the use of company cars for private purposes
- f) Representation and business gifts

85. The primary data sources were the declarations on tax and contribution liabilities, which contained the 44% personal income tax of the financial institutions.

86. In order to have separate values for the three categories (own and purchased products and services transferred to employees and welfare services), we used the data of the Labour Cost Survey for 2002.

87. The results of the Labour Costs Survey may be used to control the in-kind benefits of financial institutions. The Labour Cost Survey for 2002 covered enterprises with more than 49 employees. From the enterprises of the financial sector, 69 companies, i.e. more than 50% filled in the questionnaire. Thus, we completed our calculations based on this enterprise sample.

88. The total estimated in-kind benefits of the financial sector amounted to HUF 12,246 million, as illustrated in Table 4.7 below.

Table 4.7 Estimated in-kind benefits of the financial sector in 2002 (million HUF)

		65 total	66 total	67 total	J industry total
D.1121	Total value of own and purchased products and services transferred to employees	7 027	1 017	238	8 282
	of which: own products and services (=P.16)	3 606	519	122	4 247
	purchased products and services (P=261)	3 421	498	116	4 035
D.1122	Welfare services (=P.15)	599	79	19	697
D.1123	Interest difference on preferential loans	189	65	66	320
D.1124	Use of company cars for private purposes (=P.262)	1 685	340	248	2 273
D.1125	Representation, business gifts	495	123	56	674
D.112	In-kind wages and salaries	9.995	1 625	626	12 246

89. What now follows is a further explanation of the estimates of in kind benefits as presented in Table 4.7.

90. **(1)** Value of own products and services transferred to employees

Out of the employer's own products and services the products and services transferred to employees free of charge or at their prime cost are very specific to the financial sector: current account management free of charge, currency exchange free of charge or commission, preferential insurance premium or management of insurance policies free of charge for employees of an insurance company etc.

91. As the financial enterprises usually do not report such benefits, in order to have a more acceptable estimate, we applied the higher multiplication factor, calculated from the sample, to the entire portfolio.

92. The following data were available:

- a) The value of benefits transferred to employees from the company's own products and services (LALA068) was HUF 133,498,000 in the Labour Cost Survey of 2002, but only a fraction of the financial institutions reported some figures, although it was assumed that most of them provided such services to their employees. In our estimate we also assumed that enterprises not reporting any figures also provided similar services to their employees, therefore we used 0.534 taken from the sample as coefficient, and accounted HUF 3,055,360,000 in section "J" under this title.
- b) Amounts spent by financial institutions on training and further training fees and language learning support (LALA073) within special education training and further training costs included in the Labour Cost Survey were HUF 1,447,968,000 in the sample. Assuming that 40% of these activities were provided by the financial institutions themselves, and 60% were spent on remuneration of external tutors, we accounted HUF 579,187,000 for the sample.

- c) In our estimate, financial enterprises spent in total HUF 3,634,547,000 in 2002 on benefits to employees, and training, further training and language learning. Dividing this amount by the 44% personal income tax on in-kind benefits, the coefficient is 0.635.

93. Our calculations are illustrated in Table 4.8.

Table 4.8 Coefficient calculation for estimating the value of own products and services transferred to employees (P16) (data in HUF ‘ 000)

	44% PIT on in-kind	Value of estimated benefits	40% of training fees	Total estimated value of
	benefits	from own products		benefits
	(PAJ0M045)	(from LALA068)	(from LALA073)	from own products
65	4 911 740	2 622 869	459 071	3 081 940
66	718 161	383 498	108 394	491 892
67	91 747	48 993	11 722	60 715
Total J industry	5 721 648	3 055 360	579 187	3 634 547
Coefficient:	0.635			

94. **(2) Value of purchased products and services transferred to employees**

We relied on the total of three categories of the Labour Cost Survey for estimating the value of purchased products and services transferred to employees.

- Costs reimbursed in relation to the job (LALA016), which amounted to HUF 2,029,171,000 in our sample,
- Other in-kind compensation of employees (less reimbursed costs of clothing and holidays, benefits transferred to employees from own products, as these items are already contained in the other personnel-type payment), amounting to HUF 587,298,000,
- The amount spent on remuneration of external tutors, teachers of special education and language teachers among the costs of special education training and further training (60% of the total expenditure for this purpose) amounting to 868,781,000.

95. The total amount of the items listed above comes to HUF 3,485,250,000. By dividing this amount by the personal income tax of 44% on in-kind benefits a coefficient of 0.609 can be obtained.

96. The calculations are shown in Table 4.9:

Table 4.9 Coefficient calculation for estimating the value of purchased products and services transferred to employees (P261) (data in thousand HUF)

	44% PIT on in-kind benefits (PAJ0M045)	Cost reimbursed in relation to jobs (LALA016)	Other in-kind incomes (LALA018-066- 067-068)	Training fee language learning support (60% of LALA073)	Total
65	4 911 740	1 717 389	467 841	688 607	2 873 837
66	718 161	305 242	80 318	162 592	548 152
67	91 747	6 540	39 139	17 582	63 261
Total J industry.	5 721 648	2 029 171	587 298	868 781	3 485 250
coefficient:	0.609				

97. (3) Imputed value of welfare services

We relied on the following data for the calculation:

- Welfare and cultural expenses (LALA013) taken from the Labour Cost Survey, amounting to HUF 384,866,000 in 2002.
- 44% personal income tax (PAJ0M045) on the in-kind benefits of financial enterprises that reported their welfare and cultural expenses, amounting to HUF 3,979,908,000.

98. By dividing the total of welfare and cultural expenses with the 44% personal income tax on in-kind benefits, we received a coefficient which was used for making an estimate on the enterprises not contained in the sample by using the tax information available for all enterprises. The coefficient used amounted to 0.097.

99. Our calculations are illustrated in Table 4.10:

Table 4.10 Coefficient calculation for estimating the value of welfare services (P15) (data in thousand HUF)

	44% PIT on in-kind benefits (PAJ0M045)	Welfare and cultural expenses (LALA013)
65	3 468 415	315 534
66	495 227	67 759
67	16 266	1 573
Total J industry	3 979 908	384 866
coefficient:	0.097	

100. (4) The source of calculation of the interest difference on preferential loans is 44% of the personal income tax deducted under other titles and declared by the financial enterprises on APEH 0203 form. Dividing the amount of tax paid by individual taxpayers by 0.44, we receive the amount to be taken into account for in-kind wages and salaries. Assuming that approximately the half of this sum could be considered as the interest difference on preferential loans, thus multiplying the amount listed above by 0.5 the item D.1123 can be calculated.

101. (5) Estimating the income from the use of company cars for private purposes

It is a rather complicated task to estimate the income generated from the use of a company car for private purposes.

102. The only information available for our calculations was the so-called company car tax paid to the state budget by the financial enterprises.

103. Assuming that financial enterprises pay this tax on relatively new, 1-4 year-old motor vehicles, the purchase of one vehicle (including VAT) amounts to HUF 4-5 million. (The tax of the more expensive vehicles may be offset by the lower tax amount paid on more than four-year-old motor vehicles).

104. On the basis of the table in Section 70 of the Act on Personal Income Tax monthly HUF 16,000 is payable on the motor vehicles indicated above, while the annual tax liability is HUF 192,000. In section "J" of the national economy, dividing the company car tax paid for 2002 by this amount we get the result that in total 3,144 motor vehicles were used in financial enterprises for private purposes too. Dividing this further by the number of financial enterprises we get the final result that on average 0.9 motor vehicle was used in the 3,450 financial enterprises for private purpose, too. Completing the above calculations on the sample, we can conclude that the 69 financial enterprises contained in the sample pay tax on 33.5 company cars on the average, which is approximately 37 times the figure calculated on the total portfolio. This could be caused by the fact that only the largest enterprises filled in the questionnaire and these companies operated numerous and more valuable vehicles. In addition, in the entire section "J" there are many small companies whose company car data cannot be estimated on the basis of the data of the large companies, therefore from now on we shall not rely on the sample, but on the company car data of the entire financial sector.

105. The calculations are contained in Table 4.11.

Table 4.11 Calculations for estimating the use of motor vehicles for private purposes (P262)

	In the sample			
	Company car tax (PAJ0M050) (thousand HUF)	Total number of company cars (number)	Number of financial enterprises (number)	Company cars in one enterprise
65	356 990	1 859	43	43.2
66	76 390	398	15	26.5
67	10 301	54	11	4.9
Total J	443 681	2 311	69	33.5
	In the total portfolio			
	Company car tax (PAJ0M050) (thousand HUF)	Total number of company cars (number)	Number of financial enterprises (number)	Company cars in one enterprise
65	449 876	2 343	659	3.6
66	87 121	454	243	1.9
67	66 741	348	2 548	0.1
Total J	603 738	3 144	3 450	0.9

106. But how much income could have been generated from the use of motor vehicles for private purposes?

We started our calculations based on the rent payable on the vehicles for the period of private use in case of renting the vehicles from official car renting businesses.

107. We have completed the calculation on the basis of the following assumptions:

- Employees use the company car on two weekends a month (for 2-2 days)
- The company car is used for private purposes for one week during the employee's vacation.
- If an employee rented a medium-category motor vehicle worth on average HUF 4-5 million on the average from an official car rental company, he would have to pay HUF 981,200 rent for two occasions a month, for 11 months, based on weekend tariffs.
- Completing the calculation for the same type of vehicle, the rent for seven days' vacation would amount to HUF 137,600.
- The rent charged by car rental companies usually contains a proportionate fee charged on the basis of the compulsory third-party liability insurance, the vehicle tax, winter tires and motorway stickers, too. Therefore, they do not have to be added to the rent quoted by the companies separately.
- However, they generally charge a separate fee for theft or damages, therefore the rent has to be increased by these items.

108. Coming back to the former assumptions, the increased rent of one company car used for private purposes, too would be HUF 1,051,600 for weekends, and HUF 140,800 for a seven days' vacation, thus the total rent payable on one vehicle would amount to HUF 1,192,400 in the case of financial enterprises.

109. Assuming that rent-a-car companies work with 40% margin on the average, by calculating the so-called shorter-term rent and deducting this margin from the rent, the remaining amount would be HUF 715,440 for one car a year, amounting to HUF 59,620 a month.

Consequently, one employee using a company car for private purposes, too received HUF 715,440 income a year, considered as in-kind wage.

The estimated total income on the vehicle portfolio of the financial sector is HUF 2,273 million, which we take into account as in-kind wages.

110. Dividing the amount assumed in relation to the use of a motor vehicle for private purposes by the company car tax paid by the employer, we receive a coefficient of 3,726.

111. The calculations are contained in Table 4.12.

Table 4.12 Calculation for estimating the income generated from the use of a company car for private purposes

Definition					
<u>Data/1 car</u>	1 weekend	1 month	11 months	1 week of vacation	Total
Car rental fee (HUF)	44 600	89 200	981 200	137 600	1 118 800
CDW (insurance against theft, in HUF)	2 100	4 200	46 200	2 100	48 300
TP (insurance against damages, in HUF)	1 100	2 200	24 200	1 100	25 300
Total	47 800	95 600	1 051 600	140 800	1 192 400
of which: car rental company's margin					476 960
Employee's rent (60%)					715 440
The above figure broken down into a monthly figure:					59 620
Total in the financial sector (in HUF million)					2 273
Coefficient:					3.726

112. At present we consider the application of this estimating method acceptable.

113. (6) The same method has been applied for the calculation of representation and business gifts as the method applied to non-financial enterprises.

4.7.3. General government sector (S13)

4.7.3.1. Wages and salaries

114. Annual report of government institutions includes data on remuneration of employees and social contributions. There are items in remuneration which are not treated as wages and salaries in the ESA, therefore corrections are needed to reach ESA categories.

115. Item 'Other reimbursement and contributions' is transferred to intermediate consumption. (It covers reimbursement of purchasing professional books by teachers.) Remuneration for sick leave by the employer is also subtracted and transferred to social benefits. Pension fund contributions and insurance supplements by the employer are also excluded and transferred to social contributions.

116. There are benefits that are not included in the annual report of the institutions but should be treated as wages and salaries according to ESA rules. Welfare benefits and in kind benefits that are subject to 44 per cent personal income tax should be treated as wages and salaries. These are e. g. kindergarten provided to the employee's children by the employer. In the case of institutions this kind of service is not primary activity welfare service is considered as the difference of revenues and outlays of this activity.

Table 4.13 Calculation of wages and salaries in government in 2002 (million HUF)

M1=D.11	Wages and salaries	M11+M12-M13-M14-M15+M16+M17 +M18	1535423
M11	Regular wage	21/01	1114166
M12	Other remuneration of employees	21/02+21/03	386 628
M13	Cost reimbursement	F3	7 131
M14	Sick leave allowance	$(0,5 \times 02/21) \times \frac{21/01}{02/09}$	10 953
M15	Pension fund contribution and insurance supplements	$02/20 \times \frac{21/01}{02/09}$	10 550
M16	Welfare services	Labour cost survey	16 527
M17	Personal income tax paid by the employer	$03/45 \times \frac{21/01}{02/09}$	8 242
0M18	Accrual adjustment	$(53/15-53/14) \times \frac{21/01}{02/09}$	38 494

4.7.3.2. Employer' social contribution

117. Employer' social contribution includes:

- Social security contributions paid by government institutions to pension and health funds
- Employers' contribution
- Health care contributions
- Contribution to sick leave benefit
- Employer's contributions paid outside government

118. Adjustment is made as the sick leave benefit paid by the employer and pension fund contributions and insurance supplements.

Table 4.14 Calculation of employer' social contribution in 2002 (million HUF)

M2=D.12	Employer' social contribution	M21 + M22 + M23 + M24	562240
M21	Actual social contribution	21/04	528962
M22	Sick leave benefit	M14	10 953
M23	Pension fund contributions and insurance supplements	M15	10 550
M24	Accrual adjustment	$(53/17-53/16+53/19-53/18+53/21-53/20) \times \frac{21/04}{02/56}$	11 775

4.7.4. Households sector (S14)

4.7.4.1. Employees of sole proprietors

Wages and salaries

119. Though wages and salaries paid by sole proprietors to their employees should be included in the personal income tax declaration of sole proprietors principle, the total amount of these data is not reliable or realistic enough, because of the tax evasion and the mistakes made during filling-in. (According to the tax returns, for example the gross monthly average earnings of employees were 9 700 HUF in the year 2002.) Therefore, calculations for wages and salaries are based on labour statistical surveys, namely:

- the number of employees in sole proprietorships is obtained from the Labour Force Survey
- yearly average earnings -for the total economy- are derived from the labour statistics of SBS.

120. The reason for using the yearly average earnings regarding the total economy is trying to correct the deficiencies issued from the registration of the employees in minimal wage and other tax evasions.

Table 4.15 The sum of wages in the base year (benchmark year, 1999)

W&S from personal income tax declaration	44 145	million HUF
Number of employees of sole proprietors from personal income tax declarations	266 749	persons
W&S HUF/employee/month	13 791	HUF
W&S HUF/employee/month from LFS	77 187	HUF
Number of employees of sole proprietors from LFS	298 192	persons

Table 4.16 Wages and salaries of sole proprietors' employees

Year	Total, million HUF	Per capita/month, HUF	Per capita/month, HUF (from the income tax declarations)
1999	200 300	55 976	13 791
2000	236 000	69 789	1 950
2001	273 500	82 881	6 266
2002	295 000	98 149	9 673

121. For the estimation of 1999 year data, HCSO used the number of employees from the personal income tax declarations by industries and multiplied them with the average wages per employees from the labour cost statistics by industries. This method gave the 200 300 million HUF wages and salaries which meant a 55 976 HUF/capita/month figure. It made more sense than the 13 791 HUF/capita/month figure coming from the personal income tax declarations compared to the total average earnings (55 218 HUF/capita/month).

122. From 2000 the personal income tax declaration figures on the number of employees became less reliable because there were some changes in the legislation, and the definition of the employees of sole proprietors got somehow unclear, and there was a huge increase in the number of employees (it was 266 749 in 1999 and 2 275 306 in 2000) which means that the sole proprietors themselves and their household's members were recorded, too. That is why HCSO used the number of employees from the Labour Force Survey from that time. The total amount of wages and salaries was estimated with extrapolation, using the change of the number of employees corrected with the change of wages and salaries per capita per month for 2000, 2001 and 2002.

Table 4.17 Wages and salaries of sole proprietors' employees 2)

		2000/1999 (%)
a)	Δ number of employees of sole proprietors	94,5
b)	Δ wages and salaries per capita	113,5
	a*b	107,3

123. Wages and salaries of sole proprietors' employees in 2000:

$$200\,300 * 107.3\% = 215\,000$$

$$215\,000 + 21\,000 = 236\,000,$$

where 21 000 million HUF came from a certain reclassification. Sole proprietors with single entry book-keeping system were taken out from the Non-Financial corporations sector and put into the Households sector, and this 21 billion HUF was their employees' wages and salaries. The above mentioned method was used for the 2002 calculation, too.

Social security contributions

124. The main data for the social security contributions are from the balance sheet report of the Social Security Funds. Employers' social contributions (for pension insurance or health insurance) and percentual health insurance contributions are obtained from the Social Security Funds. In the balance sheet report, the social insurance contributions for Health Fund could not be divided into payments paid after the employees of sole proprietors and that paid after them. Therefore, this social insurance contribution has to be broken up in proportion to the number of sole proprietors and the number of their employees.

4.7.5. Non-profit institutions serving households

125. Estimates in the sector of NPISHs are based on the above-described annually available survey data. Information on wages and salaries and personnel-type expenses as well as employers' actual social contributions returned by the institutions in correct values permit of performing direct estimation for compensation of employees in the sector. This way both the remuneration of temporary or casual labour is accounted.

126. We generally have all the information about the largest institutions and based on administrative sources or on other surveys we make the follow-up verifications of the non-profit survey results individually for this group.

127. Besides the data verification and the necessary grossing up procedures there are no corrections performed regarding these variables.

128. For the purpose of making the data comprehensive, initially a system of multipliers was applied connected to the responding organizations, but later the Social Statistics Department developed a so-called representational method. Instead of multipliers they use a special representative „pairing” method: every non-responding entity is paired with the most similar responding one for grossing up to

the whole population. The principle of this method is that the missing statistical data of all non-respondents are taken from another responding organization that is similar in terms of its major characteristics. The organizations with the same amount of annual total revenues are classified into groups according to their characteristics known from the register: legal form, main activity and type of municipality. When “matching” the responding and non-responding organizations, they take the regional and the county differences into consideration as well.

129. The basis of the usage of this method is the assumption that the organizations of the same combination of these main characteristics have the same attributes in their production activity too.

130. Concerning the activity of churches and their religious institutions a separate survey serves also as a direct source for the estimations.

131. Other exceptions are political parties in case of which we calculate these account items on the basis of their published fiscal report by using the indices of the employment statistics.

132. In lack of adequate information, employers’ imputed social contribution in the NPISHs sector has not been estimated as a separate item but the sum is recorded in our totals relying on the questionnaire instructions.

Table 4.18 Generation of income in non-profit institutions serving households by industries, 2002 (million HUF)

NACE code	B.1g Value added, gross	D.1 Compen- sation of employees	D.11 Wages and salaries	D.12 Social security contributions	D.29 Other taxes on production	D.39 Other subsidies on production	B.2g Operating surplus, gross
80	32 282	30 102	22 906	7 196	25	0	2 155
85	21 576	19 448	14 596	4 852	6	32	2 154
91	44 190	41 335	32 537	8 798	46	30	2 839
92	28 976	25 850	20 391	5 459	19	0	3 107
Total:	127 024	116 735	90 430	26 305	96	62	10 255

4.8. Other taxes on production and imports

133. In the course of accounting taxes and subsidies, cash-flow data in the final accounts of the business year are used as data source. Among the possibilities for accrual accounting of taxes and social contributions offered by the 2516/2000 Regulation of the European Parliament and the Council, we apply the time adjusted cash method. This preference is influenced basically by the fact that cash-flow data are available.

134. We account only taxes and subsidies paid actually, and do not correct tax data with the amount of taxes not paid.

Taxes recorded under this heading can be classified in the following 3 categories:

- taxes on building sites,
- taxes on use of fixed assets and vehicles,
- taxes on payroll or workforce.

These taxes are payable regularly (each year) either to the central budget or to the local governments irrespectively of the profitability of the enterprises.

135. The items classified as “Other taxes on production” in 2002 are as follows:

Table 4.19 Data sources of other taxes on production and imports

	Tax type	Data source
D.29	OTHER TAXES ON PRODUCTION	D.29A+....+ D.29F
	Payable to the Central Budget	
D.29B	Corporations' taxes on vehicles and other fixed assets	Budget Reporting (realized) of the Local Government
D.29C	<i>Wage bill and payroll taxes</i>	<i>D.2911+D.2912</i>
D.29C1	Training contribution	Budget Reporting (realized) of extra budgetary funds, Ministry of Economy data
D.29C2	Rehabilitation contribution	Budget Reporting (realized) of extra budgetary funds, Ministry of Economy data
D.29E	Concession fees on gambling	Budget Reporting (realized), Ministry of Finance data
	Payable to Local Government	
D.29A1	Estate tax	Budget Reporting (realized) of the Local Government
D.29A2	Land tax	Budget Reporting (realized) of the Local Government
D.29A3	Tax on properties paid by foreigners	Budget Reporting (realized) of the Local Government
D.29B	Corporations' taxes on vehicles and other fixed assets	Budget Reporting (realized) of the Local Government
D.29F	Corporations' communal tax	Budget Reporting (realized) of the Local Government

Table 4.20 Other taxes on production and imports (million HUF)

	Tax type				
		TAC Time adjustment	Cash data	Adjustment	Accrual data
D.29	OTHER TAXES ON PRODUCTION		66 872	96	66 968
	Payable to the Central Budget				
D.29B	Corporations' taxes on vehicles and other fixed assets		6 938		6 938
D.29C	<i>Wage bill and payroll taxes</i>		21 292	96	21 388
D.29C1	Training contribution	1 hó month	18 480	72	18 552
D.29C2	Rehabilitation contribution	1 hó month	2 812	24	2 836
D.29E	Concession fees on gambling		1 464		1 464
	Payable to Local Government				
D.29A1	Estate tax		23 722		23 722
D.29A2	Land tax		2 524		2 524
D.29A3	Second home tax		442		442
D.29B	Corporations' taxes on vehicles and other fixed assets		9 334		9 334
D.29C3	Corporations' communal tax		1 156		1 156

Training contribution (D.29C1)

136. A contribution paid in order to ensure the development sources of a training system adjusted to the requirements of the economy and the labour market.

Training contributions have to be paid by corporations, co-operatives, government corporations and institutions, corporations of joint forest owners, of water management, etc., sole proprietors.

The basis of the contribution is the wage cost, its rate amounts to 1.5% (according to the Employment Act IV/1999 amended several times).

Rehabilitation contribution (D.29C2)

137. The aim of the contribution is to promote the employment of people with decreased capacity of work. Those entrepreneurs that engage more than 20 employees, and the rate of employees with 5% decreased capacity of work is less than 5% are obliged to pay this contribution (compulsory employment level).

138. Time adjustment of the cash figures: in the case of “Training contribution” and “Rehabilitation contribution” one month time adjustment is used.

139. Explanation: These tax types are due monthly. The taxpayers should settle their tax liabilities by 15th February following year. This may imply the implementation of 2 months’ time adjustment but the amounts to be modified are so negligible that there are no arguments as regards dropping the usual 1 month shift. The tax receipts are revenues of the Labour Market Fund (extra budgetary fund). All the revenues as respect the fund mentioned above are shifted with 1 month, another practical argument for choosing 1 month time adjustment.

Corporations’ taxes on vehicles and other fixed assets (D.29B)

140. This covers two different elements of tax:

- In the case when a *car is registered inland*, the taxpayer is the owner or the registered keeper of the vehicle. The base of the tax is the weight of the car. The amounts constitute the revenue of the local governments.
- In the case when a *car is registered abroad* the taxpayer is the owner or the registered keeper of the vehicle. The base of the tax in the case of passenger cars is the length of stay in Hungary. As for lorries, the tax base is the distance driven in Hungary.

4.9. Other subsidies on production

141. Other subsidies on production cover those subsidies which are not classified as subsidies on products and are receivable by resident producers as a consequence of their involvement in production.

142. The items classified as “Other subsidies on production” in 2002 are as follows:

Table 4.21 Data sources of other subsidies on production

	Subsidy type	Data source
D.39	OTHER SUBSIDIES ON PRODUCTION	
	From the central budget	
D.391	<i>Subsidies on payroll and workforce</i>	D.3911+D.3912
D.3911	From Labour Market Fund	Budget Reporting (realized) of extra budgetary funds, Ministry of Economy data
D.3912	Subsidies on employment of persons with a decreased capacity of work	Budget Reporting (realized), Ministry of Finance data
D.392	<i>Subsidies on intermediate consumption</i>	D.39211+... + D. 39251
D.39211	Subsidy on family farms	Budget Reporting (realized) Ministry of Agriculture data
D.39212	Subsidy on interest on loans in agriculture	Budget Reporting (realized) Ministry of Agriculture data
D.39213	Soil quality protection and utilization	Budget Reporting (realized) Ministry of Agriculture data
D.39214	Farm and other professional training	Budget Reporting (realized) Ministry of Agriculture data
D.39215	Animal husbandry and breeding organizational tasks	Budget Reporting (realized) Ministry of Agriculture data
D.39216	Animal compensation, animal waste destruction	Budget Reporting (realized) Ministry of Agriculture data
D.39221	Game management activities	Budget Reporting (realized) Ministry of Agriculture data
D.39231	Public objectives in forestry	Budget Reporting (realized) Ministry of Agriculture data
D.39232	Operating forest railroads	Budget Reporting (realized) Ministry of Agriculture data
D.39233	Maintenance of welfare and park forests	Budget Reporting (realized) Ministry of Agriculture data
D.39241	Fishing management activities	Budget Reporting (realized) Ministry of Agriculture data
D.39251	Subsidy on current asset loans for dwelling construction corporations	Budget Reporting (realized), Ministry of Finance data
D.394	<i>Other subsidies</i>	D.3941+...+D.3944
D.3941	Targeted allocation for environmental protection	Budget Reporting (realized), Ministry of Finance data
D.3942	Targeted allocation for investment promotion	Budget Reporting (realized), Ministry of Finance data
D.3943	Other subsidy	Budget Reporting (realized), Ministry of Finance data
D.3944	Technical development subsidies	Budget Reporting (realized), Ministry of Finance data

Table 4.22 Other subsidies on production (million HUF)

		Time adjustment	Cash data	Adjustment	Accrual data
D.39	OTHER SUBSIDIES ON PRODUCTION		102 466	2100	104 566
D.391	<i>Subsidies on payroll and workforce</i>		64 239	1 678	65 917
D.3911	From Labour Market Fund		26 400		26 400
D.3912	Subsidies on employment of persons with a decreased capacity of work	1 month	37 839	1 678	39 517
	From the central budget				
D.392	<i>Subsidies on intermediate consumption</i>		32 074	422	32 496
D.39211	Subsidy on family farms		7 992		7 992
D.39212	Subsidy on interest on loans in agriculture		12 605	422	13 027
D.39213	Soil quality protection and utilization		168		168
D.39214	Farm and other professional training		220		220
D.39215	Animal husbandry and breeding organizational tasks		265		265
D.39216	Animal compensation, animal waste destruction		1 840		1 840
D.39221	Game management activities		255		255
D.39231	Public objectives in forestry		4 935		4 935
D.39232	Operating forest railroads		109		109
D.39233	Maintenance of welfare and park forests		247		247
D.39241	Fishing management activities		96		96
D.39251	Subsidy on current asset loans for dwelling construction corporations		1 761		1 761
D.39251	Other subsidies on interest on loans		1 581		1 581
D.394	<i>Other subsidies</i>		6 153		6 153
D.3941	Targeted allocation for environmental protection		2 891		2 891
D.3942	Targeted allocation for investment promotion		818		818
D.3943	Other subsidy		274		274
D.3944	Technical development subsidies		2 170		2 170

Subsidy from Labour Market Fund (D.3911)

143. Financial assistance is available after application for the following activities:

Implementing new workplaces, enlarging active workplace, introducing new technologies, obtaining fixed assets (tangible and intangible), if it leads to long-lasting employment with the increase of workforce.

Subsidies on employment of persons with a decreased capacity of work (D.3912)

144. Subsidies for the employers which engage persons with a decreased capacity of work by reimbursing their wage cost.

Time adjustment of the cash figures: we apply one month's time adjustment as the employer may ask for reimbursement from the Tax Office from the 20th day of the following month.

Subsidy on family farms (D.39211)

145. Forms of subsidy:

- subsidy on interest on loans connected to purchase, establishment and modernization of arable land and premises or to purchase of current assets,
- development subsidy beyond those determined in the general agricultural support system – e.g. on purchase of machines, on building and plantation investments as well as supplementary subsidy based on fixed area and yields.

Subsidy on interest on loans in agriculture (D.39212)

146. Agricultural producers may apply for subsidy on interest if a loan has been taken from financial intermediaries for covering current production costs. One may apply for subsidy even if the interest is due within or after the end of the year.

4.10. Gross operating surplus

147. The gross operating surplus is to be found in the national accounts as a residual of market production. Compensation of employees and other taxes on production are deducted from gross operating surplus and other subsidies on production received are added. In non-market production, gross operating surplus is identical to consumption of fixed capital because it generates no operating surplus.

148. Gross operating surplus of the Households sector is equal the GVA of the owner-occupied dwelling services estimated via the user cost method and contains the net operating surplus and the consumption of fixed capital. (for details see Chapter 3.17)

4.11. Mixed income

149. Mixed income is the income of unincorporated enterprises owned by households to which the owners may contribute with their unpaid labour inputs that cannot be separated from the operating surplus which covers the income on fixed assets. It covers production of household for own final use, as well.

150. The mixed income of Households sector is a balancing item and calculated as follows:

+ Gross value added
- Compensation of employees
- Other taxes on production
<u>+ Other subsidies on production</u>
Mixed income

Table 4.23. Mixed income

		B.1g	D.1	D.29	D.39	B.2g	B.3g
		Gross value added	Compensation of employees	Other taxes on production	Other subsidies on production	Gross operating surplus	Mixed income
A	Agriculture, hunting and forestry	250 236	12 418	2 882	9 286		244 222
B	Fishing	146	20				126
C	Mining and quarrying	193	69				124
D	Manufacturing	149 994	29 934	9 257			110 803
E	Electricity, gas, steam and water supply						
F	Construction	276 808	24 475	345			251 988
G	Wholesale and retail trade; repair of motor vehicles; motorcycles and personal and household goods	350 013	71 813	777			277 423
H	Hotels and restaurants	106 044	18 424	1 257			86 363
I	Transport, storage and communications	119 316	26 402	476			92 438
J	Financial intermediation	68 491	20 999				47 492
K	Real estate, renting and business activities	1 310 934	82 302	369		786 410	441 853
L	Public administration and defence; compuls. social security						
M	Education	65 808	11 718				54 090
N	Health and social work	125 958	65 246				60 712
O	Other community, social and personal service activities	143 195	24 254				118 941
P	Private households with employed persons						
Q	Extraterritorial organizations and bodies						
	Industries, total	2 967 136	388 074	15 363	9 286	786 410	1 786 575

4.12. Estimation of consumption of fixed capital

151. Consumption of fixed capital (CFC) is estimated by sectors, industries and types of fixed assets based on the gross new replacement value of the capital stock for the actual year. The estimation is based on the statistical survey of the capital stock on the ideal moment of 1. January 2000, and that on the valuation of the stock for statistical aim based on the survey.

4.12.1. Valuation

152. In accordance with ESA '95 the valuation procedure of the non-financial assets having originated from the gross book-keeping values either took into account the information from the asset inventories of the statistical units and the official investment price indices, or in certain cases it referred to empirical sources on the changes in values over the time.

153. The stock valuation based on empirical information was undertaken by multiplying the specific construction (acquisition) costs of the reference year by the quantitative stock of the observed asset categories. Such – not accounting based – valuation approach was carried out for the assets of water utilities, dams and dikes and public roads at the prices of the reference year.

154. Sufficiently detailed data were available on the assets of agricultural units and dwellings in natural units from the agricultural censuses and dwelling surveys indicating the adaptation of the empirical value relations.

155. The consumption of fixed capital of the intangible goods - within this the most important item is the Computer Software - requires initial stock value. We assumed that the expected service life of softwares could be five years considering the Hungarian circumstances, and the initial stock of 2000 was calculated from the data of cumulated capital formation for the previous five years. The revaluation of the stock at current prices required the compilation of a software price index which was carried out by the adaptation of the Canadian method.

4.12.2. Annual extrapolation of the stock data

156. The generally accepted, model based Perpetual Inventory Method (PIM) was applied to determine the stock value of the following years, the consumption of fixed capital and for estimation of the net stock value of assets. Accumulated and annual consumption of fixed capital is estimated by applying expected service lives and depreciation functions to the model.

157. The extrapolated stock is split to the following main asset categories:

- Buildings, other structures;
- Machinery with long service life;
- Machinery with short service life;
- Transport equipment
- Computer software.

158. The extrapolation of the dwelling stock is not based on PIM, as there is direct information on the annual stock changes, therefore the model approach is not necessary.

159. The stock value of plants and breeding animals was computed by multiplying the surveyed stock in natural units with the average price or with the cost of plantation. The classifications of capital stock by sectors and by vintage are available from the data sources establishing the estimation. The calculation of CFC for cultivated assets is based on direct data sources as well.

4.12.3. Data sources of the valuation of Capital Stock

160. A voluntary sample survey was carried out on the tangible fixed assets owned by financial and non-financial corporations in order to gain information on the value, the present average age and the expected service life of the assets (according to OSAP 1800).

161. The estimation of the value of tangible fixed assets owned by agricultural corporations was based on the General Agricultural Census carried out exhaustively, which took place in 2000, on the Census of Vineyards and Fruit plants executed in 2001, and on regular annual and sub-annual data collections.

162. The estimation for the value of tangible fixed assets owned by the central government was based on the information from the administrative inventories on the book-keeping values, on the detailed records of the Treasury Property Directorate and on the local government compulsory data survey for building stock (OSAP 1616/03).

163. The valuation of tangible fixed assets of infrastructure (like public roads, public utilities, dams and dikes, public vehicles) took place separately involving technical experts hired by the HCSO, on the basis of the data set of the responsible ministries.

164. The experts multiplied the existing natural data – square metres – by the actual specific construction costs in order to value the stock of dwellings. The construction costs are calculated by dwelling types. The model applied for the estimation of dwelling stock is similar to the estimation method for accounting the dwelling investment in annual fixed capital formation. The model used for the estimation of dwelling stock contains also the cost calculation of those dwellings which are not built any longer.

165. The revaluation was implemented by vintage because of missing long time-series on annual dwelling investments. The ratio of the net/gross value was estimated by vintages and also by experts. Census data make periodical revisions on the ratio of the net and gross asset value possible.

166. The dwelling stock was categorized by sector and vintage on the basis of the results of the valuation. The age structure of the stock is available from the data of the Population Census, and there are supplementary sample surveys to support those pieces of information, as well.

167. The following sources were available for the capital stock estimation of the producer households:

- Personal Income Tax reports of the entrepreneurs;
- Stock estimation results on small corporations (working with less than 5 employees);
- Specific asset figures obtained from the tax records of corporations performing single-entry bookkeeping;
- Survey data of the General Agricultural Census in 2000 on units engaged in agricultural activity.

168. At the request of the HCSO the four historical churches from the non-profit institutions serving households estimated their buildings categorised by function. The physical parameter of the buildings and the current state of them (rate of deterioration) were available from the survey.

4.12.4. The estimation of the consumption of fixed capital on the basis of PIM (Perpetual Inventory Method)

169. The generally accepted, model based Perpetual Inventory Method (PIM) was applied by HCSO to determine the stock value of the following years.

170. Statistical data and statistical models are both applied in order to calculate the new replacement (gross) value of the stock and – by taking into account the actual deteriorations of the assets – the net values of each year following the year, of which the initial stock was set for. PIM provides data on the Capital Stock by accumulating the value of asset acquisitions of the preceding years.

Basic information to operate PIM:

- Annual Gross Fixed Capital Formation figures (GFCF), where the length of the series is determined by the assets with the longest service life;
- Investment price indices of the asset categories in question;
- Average service lives of the assets;
- Information on the pattern of asset discards by categories.

4.12.4.1. Conversion of the observed stock data to meet the PIM input requirements

171. Long time series on investment were not available in Hungarian statistics to implement PIM in its classical form. Thus, the methodology was diverted from the conventional solution, and was based on the data of the directly observed gross stock to determine the normal model outputs: the Gross and the Net Capital Stock. This initial, surveyed stock was the basis of all model calculations.

172. The value of initial capital stock available at the beginning of 2000 by vintage must have been attached to the exact years of investments. However, the model necessitates not only the currently surveyed value of the stock, but the total value of the investments once performed in order to calculate the value of gross stock still operating for each year. This means that ideal investment time series were estimated (by inversion) which the observed stock value could be exactly derived from with the help of the model.

173. Based upon the selected combination of functions, the data of the direct survey explicitly determined:

- on one hand the ratios of gross and net stock for each year of investments,
- on the other hand they provided results on expected service lives indirectly from the gross/net ratios and the actual ages of the assets.

174. As a consequence of the previous steps, new ideal investment time series were created which provided identical Gross and Net Capital Stock results to the directly observed ones, if the proper combination of model functions had been attached to them.

4.12.4.2. Application of PIM

175. In accordance with the suggestions of the OECD Manual on Capital Stock published in 2001 (Measuring Capital, OECD 2001), the method contains two discard functions, namely the normal distribution, and the delayed linear discard functions. The discard functions calculate the value of discards from the initial investment values of a given year by category in relation with the expected service lives of the assets. The calculated value of annual discards corresponds to the negative changes in Gross Capital Stock.

176. The calculation of CFC and f Net Capital Stock requires not only discard, but also depreciation functions. The most common depreciation function, which could be attached to the discard function, is the linear one, which reduces the net value of the assets with the same amount year by year.

177. The combination of functions used for extrapolation by HCSO was the combination of normal distribution discard function and linear depreciation function.

178. The extrapolated stock is split to four main asset categories:

- Buildings, other structures (without dwellings);
- Machinery with long service life;
- Machinery with short service life;
- Vehicles.

179. Based on the information acquired from the annual survey on the structure of investments (OSAP1932), the machinery with long and with short service life could be well identified and separated.

The investment price indices are used for estimating CFC on the basis of the model.

180. According to the different price indices are determined for the categories of domestic machinery and domestic transport equipment on the basis of the industrial production price indices. The index calculations for the categories of machinery of import origin and transport equipment of import origin are founded on representant based data from the price statistics of foreign trade. The deflation of construction works is carried out by applying cost based construction price index.

181. The calculation of investment price indices by industry is executed by taking into account the weights of product groups referring to their observed industrial proportions in the year t-2. The annual price indices are obtained as the weighted averages of the new industrial price indices, where the weights are the annual investments of the industries.

182. The expected service lives of the assets owned by corporations were fixed by taking into account the results of the direct survey. The average expected service lives are available by vintage, and there is no information on differences among vintages in terms of service lives.

183. In case of direct observation, the value of major repairs appear together with the original value of the assets for the year when the asset was first put into operation, which means that extension of the expected service life data for the old vintages is necessary. Service lives applied for the old vintages were derived from the condition factors of those vintages.

184. There were no possibilities for the estimations of service lives from the primary data sources in the Government sector, therefore the expected service lives are fixed for the whole series. The estimation made by experts covered the expected service live for tangible fixed assets of infrastructure, like public roads, public utilities, dams and dikes. Longer service lives than recommended by Eurostat are used based on the opinions of the external experts.

185. Information on the expected service lives of the assets owned by the Households sector was directly derived from the survey on the corporations. Service lives reported by small corporations were applied for the assets of households.

186. Accumulated Consumption of Fixed Capital could be estimated by applying expected service lives and depreciation functions to the model for the previously fixed breakdown. Deducting the accumulated Consumption of Fixed Capital from the value of Gross Capital Stock leads to Net Capital Stock, which concept refers to an adjusted stock value, where the actual deterioration of the stock is taken into account.

4.12.5. Estimation of consumption of fixed capital based on direct data sources

4.12.5.1. Dwellings

187. To estimate the consumption of fixed capital, the dwelling stock data base was compiled by using the census and data of the dwelling survey.

188. Net and gross stock value ratios were known by vintage which made indirect lifetime estimations possible. To calculate expected lifetimes by vintage, the ages of the dwellings were identified as average age of the related vintage.

Therefore, it is not needed to apply a model-based approach. However, the estimation procedure follows the logic of the PIM.

189. There are available stock modifying items (new dwelling investments, dwelling major improvements, disaster or collapse because of complete depreciation and further utilisation of the construction for non-dwelling purpose etc.) and the investment price index for the further calculation of stock data.

190. Estimation procedure for the current year is as follows:

- a) The closing gross and net values of the stock are calculated by investment price indices of the current year to new replacement values integrating the impact of the stock modifying items into these.
- b) The value of the discard is required for gross value determination; it is possible to estimate for the entire dwelling stock by using natural data of dwelling surveys. Distribution of all discards by age group can be determined by lifetime data.
- c) Calculation of the closing stock value of the current year: repriced gross stock + investment – discard +/- other stock modifying items.
- d) The changes of the net stock value for the current year and for the previous year are calculated by the combined effect of price changes, investments, that of the other stock modifying items and of the consumption of fixed capital. Estimation of the consumption of fixed capital can be calculated by average expected lifetime by vintage and by the remaining service life of the assets, based on experts' analysis. Linear depreciation function is applied on the basis of average remaining lifetimes.
- e) Calculation of the closing value of the net stock in the current year: repriced net stock + investment +/- other stock modifying items – (repriced net stock/average remaining lifetimes).

4.12.5.2. Plants and breeding animals

191. PIM is not required for the extrapolation of the stock of cultivated assets such as plants and breeding animals, since regular surveys provide information on stock increases and decreases, and on actual prices.

192. The vintage structure of the stock is available and expected service life data can be set as fixed ones, since they are mainly determined by biological and technological factors. Condition factors for plants can be set by the age and by the service life. The CFC can be calculated with these condition factors.

193. The stock of breeding animals is not reduced by the consumption of fixed capital.

Table 4.24 Consumption of fixed capital by category (2002, million HUF):

Categories	CFC
Dwellings	399 919
Other buildings and structures	906 029
Transport equipment	298 652
Other machinery, equipment	1 006 845
Plants	21 759
Computer software	68 487
Total CFC	2 701 691

4.12.6. Estimation of the consumption of fixed capital by sectors

4.12.6.1. Corporation sector (Financial and non-financial corporations)

194. A sample survey (OSAP1800) was carried out on the fixed tangible assets which collected data about the gross bookkeeping values of the assets, the replacement values, the condition factors (which show the deterioration of the assets), the new acquisition price of the assets with 0 condition factor, the average age and the expected service life of the assets. The gross book-keeping value, the replacement value and the condition factor were determined by vintage.

195. The new replacement values of the assets (without software) were calculated in two steps:

- at first, experts of corporations determined new acquisition prices based on market information, which can substitute the asset according to the technical parameters, to the historical price of the tangible fixed assets. If the market price of the asset in new condition missed the estimated market price for the existing asset was applied.
- in the second step the HCSO re-valued the asset according to the results of the estimations on the existing assets, the condition factor related to these assets and with the help of the function of wear and tear.

196. The stock of software at replacement value is estimated from cumulated investment data for five years by a special price index developed for measuring the volume changes and the value of the stock of software.

197. We chose the adaptation of the Canadian method to calculate the software indices in consideration of the recommendations of the expert's task force of the OECD presented in the 'Report of the OECD Task Force on software measurement in the National Accounts'.

198. The estimation of CFC – excluding plants- is calculated by type of assets and by industries, on the basis of PIM.

4.12.6.2. General government sector

199. Concerning the institutions of the central government, the gross (new replacement) value of the capital stock and the condition factor were estimated by industries and by the main asset categories. The new replacement value was estimated by the revaluation-multiplier according to the book-keeping

value and the ratio of the reproduction/book-keeping value. The expected service lives were determined according to the recommendations presented in the OECD Manual on Measuring Capital.

200. The compulsory survey collected data on the real estates of the local governments exhaustively. The survey contained the estimated (net) values and the average condition factors of the buildings by function of the building and other structure. The value of the machinery and vehicles owned by the local governments was estimated from the gross book-keeping values by considering the vintage structure of the assets owned by the central government.

201. Tangible fixed assets of infrastructure like public roads, public utilities, dams and dikes were not taken into account among the other assets of the general government. The calculation of the gross capital stock is carried out by multiplying the natural data by the specific construction costs. The expected service lives of the infrastructural assets are experts' estimations.

202. The stock of software at replacement value is estimated from cumulated investment data of five years by a special price index developed for measuring the volume changes and the value of the stock on software. We chose the adaptation of the Canadian method to calculate the software indices in consideration of the OECD recommendation.

203. The estimation of CFC is calculated by sub-sectors, by type of assets and by industries on the basis of PIM. The capital consumption of fixed capital of dwellings is based on direct data sources. (See more details in the section 4.12.5.1.)

4.12.6.3. Households sector

204. Dwellings amount to a significant part of the stock of fixed capital of the sector. The capital consumption of fixed capital of dwellings is based on direct data sources. See more details in the section 4.12.5.1.

205. The estimation of stocks was made by experts based on the survey data of the General Agricultural Census in year 2000 in natural units engaged in agricultural activity of the producing households.

206. The stock value of small corporations working in the non-agricultural industries is estimated indirectly, based on the data of the personal tax-declaration of the sole proprietors, and on the results of the stock estimation for small enterprises working with 4 or less people and belonging to the corporation sector.

207. The main assumption in order to execute estimations on the capital stock of the Households sector was that units in this sector perform their production activities with relatively few assets compared to the corporations operating in the same industries.

208. In order to estimate the new replacement value from the calculated gross bookkeeping value, the surveyed revaluation multipliers of the corporations were adopted (new replacement value/gross book-keeping value). The service lives of the assets were adopted from the same source as well.

209. Tangible fixed assets assigned to the Households sector do not contain the stock of the assets owned by households, which are used out of the production activities for a period of more than one year.

210. The estimation of CFC is calculated by PIM except for dwellings and plants.

4.12.6.4. Non-profit institutions serving households sector

211. The annual data collection on non-profit institutions carried out by HCSO does not provide all the necessary basic information to revalue their capital stock. The four historical churches have made a rough inventory on their buildings in natural units, and separated them according to the services they provide. The reported data contain the present condition of the built buildings.

212. Buildings constructed to serve the activity of religious life (mainly churches) could not be valued according to their real worth, since there is no ground for the statistical valuation of art treasures and unique artworks. So the scope of valuation was reduced to the construction costs of the buildings with the present technologies available.

213. Based on the floor spaces, estimations were carried out on the new replacement values by applying the specific construction costs set for 2000. The investment price index is used to make the value of the stock up-to-date.

214. The value of the stock of the machinery and equipment is estimated indirectly based on the purpose of the buildings and applying the similar rate of the buildings and machinery of other sectors.

215. A supplementary estimation was made for stock value of buildings of some non-profit institutions working in education or in social work if longer time-series were available.

216. The estimation of CFC is calculated by PIM.

Table 4.25 Consumption of fixed capital by sector (2002, million HUF):

Sectors	CFC
S.11 Non-financial corporations	1 481 910
S.12 Financial corporations	71 265
S.13 General government	593 488
S.14 Households	516 234
S.15 NPISHs	38 794
Total CFC	2 701 691

CHAPTER 5. THE EXPENDITURE APPROACH

5.0. GDP according to the expenditure approach

1. The expenditure approach is for measuring total expenditures as the sum of final uses of goods and services by resident institutional units plus exports less imports of goods and services.

2. The total amount is obtained from the sum of the final consumption expenditure by households, non-profit institutions serving households (NPISHs) and government on goods and services; gross capital formation (capital expenditure on fixed and intangible assets, changes in inventories); and net exports of goods and services plus the statistical discrepancy as a balancing item (see Chapter 6).

3. These categories are estimated from a wide variety of sources including expenditure surveys, the government's internal accounting system, surveys of traders and administrative sources. The table below shows how the expenditure measure of GDP is put together.

Table 5.1 GDP from expenditure side, 2002

ESA-code	Denomination	million HUF	% of GDP
P.31	Household final consumption expenditure	9 078 800	52.9
P.31	Final consumption expenditure of NPISHs	248 744	1.5
P.32	Final consumption expenditure of government	3 801 006	22.2
P.51	Gross Fixed Capital Formation	3 944 460	23.0
P.52	Changes in inventories	218 959	1.3
P.53	Acquisitions less disposals of valuables	..	
	Statistical discrepancy	211 317	1.1
P.6	Exports of goods and services	10 820 458	63.1
P.7	Imports of goods and services	11 156 985	65.1
B.11	Balance of external trade	-336 527	-2.0
B.1g	GDP, total	17 148 449	100.0

4. 29. In 2006, the estimation of production, consumption and income deriving from illegal activities was introduced in the Hungarian National Accounts compliance with the ESA'95. (3.08). According to the proposal of Eurostat, estimations for three main scopes of illegal activities have to be compiled, namely: prostitution, drugs and smuggling. From these three scopes HCSO has made estimations for prostitutions and drugs, because these activities do not change often and significantly in short term and a lot of information is available for these items. Smuggling is a different thing. Although, it has constant elements, it is an activity that can immediately adapt to the change of market and legal regulations but these can not be measured by statistical means. It is more unlikely to find other basic information than in the case of the first two items. So till now, HCSO did not try to estimate this activity.

For more details see Chapter 7, paragraph 41.

5.1. The reference framework

5.1.1. Household final consumption expenditure

5. Household final consumption expenditure covers the consumption of goods and services for individual purposes. It contains the purchased goods and services, i.e. consumption of goods and services paid for by the households, the consumption of own-account goods and the wages and salaries in kind from the employers.

6. The main data sources used for estimating the household final consumption expenditures are the Household Budget Survey, the Retail Trade Survey and several other surveys conducted by HCSO (e.g. telecommunication survey). The characteristics of these data sources are outlined in chapter 5.7 (Household Final Consumption Expenditure).

5.1.2. Final consumption expenditure of government

7. According to ESA95 the government final consumption expenditure is divided into two parts:

- The value of the goods and services produced by the general government itself other than own-account capital formation and sales;
- General government purchases of goods and services produced by market producers that are supplied to households – without any transformation – as social transfers in kind. This implies that the general government pays for those goods and services which are provided to households by sellers.

8. Central government units and extra-budgetary funds are registered by the Ministry of Finance. Local governments and their institutions are registered at regional institutions. The coverage of these registers is complete.

9. The estimates for the compilation of data referring to the central Government sector are based on annual reports of government institutions and on the government budget. Each government institution has an annual report, and all of them are included in the government budget. Therefore, the common data of the two sources are identical.

10. The local government institutions have similar annual financial report, and the Ministry of Finance uses them for compiling the report on the revenues and outlays of the local Government sector. There is no difference in the data of the two sources.

5.1.3. Final consumption expenditure of NPISHs

11. For NPISHs the final consumption expenditures include two categories as it is indicated in ESA95:

- the value of the goods and services produced by NPISHs other than own-account capital formation and other than expenditures made by households and other units which means their non-market output
- NPISH expenditures on goods or services produced by market producers and redistributed through their intermediate non-profit activities to households for consumption.

5.1.4. Gross fixed capital formation

12. The value of gross fixed capital formation comprises acquisitions and own-account production of new and existing tangible and intangible fixed assets, performed improvements on existing fixed

assets, and major improvements to land as positive entries, while disposals of fixed assets are recorded as negative counterparts.

13. The main sources to estimate the annual GFCF are the Annual Integrated Economic Survey, the Structural Investment Survey, the balance sheet data of corporations working with less than five employees, and enterprise data on stocks of tangible fixed assets. Data on new dwelling constructions in physical volume terms (number and square meter) from permits of usage are available to estimate dwelling investments.

5.1.5. Changes in inventories

14. Changes in inventories are calculated as the difference between the closing stock of the actual year and the adjusted closing stock of the previous year. The data source for calculating changes in inventories is provided by tax declarations and by the quarterly integrated economic survey.

5.1.6. Acquisitions less disposals of valuables

15. There is no source information on this item, and there is no estimation process executed in order to measure it.

5.1.7. Exports and imports of goods and services

16. In 2002, the source of export data was the external merchandise trade statistics and the balance of payments statistics. The statistical recording of external merchandise trade is based on customs documentations. Until 30 April, 2002 the Ministry of Economic Affairs and the Central Statistical Office were jointly responsible for the statistical processing of data collected within the framework of the customs procedures by the National Command of Customs and Excise Guard. Afterwards the Central Statistical Office has the only responsibility for producing external trade statistics. The balance of payments statistics are compiled by the National Bank of Hungary.

5.2. Valuation

17. In most cases the relevant data sources give sufficient information to conform to ESA95 prices. In some cases this is not obvious and then HCSO makes the necessary adjustments. As for the expenditure approach the survey sources are predominantly in line with ESA95 concepts. The necessary adjustments, which have to be made by HCSO, are described in the relevant chapters (e.g.: to move from “cost, insurance, freight [c.i.f.] to free-on-board” [f.o.b.] values in imports of goods). The main practice of valuation is the following:

18. In case of household final consumption expenditures the purchased consumption is accounted at market prices, while the own produced consumption at basic prices. At estimating government and NPISH (non-profit institutions serving households) consumption expenditures, the non-market output generated consumption is accounted at production costs, while the purchased and transferred (for households) products and services at market prices. GFCF (gross fixed capital formation) and changes in inventory are also valued at purchasers' prices. In case of foreign trade turnover, exports and imports are also valued at f.o.b. (free on board) parity.

5.3. Transition from private accounting and administrative concepts to ESA95 national accounts concepts

19. Adjustments, carried out on data of administrative or private accounting origin in order to meet the ESA 95 concepts, are explained in detail as part of the methodology concerning the expenditure components in question

5.4. The roles of direct and indirect estimation methods

20. The applied estimation methods of **household final consumption** expenditure are based on annual or sub annual direct statistical surveys and administrative sources. Because of the different reliability of the sources both direct and indirect (benchmarking and extrapolation) estimation methods and modelling (imputed rent) are used for estimation. (See 5.5 and 5.7)

21. **For NPISHs and for the general government the estimations on final consumption expenditures** are based on the annual reports of government institutions and on government budget data, therefore we apply a direct method for the calculation.

22. The calculation of the annual **GFCF** data is mainly survey based. There is no direct information from the survey on units working with less than five employees to support the estimation of the value of GFCF performed by them. The GFCF estimation for the non-observed units is based on existing supplementary information. Dwelling investments are estimated from natural data by applying a detailed dwelling construction cost model. Apart from the investment survey, the annual investments of cultivated assets are measured by independent statistical surveys, and these are recorded by the Ministry of Agriculture and Rural Development.

Table 5.2 Estimation methods of capital formation by activities of capital formation

Activity	Estimation method
Acquisitions less disposals of tangible fixed assets	Mainly survey data supplemented with estimation on the non-observed part based on book-keeping data and that on data collections for agricultural industries and that on surveys of the Ministry of Agriculture and Rural Development. Construction cost model for dwelling constructions.
Acquisitions less disposals of intangible fixed assets	Survey data
Additions to the value of non-produced non-financial assets	Survey data supplemented with estimation on the non-observed part based on records of the Ministry of Agriculture and Rural Development.
Changes in inventories	Survey data and tax records

23. The estimation of the **export and import of goods and services** is based on administrative (custom) and BOP data, therefore it applies a direct estimation method.

5.5. Roles of benchmarks and extrapolation

24. As for the reference year, direct methods are used in most cases for estimating e.g. the final consumption expenditures of NPISHs, the final consumption expenditures of the government, the gross capital formation and exports and imports of goods and services. In around 50 per cent benchmarking and extrapolation technique are used for estimating household final consumption expenditures, using the supply and use tables for benchmarking and the Household Budget Survey data for extrapolating. The details are described in Chapter 5.7.

25. Benchmark data are applied for the indirect estimation of investments carried out by corporations and sole proprietors with 4 or less employees. These indirect estimates are based on the

benchmark data of the Capital Stock Survey executed in 2000 to measure the actual value of fixed assets. The methods are detailed in the relevant chapters.

5.6. The main approaches taken with respect to exhaustiveness

26. As there are two approaches to measure GDP, HCSO makes efforts to ensure exhaustiveness in the expenditure approach as well as in the production approach

27. There are several sources in use for estimating the **household final consumption expenditure**. The two main sources are the Household Budget Survey and the Retail Trade Survey. According to the PHARE2000 Project on Household Final Consumption the adjustments made by the NA department on Household Budget Survey data are not considered as exhaustiveness adjustments. However, there is some important area where it is necessary to make some other adjustments in order to achieve exhaustiveness.

28. One of these areas is the consumption of alcoholic beverages and tobacco. For alcoholic beverages supply and use tables were used (in physical terms). For 1998 and 1999 the compilation of supply and use tables made possible to verify the consumption data in case of tobacco products and alcoholic beverages at current prices.

29. Giving tips is a widespread phenomenon in Hungary. The most important such field is the health services field, where this phenomenon is known as gratitude money. For the time being estimation on tips (gratitude money) was based on the Household Budget Survey and the personal income tax declaration data. The first health satellite accounts were published in January 2003. Based on satellite accounts data a detailed model was established for estimating tips (gratitude money) on health services. The model accounts the estimated amounts of gratitude monies by treatment types as well as takes into account the supposed frequency of giving gratitude monies. The result of this model estimation was used for the final calculation of 2001 data and the revised data of 2000. On tips characteristic to other service fields, an estimation procedure was introduced over the final calculations of year 2001. These calculations are based on a 1997 survey on catering, passenger transport and hairdressing.

30. In the framework of the PHARE exhaustiveness project the HCSO made a pilot estimation for the two main types of illegal activities, namely drugs and prostitution. The results were not introduced into the regular calculation and it was postponed until a major revision was made. As a number of major changes has been introduced during the preliminary calculation of 2005 the estimation of illegal activities were updated and incorporated into the accounts, too.

31. The estimation of production and turnover of drugs was based on the regular data demand. The starting point was to estimate the consumption of drugs, using the number of consumers, the quantity of drugs and the prices by type of drugs. The main data sources were medical, judicial data, reports of the police, the tax office and the customs office. For estimating the intermediate consumption mainly reports of the police were used.

32. In the case of prostitution the method is similar. For the first time, estimation was made for the consumption, using the number of consumers, number of cases using average prices. There are two additional data sources to the above mentioned ones, one is the data of the association of prostitutes and the others are special studies. For the estimation of intermediate consumption mainly reports of the police were used.

33. The calculation was made from 2000 onwards and had an impact on the gross output, intermediate consumption, final consumption and exports and imports figures.

34. In the case of **final consumption expenditures of NPISHs and the government** no adjustments were made for exhaustiveness.

35. Units of the NA sectors engaged in production are all considered to be the subject of **GFCF** estimations. The data collection system currently provides direct data on units working with 5 or more employees, but the non-observed part is also taken into account by applying supplementary information available on the units to estimate their annual GFCF, as well. The data collection covers all the required asset categories and transactions on them which are covered by GFCF. For the non-observed part of the economy some GFCF items are not dealt with in the estimation process, mainly due to the probability of their small magnitude and the uncertainty of the estimation results. Transactions on second-hand assets affecting the Households sector, and the value of investments in intangible fixed assets carried out by the non-observed units are not estimated at all.

36. For the exports and imports of goods and services figures HCSO did not make any adjustment to ensure exhaustiveness, taking into account that the data on exports and imports of goods came from custom declarations, which are considered as a full scope data source, and the data on exports and imports of services came from the balance of payments. Corrections for shuttle trade, smuggling and illegal activities have not been incorporated in the Hungarian National Accounts yet.

5.7. Household final consumption expenditure

5.7.1. General description of the method

Overview

37. Household final consumption expenditures are estimated by commodity groups and income sources. Since year 2000, these estimations use the COICOP (Classification of Individual Consumption by Purposes) classification.

38. Three categories of consumption expenditure are distinguished based on how products are being procured (how households came into possession of the product):

- own-accounts-products;
- wages and salaries in kind;
- purchased goods and services.

39. The consumption of agricultural own-accounts-production is valued at procurement prices. Procurement price means that price, which can be realized by small producers when selling their products for procurers (a procurer can be e.g. a conserve factory). Procurement statistics are based on data collection Report on Procurement (OSAP 1097), which – concerning 168 products – covers certain and determined corporations procuring primary agricultural products for processing and reselling purposes. The estimation is made by products, quantity data are multiplied by the current year's prices. The data come from agricultural surveys.

40. The imputed rent is calculated by using the user-cost method (as described in chapter 3.17). The output of owner-occupied dwelling services is estimated as a sum of costs (consumption of fixed capital, intermediate consumption and net operating surplus).

41. The estimation of wages and salaries in kind is based on the tax declaration data of enterprises and the reports of government institutions, these items are valued at cost basis.

42. The purchased goods and services are valued at market prices (including VAT).

43. For estimating the final consumption expenditure of households two main data sources and several additional data sources are used. The two main sources are the Household Budget Survey and the Retail Trade Survey. Besides these surveys several other statistical surveys and some administrative sources are used as follows:

- agricultural surveys;
- housing and public utilities statistics like: electric energy supply, piped gas supply, district heating and hot water supply;
- medicine consumption data from the Ministry of Health;
- transport statistics, like number of passengers by transportation modes, fare receipts by transportation modes;
- postal services data from the Hungarian Post Co. and telecommunication data from telecommunication enterprises;
- data for public libraries, cinemas, theatres and exhibitions from the Ministry of Education and Culture;
- hotels and accommodation surveys from tourism statistics;
- data for insurance services from insurance statistics.

44. Due to the different reliability and coverage of the sources both direct and indirect estimation methods are used. In case of the output of owner-occupied dwelling services the user-cost method is applied, which is a model-based approach.

45. Benchmark and extrapolation techniques are applied in case of using Household Budget Survey data. The first benchmark was made in 1990, the second in 1995. The first detailed supply and use tables were compiled in 2000 referring to 1998 and on this basis a new benchmark was established for 1998. The year on year changes of the expenditure figures at current prices by COICOP categories at four digit-level from the Household Budget Survey are used for extrapolations.

46. Data for retail sales are used directly to estimate household final consumption expenditures, make adjustments for national accounts purposes like the split between IC/GFCF and household final consumption expenditure is made based on the 1998 supply and use tables.

47. For the time being there was not a consistent way of balancing the private household consumption figures. For balancing the consistent way is to use supply and use tables, but this technique is not applied in the Hungarian National Accounts yet.

48. The final consumption expenditure of households referred to the consumption of resident households as a total. Net household expenditures abroad are estimated by using the balance of exchange of foreign currencies by Hungarian resident private person and of HUF by non-resident persons, although this adjustment could be made in an aggregated level only for the figures of 2002.

Some particular issues

49. The consumption of persons living in institutions is implicitly covered by Household Budget Survey data after a population adjustment. By using household budget survey statistics (HBS), per capita consumption is calculated in a COICOP 4 digit breakdown; then the population data coming from population statistics are multiplied by the per capita consumption coming from HBS. Households

in the HBS and the related population figure refers to Hungarian households where heads of households are Hungarian citizens. This correction method is also used for estimating the consumption of people living in institutions and non-Hungarian headed resident households. This process may distort consumption structures, because institutional and private households are probably characterized by different consumption structures; this problem may not be corrected at present, because the required information is missing.

50. Expenditure on goods under a hire purchase were counted as household final consumption expenditures with the full amount of the purchase when the purchase when the products were delivered to the households.

51. There were no separate estimations on open-air markets, street vendors and repairing services. These items were covered by the household budget survey and the related estimated household consumption expenditures in national accounts. Small street catering services were not covered by our estimation, because the Restaurants, café and the like data (11.1.1) based on the retail trade statistics data, which did not cover these street vendors.

52. For second hand goods trade margins on sales were covered by retail trade statistics.

53. The private use of business cars was included in wages and salaries in kind.

54. Government's payments to market producers (for medicines etc.) were covered as the final consumption of government.

55. The subscriptions, contributions etc. to NPISHs were treated according the ESA95 §4.125-4.126, i.e. they were not accounted as household final consumption expenditures, they were recorded as current transfers to NPISHs.

56. Charity and gifts from abroad were not significant, therefore they are not covered.

57. Estimations on the consumption expenditure of illegal activities like '*Narcotics*' (02.3.0.) and '*Prostitution*' (12.2.0.) were included in the household final consumption expenditures.

58. A distinction was made between taxes and purchases of government services according to Commission Decision 93/570. Inheritance duties and gift duties are accounted as capital taxes. Stamp duties are accounted as income transfers (D.59), dwelling investments related duties – which are accounted as gross fixed capital formation – are deducted from the trade duties, the remaining will be included in the consumption as part of group 12.7.0 COCIOP.

59. The next table illustrates the core benchmark NA data on the basis of SUT 1998, as well as the 1998 HBS data.

Table 5.3 Household final consumption expenditure, 1998 (million HUF)

COICOP code		Household Budget Survey (national concept)	Benchmark National Accounts data (SUT) (domestic concept ¹)
01	Food and non-alcoholic beverages	1 007 036	1 197 094
02	Alcoholic beverages, tobacco and narcotics	116 909	469 704
03	Clothing and footwear	193 495	267 866
04	Housing, water, electricity, gas and other fuels	540 474	1 073 204
05	Furnishings, household equipment and routine household maintenance	165 072	378 417
06	Health	79 450	164 551
07	Transport	275 036	724 068
08	Communication	123 854	188 735
09	Recreation and culture	161 564	412 833
10	Education	15 488	61 393
11	Restaurants and hotels	128 598	266 386
12	Miscellaneous goods and services	210 651	306 382
Household final consumption expenditure, total		3 017 629	5 510 633

¹: The household final consumption data at COICOP four-digit level refer to the domestic consumption as mentioned below.

Table 5.4 Household final consumption expenditure, 2002 (million HUF)

COICOP code		Household Budget Survey (national concept)	National Accounts data (domestic concept)
01	Food and non-alcoholic beverages	1 195 726	1 743 033
02	Alcoholic beverages, tobacco and narcotics	185 048	837 093
03	Clothing and footwear	287 811	404 731
04	Housing, water, electricity, gas and other fuels	877 524	1 719 373
05	Furnishings, household equipment and routine household maintenance	241 673	617 913
06	Health	179 770	336 082
07	Transport	477 703	1 383 858
08	Communication	282 437	456 948
09	Recreation and culture	374 372	713 023
10	Education	29 478	108 686
11	Restaurants and hotels	154 675	450 506
12	Miscellaneous goods and services	328 761	777 903
Household final consumption expenditure, total		4 614 979	9 549 149

60. The table shows that there is a significant discrepancy between the two sources on the level of consumption. Behind this discrepancy there are some conceptual differences (e.g. the HBS refers to the resident households data while NA to the domestic consumption data) but it is clear that the HBS could not cover certain parts of the households' consumption. Therefore, over the estimation, HCSO

chose to apply a benchmarking technique, while HBS data were integrated into the estimation process through an extrapolation technique.

5.7.2. Main data sources

5.7.2.1. Household Budget Survey

61. The target population of the survey consists of all Hungarian citizens living in private households in the country. Consequently the survey does not cover people living in institutional households, Hungarian citizens living abroad with the aim of business or work co-operation, foreign households with permission to reside in Hungary and foreign citizens working in the country.

62. The HBS is based on a representative random sampling. The unit of sampling is the dwelling. The unit of observation is the household. The source of the sampling is the updated census data. The sample is taken by multistrata method. The one-third part of the sample is rotated in each year. So, the third of the all households participates in the survey for three consecutive years. This part of sample (3200-3400 households) is considered as a panel, which can be used for longitudinal studies. In 2002, the HBS target sample (primary selected) consisted of 11 806 households. Supplementary addresses were used in 5 393 cases, so the interviewers called 17 199 households in total. The number of respondent households was 9 932, but the effective sample size was finally 9 879 due to data quality problems.

Table 5.5 Response rates of HBS in 2002

Regions	Number of			Response rate, in per cent of	
	targeted	called ¹	respondent	targeted	called ¹
	Households			households	
Counties, total	9 518	12 970	8 145	85.6	62.8
Budapest	2 288	4 229	1 734	75.8	41.0
Country, total	11 806	17 199	9 879	83.7	57.4

¹ Originally selected and substitute addresses.

63. Despite all efforts the data collection failed in some cases of the selected households. The most frequent reason is the refusal, but there are other various reasons besides that. In 2002 the number of refusals was 4161. The second important reason is the long time absence. It has the greatest significance in Budapest and the number of vacant dwellings is the highest there. It can be considered to long time absence if any of the household's members is not available after three visits. Since the data supply is time consuming and laborious the most frequent reason mentioned by the non-responding persons is the "lack of time". The second main reason to refuse the co-operation is the mistrustfulness about the statistical office and the data collection in general.

64. The data collection was done during the whole year, i.e. the HBS is a continuous survey. In each month the 1/12 part of the households (c/a 800 households) covered by the sample kept diary.

65. The data supplying activity of households was the following: The households participating in the survey were keeping diaries in a selected month of the year. During the month the income and expenditure items of all members of the household, the quantity of purchased food and clothing articles, incomes in kind and the gifts were listed in required details in the household diary every day.

66. At the end of the first quarter of the next year, respectively, the household members were interviewed about their personal incomes, retrospection the whole year, non-personal family receipts or income, stocks of consumer durables, expenditures of significant value, on construction or

purchases of real estates, for purchases in connection with agricultural production and for other infrequent but significant expenditure items usually of great value.

67. The interviewers coded the individual income and expenditure items of the household diaries and interviews. Data capturing and data sets were created at the County Directorates. The data processing itself, data quality control, correction and analysis has been made in the Central Office.

68. For estimating totals raising factors (weights) were applied differentiated by counties and size categories of settlements. These factors were calculated as the ratio of the total number of occupied dwellings in a given stratum to the number of dwellings of households co-operating in the survey. The summarisation was made by using raising factors, but in consequence of refusals the demographical data of co-operating households differ from demographical data of total population originated from other statistics. For this reason in the database of the HBS, a demographical correction was required, as well a summarisation. The demographical correction carried out with a mathematical-statistical method which modified the personal database of the survey by using updated census data by counties, age groups and gender, so the persons consisting one household gave same raising factors.

69. Data collected during the survey are the objects of several processing and correction process, partly automatically. The final data set of HBS was created by the results of various data correction methods. Imputation in general means the substitution of missing data using available auxiliary information. The HBS applies an imputation similarity method of substitution and proportional hot-deck imputation from the data base itself. Background characteristics and data of household diary show that households with high income are over-represented among non-respondents. It causes underreporting (data shortage) in general mainly in case of items of great value (consumer durables) and several other important items. Substitution is carried out proportionally, supposing that the ratio of incidence of a given expenditure item is similar among the respondents and non-respondents. It was carried out in three phases:

- a) Establishing the ratio of incidence among full respondents;
- b) Calculating the yearly average per household declared such expenditure;
- c) Imputation of missing data:

c/a If monthly data is available: Substitution of the value of item by the average or (if the monthly value is higher than that) it remains unchangeable.

c/b If the monthly value is missing: random imputation using the rate of incidence.

70. In these cases external source of data was not applied.

71. In case of items occurred monthly or bi-monthly data of non-respondent households were substituted not by the yearly average of respondent but by the monthly value of item multiplied with the ratio of yearly incidence.

The above mentioned method was applied in case of households which obtained data in the diary but the item was not registered in the annual interview.

72. Finally in all cases a special, so-called “correction of items forgotten” method was applied supposing that items forgotten can be found in all households. For this purpose the monthly value of item – if item was found only in the diary – was randomly distributed on the whole sample.

73. In total, due to imputations the volume of expenditure rose by 5 per cent.

From 2000 the HBS uses the COICOP-HBS classification but the data are published according to the traditional Hungarian classification as well.

5.7.2.2. Retail Trade Survey

74. During 1997 and 1998 the retail trade statistics were completely reorganised on the basis of a retail trade census carried out in 1996. On this basis a new Hungarian Outlet Register was established, which contains all retail trade units. This register is regularly updated, based on a questionnaire from the local government: Questionnaire on the number of units with operating licence.

75. There are two other surveys on retail trade activities. One of them is the survey on monthly retail sales (No. 1045602 Monthly survey of Retail Sale). The aim of this survey is to measure the monthly sales of the retail trade. The observation unit of the survey is the group of retail trade shops. The data suppliers are those enterprises, which operate the retail trade shops. This is a sample survey which contains full scope and representative parts. The full scope part covers the enterprises with 50 or more employees or 10 or more owned retail trade shops, with all their shops, furthermore the pharmacies, catering units and mail order companies. The representative sample is chosen with a stratification method. The representative sample units stay among the data suppliers not more than five years. The turnover of retail sales is valued at purchaser (actual market) prices, i.e. contains the value-added tax and the excise duties. The survey does not include the turnover of open-air markets, street vendors and repairing services.

76. The other survey is a quarterly survey on the retail trade turnover by commodities (No.1646/02 Report on the sales of retail and catering trade by commodity groups). The observation units of this survey are the enterprises in the NACE 52 and 50. This is a sample survey which contains full scope and representative parts. The full scope part covers the enterprises with 50 or more employees or 10 or more owned retail trade shops, with all their shops, furthermore the pharmacies, catering units and mail order companies. After choosing the full scope part the representative sample is chosen with a stratification method. The representative sample units stay among the data suppliers not more than five years. Since 1999, the data collected by 30 commodity groups (until 1997 it was 10 then in 1998 it was 15 groups; from 2003 there are 45 commodities.) The turnover of retail sales is valued at purchaser (actual market) prices, i.e. contains the value-added tax and the excise duties. As the No. 1045/02 survey this one does not include the turnover of open-air markets, street vendors and repairing services either.

77. These commodity groups were the following in 2002:

- Vehicles
- Fuels and lubricants for personal equipment
- Alcoholic beverages
- Non-alcoholic beverages
- Coffee and tobacco
- Food
- Medical products, appliances and equipment
- Articles and products for personal care
- Clothing
- Household hardware
- Household textiles
- Non-durable household goods
- Major electric household appliances
- Small electric household appliances
- Photographic and cinematographic equipment
- Telecommunication equipment

Information processing equipment
 Recording media
 Books, newspapers and magazines
 Major and small tools and equipment for the house and garden
 Building materials
 Painting materials
 Bathroom equipment
 Wallpapers and floor coverings
 Liquid and solid fuels
 Households cleaning supplies
 Second hand goods
 Other goods

5.7.2.3. Other sources

Agricultural statistics

78. The data of the agricultural statistics is used for the estimation on own-account products. In the agricultural statistics the own-account production include the value of goods consumed by households from own production valued at procurement prices. The main source of compiling national accounts data for agriculture is the Economic Accounts for Agriculture (EAA), which is a satellite account compiled by the Agricultural and Environmental Statistics Department of HCSO. EAA is a well established detailed and coherent system integrating all the available agricultural statistical data collections of HCSO (25 surveys) and the Ministry of Agriculture and Rural Development (10), administrative data (on subsidies, loans, etc.) and other data sources (producer organisations, organisations of the producers and importers of agricultural inputs etc.). Since 1995, large-size farms are surveyed on full-scope, while medium and small size ones are surveyed on a representative basis. Representative observations are carried out by stratified sampling (the details of agricultural surveys are discussed in Chapter 3.7 and Chapter 11).

79. In Hungary the agricultural output calculation is based on a detailed balance sheet which is compiled for most the agricultural products (so called “commodity balance sheet”) by the Agricultural Statistics Department. The balance sheet contains the following items for all agricultural products (the breakdown of some items can be even more detailed depending on the nature of the product group):

Resources:

Total production

- Losses in stocks

= Usable output

+ Initial stocks

= Total available resources

Uses:

Intra-unit consumption

- for crop production (seed, manure)
- for animal husbandry (feed, eggs for hatching)
- for other use

Processing by producers

- to seed
- to feed
- to other

Own consumption (only private farms)

Domestic sales

Sales abroad
Own-account produced fixed capital goods
Final stocks

80. The balance sheets are compiled both in physical terms and value (at producer prices), for the enterprises at unit (individual) level, for the private farms at county level. Values figures are obtained by multiplying the quantity data by the relevant unit values (prices). Price information is collected monthly on a separate basis for products sold to wholesalers and processors of agricultural products and products directly sold to the consumers. Different prices are used for the valuation in the 'Uses' side of the commodity balances.

Housing, public utilities statistics

81. The data of housing and public utilities statistics are used for the estimation of actual rent, water supply, sewerage collection, electricity and heat energy figures.

Electric energy supply, piped gas supply, district heating and hot water supply:

82. The source of the quantity of electricity supplied to households is a statistical survey. The data suppliers are the Hungarian Electricity Co. and the electricity supplier enterprises. The survey asks quantity data by types of consumers (like households) and by region. There is another survey about the piped gas supply. The data suppliers are the gas producers and suppliers. The survey asks quantity data by types of consumers and by region. The data source of the district heating and hot water supply is a survey also, the data suppliers are the district heating and hot water suppliers, and there are information about the quantity and the charge receipts on the supplied district heating and hot water by types of consumers and by region.

Water supply, sewerage:

83. This survey covers the water suppliers (through pipes) connected to the public water conduit network, including the total quantity of water used by household and the data about the sewerage collection, through closed public sewerage network.

84. For checking purposes and for the estimation of solid fuels HCSO uses the balance of energy. Data come from the 'Energy Centre' Energy Efficiency, Environment and Energy Information Agency.

Health Care

85. There are several data sources for the estimation of medical products, appliances and equipment. The Hungarian Health Satellite Accounts were published in January 2003 at the first time, and now they are under revision. Beside this important data source there are data from the retail trade statistics about the pharmaceutical products (which include all kind of product sold in the pharmacies, i.e. not only the medicines) and there are data from the Ministry of Health about the medicine consumption.

Transport

86. For the estimation of transport services HCSO uses the data from the transport statistics. They collect data on the goods and passenger transport, like number of passengers transported by types of transportation modes (local transport by railway, road, long-distance transport by railway, road, waterway, air) fare receipts by types of transportation modes. The data suppliers are the transportation companies.

Post and telecommunication

87. The data of the post and telecommunication come from surveys. The data suppliers are the Hungarian Post Co. and the telecommunication enterprises. The surveys contain quantity data about the letter post consignments, parcel and value parcel, telegrams sent. The telecommunication data include the number of phone calls (local, inland or long-distance), data on radio and television services, including cable televisions and Internet services.

Culture

88. The data on public libraries, cinemas, film production, theatres, concerts, folk ensembles, museums, exhibitions come from the Ministry of Education and Culture. In case of cinemas and theatres not only the number of visitors and performance are available but the fare of ticket fares, as well.

Tourism (Hotels and accommodation units, package holidays)

89. There are lots of quantity data in the tourism statistics. From border statistics the number of Hungarians travelling abroad and those of international incoming visitors are available. From the survey of organised tourism there are data on tour operators and travel agencies, as well as organised tourism, including data on sales. The data suppliers are travel agencies registered by the Hungarian Chamber of Commerce and have a tour operator licence. The data on public accommodation come from a survey, which is conducted by HCSO. The data suppliers are those enterprises, which operate establishments with a licence throughout the whole year or periodically offering night accommodation and stay.

5.7.3. Estimation methods

90. The household final consumption expenditure is estimated by commodity groups and by sources of income. From the calculation of year 2000, the COICOP classification is used for the estimation by commodity groups. A backward calculation until 1995 was finished in March 2003.

91. Three categories of consumption expenditure are distinguished based on how products are being procured (how households came into possession of the product):

- A) own-account products;
- B) wages and salaries in kind;
- C) purchased goods and services.

Table 5.6 Household final consumption expenditure 2002 (million HUF)

COICOP code		Purchased goods and services	Own account production	Wages and salaries in kind	Total
01	Food and non-alcoholic beverages	1 626 017	117 016	0	1 743 033
02	Alcoholic beverages, tobacco and narcotics	823 003	12 625	1 465	837 093
03	Clothing and footwear	403 929	0	802	404 731
04	Housing, water, electricity, gas and other fuels	1 376 241	336 583	6 549	1 719 373
05	Furnishings, household equipment and routine household maintenance	617 913	0	0	617 913
06	Health	333 721	0	2 361	336 082
07	Transport	1 350 720	0	33 139	1 383 858
08	Communication	456 948	0	0	456 948
09	Recreation and culture	704 723	0	8 301	713 023
10	Education	92 620	0	16 067	108 686
11	Restaurants and hotels	425 484	0	25 022	450 506
12	Miscellaneous goods and services	763 998	0	13 904	777 903
Household final consumption expenditure - domestic concept		8 975 316	466 224	107 610	9 549 149
Residents spending abroad (+)					465 134
Non-resident spending in Hungary (-)					935 663
Household final consumption expenditure - national concept					9 078 800

A) The consumption from **own-accounts-production** has two main types in the Hungarian National Accounts:

- Agricultural products: for the estimation of own-account agricultural products the basic data source is the agricultural statistics. The estimation is a direct estimation, made by products, using quantity and procurement price data. Procurement price means that price, which can be realized by small producers when selling their products for procurers (a procurer can be e.g. a conserve factory). Procurement statistics are based on the data collection of the Report on Procurement (OSAP 1097), which – concerning 168 products – covers certain and determined corporations procuring primary agricultural products for processing and reselling purposes. The estimation is made by products, quantity data are multiplied by the current year's prices. Procurement prices were used because of the lack of information on basic prices.
- Imputed rent: from 2000 HCSO started to use the recommended user cost method. Detailed description could be found in section 5.7.3.4.

B) The estimation on **wages and salaries in kind** is based on tax declarations of enterprises and reports of government institutions. According to the bookkeeping rules the costs of wages and salaries in kind could be separated from other costs.

The wages and salaries in kind include:

- value of own produced goods and services provided to employees free or at nominal prices;
- purchased goods and services provided to employees free or at nominal prices;
- private use of business cars.

The value of wages and salaries in kind could be caught only in aggregate by the above mentioned categories. To split it up to the appropriate COICOP group the labour cost survey was used. The Labour Cost Survey was carried out in every five years, but from 2003 it became an annual survey.

C) The estimation methods for the **purchased goods and services** are described in the following paragraphs.

Where the main data source is the Household Budget Survey, data are not used directly in the most cases. For the estimation of household final consumption figures a value extrapolation method is used. At first a population adjustment is made, because the Household Budget Survey covers only resident households with Hungarian citizen head of household. Therefore the data of resident households with non-Hungarian citizen head and the data of persons living in institutions are missing. For imputing these missing data the expenditure data of the HBS are calculated per capita according to the total population of the survey then grossed up with the actual population data, which come from the Population statistics and covers the total population of the country, including persons living in institutions and households headed by non-residents. The two latter kinds of households are out of the boundary of the HBS, and HCSO imputes their consumption with the above mentioned method. This process may distort consumption structures, because institutional and private households are probably characterized by different consumption structures; this problem at present may not be corrected, because the required information is missing. Then the previous year's data are extrapolated with the value indices (previous year=100.0) of each commodity group.

92. Then the extrapolated values are adjusted for definitions and concepts of National Accounts, as well as the case using data sources other than Household Budget Survey.

93. The Table 5.4 shows figures according to the three types of consumption expenditures. The following paragraphs give a more detailed description of the used estimation methods by main commodity groups (at COICOP two digit level or more detailed level if necessary) and the tables shows the figures at COICOP 4 digit level. In the tables the tabular approach is used, which was developed and used during the PHARE2000 Task Force on Private Household Consumption. The first column (Raw data, grossed up) gives the figures coming from basic data sources. Where the Household Budget Survey is the data source, a population adjustment is made in order to estimate the consumption of that population, which is not captured by the HBS (because of they are out of the boundary of HBS). As a result of extrapolation an adjustment shows the figures coming from the used indirect (value extrapolation) method. Other adjustments for definition and concepts contain the necessary adjustments to fulfil the ESA95 requirements (e.g.: own-account production, imputed rent, insurance on net basis, gambling on net basis).

5.7.3.1. Food and non-alcoholic beverages

94. The Household Budget Survey is the basic data source for the estimation of consumption on food and non-alcoholic beverages. The use of the extrapolation method mentioned in section 5.7.3/C gives the value of the 'Adjustment as a result of extrapolation' (see next table). Then the extrapolated values are adjusted for the definitions and concepts of the National Accounts. It means consumption of households' own production at '*Meat*' (01.1.2.), '*Fish and sea-food*' (01.1.3.), '*Milk, cheese and eggs*'

(01.1.4.), 'Oils and fats' (01.1.5.), 'Fruit' (01.1.6.), 'Vegetables' (01.1.7.), 'Sugar, jam, honey, chocolate and confectionery' (01.1.8.) and 'Food products n.e.c.' (01.1.9.)

95. The Retail Trade data and the balance sheets of food consumption (in physical terms) are used for checking purposes.

**Table 5.7 Estimation process of consumption on food and non-alcoholic beverages, 2002
(million HUF)**

COICOP code		Data source	Raw data, grossed up	Population adjustments	Adjustment as a result of extrapolation	Other adjustments for definitions and concepts	NA data, actual used
01	Food and non-alcoholic beverages		1 195 726	15 089	415 202	117 016	1 743 033
01.1	Food		1 080 491	13 634	282 127	117 016	1 493 268
01.1.1	Bread and cereals	HBS	208 675	2 633	10 994	0	222 302
01.1.2	Meat	HBS	313 435	3 955	53 127	57 352	427 869
01.1.3	Fish and seafood	HBS	10 614	134	2 565	2 042	15 355
01.1.4	Milk, cheese and eggs	HBS	213 723	2 697	90 029	11 659	318 107
01.1.5	Oils and fats	HBS	60 475	763	-4 369	14 763	71 632
01.1.6	Fruit	HBS	55 719	703	54 054	5 956	116 432
01.1.7	Vegetables	HBS	92 776	1 171	14 148	24 493	132 588
01.1.8	Sugar, jam, honey, chocolate and confectionery	HBS	81 337	1 026	47 352	500	130 216
01.1.9	Food products n.e.c.	HBS	43 738	552	14 227	251	58 768
01.2	Non-alcoholic beverages		115 235	1 454	133 076	0	249 765
01.2.1	Coffee, tea and cocoa	HBS	47 893	604	25 247	0	73 744
01.2.2	Mineral waters, soft drinks, fruit and vegetable juices	HBS	67 343	850	107 829	0	176 022

5.7.3.2. Alcoholic beverages, tobacco, narcotics

96. The Household Budget Survey is the basic data source for the estimation of consumption on alcoholic beverages, tobacco and narcotics. The use of the extrapolation method mentioned in section 5.7.3/C gives the value of the 'Adjustment as a result of extrapolation' (see next table). Then the extrapolated values are adjusted for the definitions and concepts of the National Accounts. It means alcoholic beverages in kind at 'Beer' (02.1.3) and consumption of households' own production at 'Spirits' (02.1.1.) and 'Wine' (02.1.2.).

97. The Retail Trade data and the balance sheets of alcoholic beverages and tobacco consumption (in physical terms) are used for checking purposes.

98. The estimation of production and turnover of drugs was based on the regular data demand. The starting point was to estimate the consumption of drugs, using the number of consumers, the quantity of drugs and the prices by type of drugs. The main data sources were medical and judicial data, reports of the police, the tax office and the customs office. For the estimation of intermediate consumption mainly reports of the police were used.

Table 5.8 Estimation process of consumption on alcoholic beverages, tobacco and narcotics, 2002 (million HUF)

COICOP code		Data source	Raw data, grossed up	Population adjustments	Adjustment as a result of extrapolation	Other adjustments for definitions and concepts	NA data, actual used
02	<i>Alcoholic beverages, tobacco and narcotics</i>		185 048	2 335	576 235	10 387	774 005
02.1	Alcoholic beverages		57 209	722	418 091	10 387	486 409
02.1.1	Spirits	HBS	11 946	151	153 835	-202	165 730
02.1.2	Wine	HBS	15 303	193	76 237	10 785	102 518
02.1.3	Beer	HBS	29 960	378	188 020	-196	218 162
02.2	Tobacco		127 839	1 613	158 144	-2 173	285 423
02.2.0	Tobacco	HBS	127 839	1 613	158 144	-2 173	285 423
02.3	Narcotics		0	0	0	65 261	65 261
02.3.0	Narcotics		0	0	0	65 261	65 261

5.7.3.3. Clothing and footwear

99. The Household Budget Survey is the basic data source for the estimation of consumption on clothing and footwear. The use of the extrapolation method mentioned in section 5.7.3/C gives the value of the 'Adjustment as a result of extrapolation' (see next table). Then the extrapolated values are adjusted for the definitions and concepts of the National Accounts. It means clothing and footwear in kind at '*Clothing materials*' (03.1.1.) and '*Garments*' (03.1.2.).

100. The Retail Trade data are used for checking purposes.

Table 5.9 Estimation process of consumption on clothing and footwear, 2002 (million HUF)

COICOP code		Data source	Raw data, grossed up	Population adjustments	Adjustment as a result of extrapolation	Other adjustments for definitions and concepts	NA data, actual used
03	<i>Clothing and footwear</i>		287 811	3 632	115 567	-2 279	404 731
03.1	Clothing		199 816	2 521	107 999	-1 548	308 788
03.1.1	Clothing materials	HBS	1 543	19	31 119	271	32 953
03.1.2	Garments	HBS	188 970	2 385	50 185	-1 547	239 993
03.1.3	Other articles of clothing and clothing accessories	HBS	7 477	94	18 337	-196	25 712
03.1.4	Cleaning, repair and hire of clothing	HBS	1 826	23	8 358	-77	10 129
03.2	Footwear		87 995	1 110	7 568	-730	95 944
03.2.1	Shoes and other footwear	HBS	86 729	1 094	2 416	-682	89 558
03.2.2	Repair and hire of footwear	HBS	1 266	16	5 152	-49	6 386

5.7.3.4. Housing, water, electricity, gas and other fuels**5.7.3.4.1. Actual rent:**

101. There are two types of actual rent in Hungary. One is the subsidised rents, paid by tenants living in local government owned dwellings and the other is the private rent, paid by tenants living in

privately owned dwellings. For the estimation on rents of local government owned dwellings HCSO uses the data coming from the survey of the local governments. Until 2002, a separate estimation was not made for private rents. In 2000 and 2002 rent surveys were carried out by HCSO and on the basis of these it was possible to work out a new estimation method for private rents.

5.7.3.4.1.1. Local government owned dwellings

102. The output of the services of local government owned dwellings is estimated by using data on average rents and total square meters of rented dwellings. The rent data cover the rent paid by households as well as the government subsidies. As a data source a full scope survey conducted by NSI and the data suppliers are local governments. The intermediate consumption is estimated by using the intermediate consumption/square metre ratio of the owner-occupied dwelling services which is multiplied by the square metre of the local government owned rented dwellings for maintenance and repairs. At the other services relating to the dwellings the whole value is distributed among the different sub-sectors by using the relevant shares in square metres.

Table 5.10 Dwelling services for local government owned rented dwellings (million HUF)

	2002
Square meter of local government owned rental dwellings (thousand sq m)	7 649
Average rent sq m/month/HUF	172
Total dwelling services	15 817
Of which: CFC	13 803
Intermediate consumption	4 638
Net operating surplus	-2 623
Rent paid by the tenants	7 478

103. The rents paid actually by the tenants are recorded as final consumption expenditures of households and the subsidies are recorded as social transfers in kind from the government.

104. The local governments do not manage their dwellings directly, they have contracts with market producers for this work. This means that the market producers collect the rents from the tenants and pass it on to the local governments. Furthermore they organize and carry out the main renovation and major repair works on the buildings; albeit these activities are covered by GFCF this explains their “close connection” with local government bodies.

5.7.3.4.1.2. Privately rented dwellings

105. For privately owned dwellings for the year of 2002 a new estimation model was established. First the total square metre of the privately rented dwellings was calculated by using the results of the population census. Then the average rent was calculated on the basis of the rent survey which was carried out in 2002 and referred to 2001. These figures were extrapolated for 2002 (and the following years) by the consumer price indices. This survey was a regular probability sample drawn from households that rented dwellings according to the 2001 census. The sample size was 3000 households. The rent question was formulated for measuring basic market rents. The survey also covered many characteristics of the dwellings so it was possible to deliver such data, which are stratified according to the census 2001 data. At present, HCSO does not envisage conducting a new, costly rent survey, its capacity is taken up by the preparation of the following population census. The next rent survey might be made relying on the 2011 population census results if the necessary resources will be available.

106. The estimation of intermediate consumption is based on the Household Budget Survey.

Table 5.11 Dwelling services for privately owned rental dwellings million HUF

	2002
Total dwelling services	58 370
Of which: CFC	10 547
Intermediate consumption	4 415
Net operating surplus	43 408
Rent paid by the tenants	58 370

107. The yearly actualized new replacement value of the dwelling stocks is available for the estimation of CFC on rented dwellings. As there is direct information for the extrapolation of the stock, therefore the model approach is not necessary. However the estimation procedure follows the logic of PIM. (See the detailed description is in Chapter 4.12.5.1.)

5.7.3.4.2. Imputed rent (owner-occupied dwelling services)

108. The estimates of dwelling services in the new Member States (covering rents in the rented sector as well as imputed rents in the owner-occupied sector) posed particular problems in the implementation of the Commission Decision (95/309) on dwellings, which suggests the use of a stratification method. These problems exist because the owner-occupied sector represents a very high proportion of total dwelling services in most new Member States. Therefore in many new Member States, the rented sector now represents a very small and non-representative share of total dwelling services.

109. In recognition of the theoretical and practical difficulties involved, a work with the new Member States on a more harmonised approach in the estimation of dwelling services was started several years ago in the framework of PHARE97 and a task force in 2000, which concluded that the stratification method recommended by the Commission Decision on dwelling services for EU Member Countries was much more difficult to apply in most of the new Member States. Following this assessment, a task force (PHARE99) investigated the user cost method as a more appropriate method for most new Member States. This method was already an option in the Commission Decision, which could be used in specific circumstances. After testing the user cost method in selected new Member States, the user cost has demonstrated its suitability, as a more practical alternative to stratification in special cases. Hungary participated in both projects.

110. The next Task Force (Phare99) on estimation methods for dwelling services in the new Member States came to the conclusion that when privately rented dwellings constitute less than 10% of the total dwelling stock by number and where there is a large disparity between private and other paid rents, as an alternative objective assessment, the user-cost method may be applied. The self-assessment method should be excluded as a suitable method for estimating owner-occupiers' imputed rent. The method was widely discussed and accepted on the NAWP in November 2002. The Commission Decision 95/309 was modified according to that agreement. (Commission Decision 1722/2005 on the principles for estimating dwelling services for the purpose of Council Regulation (EC, Euratom) No. 128/2003 on the harmonisation of gross national income at market prices.)

5.7.3.4.2.1. Data sources and methods

5.7.3.4.2.1.1. Dwelling stock

111. A detailed database is available on the value, vintage structure, and expected service lives of the dwelling stock. The experts multiplied the existing natural data – square metres – by the actual specific construction costs. The construction costs are calculated by dwelling type. The model applied for the estimation of the dwelling stock contains also the cost calculation of those dwellings which are not built any longer.

112. The value of the building site is not considered as part of the value of the dwelling, since land is a non-produced asset, and there could not be any depreciation set out upon it.

113. The dwelling stock was categorized by sector and vintage on the basis of the results of the valuation. The age structure of the stock is available from the data of the Population Census, and there are supplementary sample surveys to support those pieces of information, as well.

114. The extrapolation of the stock is not purely PIM based, as there are direct information on the annual stock changes, therefore the model approach is not necessary.

115. The dwelling investments of the central government, local government and corporations are reported on the structural questionnaire of investment. Dwelling investments cover three categories on the questionnaire:

- One-dwelling buildings;
- Two- and more dwelling buildings;
- Residences for communities.

116. The ratios of the values of new constructions and major repairs are set according to the results of the „Dwelling conditions 1999” questionnaire. The survey provided information on the vintage structure of the executed major repairs, so these proportions could be considered in the extrapolation.

CFC estimation

117. For the estimation of CFC the value of the stock of dwellings estimated at new replacement costs is available by sectors and by age groups.

118. The value of annual discards is estimated indirectly, based on the changes in stock and the investments in dwelling as the value of increases. The vintage structure of discards is estimated on the basis of the information of the annual questionnaire on dwelling discards (OSAP 1076).

119. The estimation of CFC is based on the expected average service life and the age by age group. (See the detailed description is in chapter 4.12.5.1.)

Table 5.12 The value of dwelling stock and the consumption of fixed capital, 2002 (billion HUF)

	Gross value of stock	Net value of stock	CFC
Total dwellings	30 412.8	16 094.8	368.0
Owner occupied dwellings	29 345.7	14 990.3	342.7

5.7.3.4.2.1.2. Estimation on the values of the associated land

120. The accurate estimation of land is not an easy job having in mind how much it is influenced by the different indicators of the real estate market in many dimensions. Our decision was to accept the rate given by a research institute that is specialised for rehabilitation of different districts in Budapest. According to their experience a 10 per cent in the value of the newly constructed buildings should be accounted for the associated land. Since the prices of the dwellings in use and the newly constructed dwellings have an estimated ratio of about 1:2, on average it means that 20 per cent of the net stock of dwellings should be accepted as the value of the associated land.

5.7.3.4.2.1.3. Maintenance and repairs

121. The figures of maintenance and repairs are based on the Household Budget Survey data. The questionnaire of the HBS includes two separate rows, one for regular (minor) and one for irregular (major) expenditures. The regular expenditures are surveyed every month, while the latter ones on an annual basis. Furthermore, very detailed instructions are formulated for the interviewers. On this basis it is possible to separate the minor and major (which is included in the GFCF) maintenance and repairs.

122. The expenditure on minor maintenance and repairs have to be divided into two parts: one is the group of small repairs made by both tenants and owners (these have to be recorded as final consumption expenditures) and the other is the group of minor repairs carried out only the owners and have to be recorded as intermediate consumption for owner-occupied dwelling services.

123. For this separation the Household Budget Survey is used. At first the expenditure on maintenance and repairs per rented dwellings is calculated using the total amount of maintenance and repairs and the number of rented dwellings. Then, assuming that the small maintenance and repairs made by the owners per owner-occupied dwellings are the same as in the case of the rented dwellings made by the tenants, the cost for maintenance and repairs per rented dwelling is multiplied by the number of owner-occupied dwellings.

124. Then the small maintenance and repairs made by tenants and owners are deducted from the total maintenance and repair figures, which gives the expenditure on minor maintenance and repairs made by the owners and recorded as a part of the intermediate consumption of the owner-occupied dwelling services.

Table 5.13 The distribution of the maintenance and repairs of the dwellings, 2002

Items		2002
Total maintenance and repairs (million HUF)	(a)	96 598
Maintenance and repairs per rented dwellings (HUF)	(b)	13 828
Number of rented dwellings (million)	(c)	0.2557
Total expenditure on small maintenance and repairs of rented dwellings (million HUF)	(d)=b*c	3 535
Number of owner-occupied dwellings (million)	(e)	3.4919
Total expenditure on small maintenance and repairs of owner-occupied dwellings (million HUF)	(f)=b*e	48 285
Total expenditure on minor maintenance and repairs of owner-occupied dwellings (million HUF)	(g)=a-d-f	44 778

5.7.3.4.2.1.4. Insurance premiums and claims

125. The estimation of the insurance of dwellings is based on the reports of insurance companies. The gross output has to be divided among the sectors. The data of distribution of policies between households and others is now available from the insurance companies and this share is used to estimate the total insurance on dwellings of households. In the previous calculation it was estimated by experts. After that the insurance on owner-occupied dwellings is estimated by using the share of the owner-occupied dwellings in the total dwellings stock in square meters. For the previous calculation this share was taken from the Household Budget Survey. The insurance of owner-occupied dwellings has to be accounted as the intermediate consumption of imputed rents according to the user cost method and the rest of the total insurance on dwellings is recorded as consumption in COICOP group 12.5.2.

5.7.3.4.2.1.5. Value of (mortgage) debt

126. This item covers all types of residential loans within market conditions on owner-occupied dwellings and associated land. Data are obtained from commercial banks via the National Bank of Hungary, but these data are available on a net base; that is the interest paid has been deducted already.

5.7.3.4.2.1.6. Imputed real return

127. The user cost method incorporates an acceptable real return to the invested capital; that is some return on dwelling and the associated land is estimated. This return should be connected to the net value of the relevant capital; net of any loans. As a common agreement, the final result of several experiments for finding the best rate of return was to apply a fix rate, namely 2.5%. This rate was mainly indicated by the experimental compilations of those countries, which apply in their national accounts the stratification method.

5.7.3.4.2.2. Detailed results of the user cost method

Table 5.14 Estimation of owner-occupied dwelling services applying the user cost method with a fixed (2.5%) real ROR, million HUF

Item		2002
UC01	Consumption of fixed capital (on owner-occupied dwellings) valued at current prices	335 579
UC05	Expenditures on maintenance and repair of owner-occupied dwellings	112 486
UC08	Net insurance premiums paid by owner occupants	18 188
UC11	Average value of the net stock of owner-occupied dwellings, valued at current prices; (billion HUF)	16 267.9
UC14	Average value of the land associated with owner-occ. dwell. in curr. prices (billion HUF)	3 253.6
UC16	Value of net (mortgage) debt on owner-occupied dwellings and associated land; (billion HUF)	606
UC18	Net stock of dwellings and land (net of loans) - (UC11+UC14)-UC16 (billion HUF)	18 915.5
UC18/a	Fixed (2.5%) rate for real return	2.5
UC19	Imputed real return to owner-occupied dwellings and associated land - UC18*UC18/a	472 887
UC23	<i>Imputed rental value of services of owner-occupied dwellings; estimated by (UC01 + UC05 + UC08 + UC19)</i>	939 140

5.7.3.4.2.3. The allocation of FISIM and its effect on imputed rent

128. The allocation of FISIM had impacts on the HFC figures in two ways. First, the FISIM allocated to the households as consumers were accounted, as 205 976 million HUF. On the other hand the FISIM allocation had an impact on the imputed rent calculation also. The reason is that Hungary uses the user cost method for estimating the owner-occupied dwelling service figures and the FISIM allocated to the households as owners of dwellings became a part of the intermediate consumption so the gross output increased with the same figure.

Table 5.15 The estimation of owner-occupied dwelling services with FISIM (million HUF)

Denomination	2002
<i>Consumption of fixed capital</i>	335 579
<i>Intermediate consumption</i>	156 294
Of which:	
Net insurance	18 188
Maintenance and repair	112 486
FISIM	25 620
<i>Net operating surplus</i>	472 887
Gross output of owner-occupied dwelling services (imputed rent)	964 760

Maintenance and repairs of the dwellings:

129. The Household Budget Survey is the main data source. In this case HBS data are used directly, after a population adjustment, and divided into three parts:

- maintenance and repairs carried out by tenants;
- maintenance and repairs carried out by owners (smaller);
- maintenance and repairs carried out by owners (minor).

The first two types of expenditures are recorded under this heading and the last one is recorded as intermediate consumption for the owner-occupied dwelling services via the user cost method as described above.

Water supply and miscellaneous services relating to the dwellings:

130. For estimating the value of water supply and miscellaneous services relating to the dwellings HCSO uses several data sources. In the case of water supply, refuse collection and other services relating to the dwellings the estimation is based on the Household Budget Survey using the extrapolation method. Data from public utilities statistics are available for the water consumed by a household in physical terms and it is used for checking purposes. In the case of sewerage collection a direct estimation is made, the quantity of the sewerage collection, energy etc. used by a household is multiplied by the actual prices.

Electricity, gas and other fuels

131. For estimating the consumption of electricity, gas, solid fuels and heat energy HCSO used the public utilities statistics. In these cases a direct estimation is made, the quantities of the electricity, gas, solid fuels and heat energy used by households are multiplied by the actual prices. In the lack of other reliable information for estimating the consumption of liquid fuels the Household Budget Survey is used with the extrapolation method.

132. Then the values are adjusted for definitions and concepts of the National Accounts because of income in kind at electricity (04.5.1.) and solid fuels (04.5.4.).

Table 5.16 Estimation process of consumption on Housing, water, electricity, gas and other fuels, 2002 (million HUF)

COICOP code		Data source	Raw data, grossed up	Population adjustments	Adjustment as a result of extrapolation	Other adjustments for definitions and concepts	NA data, actual used
04	<i>Housing, water, electricity, gas and other fuels</i>		789 569	2 267	820	926 317	1 719 373
04.1	Actual rentals for housing		65 848	0	0	0	65 848
04.1.1	Actual rentals paid by tenants	Other	65 848	0	0	0	65 848
04.1.2	Other actual rentals	Other	0	0	0	0	0
04.2	Imputed rentals for housing		0	0	0	964 760	964 760
04.2.1	Imputed rentals of owner-occupiers	Other	0	0	0	964 760	964 760
04.2.2	Other imputed rentals	Other	0	0	0	0	0
04.3	Maintenance and repair of the dwelling		96 598	1 219	0	-45 997	51 820
04.3.1	Materials for the maintenance and repair of the dwelling	HBS	47 649	601	0	-25 892	22 358
04.3.2	Services for the maintenance and repair of the dwelling	HBS	48 949	618	0	-20 104	29 463
04.4	Water supply and miscellaneous services relating to the dwelling		132 396	1 047	660	0	134 502
04.4.1	Water supply	HBS	65 553	827	880	0	67 260
04.4.2	Refuse collection	HBS	17 017	220	-220	0	17 417
04.4.3	Sewerage collection	Other	46 013	0	0	0	46 013
04.4.4	Other services relating to the dwelling n.e.c.	HBS	71 521	902	0	0	3 813
04.5	Electricity, gas and other fuels		494 728	1	161	7 554	502 443
04.5.1	Electricity	Other	196 668	0	0	4 184	200 852
04.5.2	Gas	Other	201 337	0	0	0	201 337
04.5.3	Liquid fuels	HBS	84	1	161	0	245
04.5.4	Solid fuels	Other	22 814	0	0	3 369	26 184
04.5.5	Heat energy	Other	73 825	0	0	0	73 825

5.7.3.5. Furnishings, household equipment and routine maintenance of the house

133. The basic data source is the Household Budget Survey for estimating the consumption on 'Furnishing, households' equipment and routine maintenance of the house'. The use of the extrapolation method mentioned in section 5.7.3/C gives the value of the 'Adjustment as a result of extrapolation' (see next table). Then the extrapolated values are adjusted for definitions and concepts of the National Accounts.

134. For estimating the consumption of 'Furniture and furnishings' (05.1.1.), 'Carpets and other floor coverings' (05.1.2.), 'Household textiles' (05.2.0.), 'Major household appliances whether electric or not' (05.3.1.), 'Small electric household appliances' (05.3.2.) and 'Glassware, tableware and household utensils' (05.4.0.) the retail trade based estimates are considered good and used for checking purposes.

Table 5.17 Estimation process of consumption on Furnishings, household equipment and routine household maintenance, 2002 (million HUF)

COICOP code		Data source	Raw data, grossed up	Population adjustments	Adjustment as a result of extrapolation	Other adjustments for definitions and concepts	NA data, actual used
05	<i>Furnishings, household equipment and routine household maintenance</i>		241 673	3 050	377 027	-3 836	617 913
05.1	Furniture and furnishings, carpets and other floor coverings		41 881	528	131 856	0	174 265
05.1.1	Furniture and furnishings	HBS	36 322	458	108 482	0	145 262
05.1.2	Carpets and other floor coverings	HBS	4 257	54	13 995	0	18 305
05.1.3	Repair of furniture, furnishings and floor coverings	HBS	1 302	16	9 380	0	10 698
05.2	Household textiles		13 607	172	23 960	0	37 739
05.2.0	Household textiles	HBS	13 607	172	23 960	0	37 739
05.3	Household appliances		51 999	656	122 794	0	175 449
05.3.1	Major household appliances whether electric or not	HBS	43 363	547	100 021	0	143 931
05.3.2	Small electric household appliances	HBS	4 022	51	11 823	0	15 896
05.3.3	Repair of household appliances	HBS	4 614	58	10 950	0	15 622
05.4	Glassware, tableware and household utensils		12 750	161	46 256	0	59 167
05.4.0	Glassware, tableware and household utensils	HBS	12 750	161	46 256	0	59 167
05.5	Tools and equipment for house and garden		12 876	162	37 795	0	50 834
05.5.1	Major tools and equipment	HBS	2 985	38	2 787	0	5 809
05.5.2	Small tools and miscellaneous accessories	HBS	9 891	125	35 009	0	45 024
05.6	Goods and services for routine household maintenance		108 560	1 370	14 365	-3 836	120 459
05.6.1	Non-durable household goods	HBS	104 028	1 313	-7 514	-3 024	94 802
05.6.2	Domestic services and household services	HBS	4 532	57	21 880	-813	25 657

5.7.3.6. Health

135. The main data source for the estimation on medical products is the health statistics, surveys on the turnover of public pharmacies and report on the activity of pharmacy institutes. The surveys

contain data on the household medicine consumption, separating the purchased from the subsidised sales.

136. For estimating medical appliances and equipment as well as outpatient and hospital services the National Health Accounts data are available and these were used for checking purposes but these data are under revision. For the 2002 estimation, the Household Budget Survey was used as described in the previous paragraphs. The values are adjusted for definitions and concepts of the National Accounts because of income in kind at 'Medical services' (06.2.1.) and 'Dental services' (06.2.2.).

137. In Hungary there is a widespread phenomenon of giving "gratitude money" (a special kind of tip) for health services, even if the services are payable. For the time being estimation on this kind of tips was based on the Household Budget Survey and the personal income tax declaration data. The first health satellite accounts were published in January 2003. Based on the satellite accounts data a detailed model was established for estimating the gratitude money on health services. This model use the number of different kind of treatments, the estimated amount of the given gratitude money by type of treatments and the possibility of giving gratitude money by treatments. In Table 5.18 the Other adjustments for definitions and concepts show the amount of the gratitude money.

Table 5.18 Estimation process of consumption on health, 2002 (million HUF)

COICOP code		Data source	Raw data, grossed up	Population adjustments	Adjustment as a result of extrapolation	Other adjustments for definitions and concepts	NA data, actual used
06	Health		195 759	801	93 140	46 382	336 082
06.1	Medical products, appliances and equipment		156 520	306	409	0	157 235
06.1.1	Pharmaceutical products	Other	132 260	0	0	0	132 260
06.1.2	Other medical products	HBS	1 365	17	1 444	0	2 826
06.1.3	Therapeutic appliances and equipment	HBS	22 894	289	-1 035	0	22 149
06.2	Outpatient services		33 152	418	88 494	21 572	143 637
06.2.1	Medical services	HBS	18 549	234	13 396	16 583	48 762
06.2.2	Dental services	HBS	12 794	161	70 449	3 195	86 600
06.2.3	Paramedical services	HBS	1 808	23	4 649	1 794	8 274
06.3	Hospital services		6 087	77	4 237	24 810	35 210
06.3.0	Hospital services	HBS	6 087	77	4 237	24 810	35 210

5.7.3.7. Transport

138. In the case of purchase of vehicles and fuel and lubricants for personal transport equipment, retail trade data are used, after the adjustment on retail trade other than final consumption expenditures of households. The adjustment was made by using the car register data of stock of the cars by ownership in 2002, although during the establishment of the 1998 benchmark data the supply and use tables were used for this purposes.

139. The estimation of consumption on other items of operation of transport equipment (spare parts and accessories for personal transport equipment, maintenance and repair of personal transport equipment, other services in respect of personal transport equipment) is based on the Household Budget Survey, as it described in paragraph 5.7.3.C).

140. For estimating transport services a direct method is used, the basic information come from the transport statistics, including quantity data and freight receipts by types of transportation (local or long distance and road, railway, air and water). The combined transportation is typical mainly in the capital (Budapest) that is why this item is estimated using the freight receipts of local transportation on road and railway in Budapest.

141. The values are adjusted for the definitions and concepts of the National Accounts because of incomes in kind at the 'Combined passenger transport' (07.3.5.).

142. Giving tips is a widespread phenomenon in Hungary. For the type of tips which is occurred for 'taxi services' (07.3.2.) a new estimation was made during the finalisation of 2001 and revising 2000 data using the result of a survey on tips, which was carried out in 1997.

Table 5.19 Estimation process of consumption on transport, 2002 (million HUF)

COICOP code		Data source	Raw data, grossed up	Population adjustments	Adjustment as a result of extrapolation	Other adjustments for definitions and concepts	NA data, actual used
07	Transport		1 988 624	1 040	112 260	-718 317	1 383 858
07.1	Purchase of vehicles		971 597	0	0	-489 571	482 026
07.1.1	Motor cars	RTS	961 726	0	0	-486 664	475 062
07.1.2	Motor cycles	RTS	5 281	0	0	-1 881	3 400
07.1.3	Bicycles	RTS	4 590	0	0	-1 026	3 565
07.1.4	Animal drawn vehicles	HBS	0	0	0	0	0
07.2	Operation of personal transport equipment		822 170	1 006	104 292	-231 441	696 027
07.2.1	Spare parts and accessories for personal transport equipment	HBS	22 153	280	63 886	2 273	88 592
07.2.2	Fuels and lubricants for personal transport equipment	RTS	742 420	0	0	-242 349	500 071
07.2.3	Maintenance and repair of personal transport equipment	HBS	31 060	392	24 085	0	55 537
07.2.4	Other services in respect of personal transport equipment	HBS	26 537	335	16 321	8 634	51 827
07.3	Transport services		194 857	33	7 968	2 694	205 804
07.3.1	Passenger transport by railway	Other	23 609	0	0	0	23 609
07.3.2	Passenger transport by road	Other	80 586	0	0	850	81 687
07.3.3	Passenger transport by air	Other	66 310	0	0	0	66 310
07.3.4	Passenger transport by sea and inland waterway	Other	654	0	0	0	654
07.3.5	Combined passenger transport	Other	21 046	0	0	2 174	23 219
07.3.6	Other purchased transport services	HBS	2 652	33	7 968	-329	10 324

5.7.3.8. Communications

143. Within this group the statistics on postal services are used for estimating the consumption on postal services indirectly. The postal service statistics supply volume data on post performances (letter

post consignments, parcels and value parcels, postal money order, telegrams sent). Using the changes in volume and the prices, the changes in value are estimated and the benchmark data are extrapolated.

144. For estimation on telephone and telefax equipment the Household Budget Survey is used indirectly as described in paragraph 5.7.3.C).

145. The consumption on telephone and telefax services is estimated by using telecommunication statistics data. Telecommunication statistics supply volume data on telecommunication performances (telephone calls: fixed-line or mobile, local, inland long distance, international calls). Using the changes in volume and the prices, the changes in value are estimated and the benchmark data are extrapolated.

Table 5.20 Estimation process of consumption on communication, 2002 (million HUF)

COICOP code		Data source	Raw data, grossed up	Population adjustments	Adjustment as a result of extrapolation	Other adjustments for definitions and concepts	NA data, actual used
08	Communication		473 045	149	1 844	-18 089	456 948
08.1	Postal services		4 765	0	0	0	4 765
08.1.0	Postal services	Other	4 765	0	0	0	4 765
08.2	Telephone and telefax equipment		11 778	149	1 844	-530	13 240
08.2.0	Telephone and telefax equipment	HBS	11 778	149	1 844	-530	13 240
08.3	Telephone and telefax services		456 502	0	0	-17 560	438 942
08.3.0	Telephone and telefax services	Other	456 502	0	0	-17 560	438 942

5.7.3.9. Recreation and culture

146. The Household Budget Survey is the basic data source for estimating consumption on recreation and culture, excluding recreational and cultural services and package holidays. This indirect method gives the value of adjustment as a result of extrapolation (see next table).

147. Then the extrapolated values are adjusted for the definitions and concepts of the National Accounts.

148. It means income in kind at 'Recreation and sporting services' (9.4.1.) and at 'Cultural services' (9.4.2.) and consumption of households' own production at 'Gardens, plants and flowers' (9.3.3.).

149. Additional data sources are used for checking purposes. Retail trade survey data were used at 'Equipment for the reception, recording and reproduction of sound and pictures' (09.1.1.), 'Photographic and cinematographic equipment and optical instruments' (09.1.2.), 'Information processing equipment' (09.1.3.) and 'Recording media' (09.1.4.). RTS data were also used at 'Games, toys and hobbies' (09.3.1.), 'Equipment for sport, camping and open-air recreation' (09.3.2.), 'Gardens, plants and flowers' (09.3.3.) and 'Pets and related products' (09.3.4.)

150. In the case of 'Recreation and sporting services' (9.4.1.) some cases (cinemas, theatres and concerts) the data of cultural statistics are used, because they are able to supply annual receipts data.

The sources of data are the surveys of the Ministry of Education and Culture. For estimation on '*Games of chance*' (09.4.3.) the data of the Gambling Authority are used, on a net basis.

151. In the case of '*Books*' (09.5.1.) data from the Hungarian Publishers' and Booksellers' Association were used for checking.

152. In the case of '*Package holidays*' (09.6.0.) HCSO used the data coming from the tourism statistics on organised tourism, namely the net income of travel agencies on package tours on a gross basis. The organised tourism includes all individual or conducted tours advertised or organised by tour operators at request, provided that a contract is signed before the beginning of the tour, and besides the accommodation and/or passenger transport connected to the tour, the contract also contains certain complementary services. The data suppliers are travel agencies registered by the Hungarian Chamber of Commerce and have a tour operator licence.

153. The calculation for HFC expenditure on software, including games is made independently of the output estimates, using the Household Budget Survey. Because of the applied extrapolation method, there are no separate estimates on software. Game software and video games were accounted in group COICOP 09.3.1., while all other software was accounted in group 09.1.3.

Table 5.21 Estimation process of consumption on recreation and culture, 2002 (million HUF)

COICOP code		Data source	Raw data, grossed up	Population adjustments	Adjustment as a result of extrapolation	Other adjustments for definitions and concepts	NA data, actually used
09	Recreation and culture		467 475	2 695	240 193	2 661	713 023
09.1	Audio-visual, photographic and information processing equipment		57 807	729	89 727	0	148 264
09.1.1	Equipment for the reception, recording and reproduction of sound and pictures	HBS	27 475	347	80 598	0	108 420
09.1.2	Photographic and cinematographic equipment and optical instruments	HBS	2 187	28	5 662	0	7 877
09.1.3	Information processing equipment	HBS	15 719	198	-10 731	0	5 187
09.1.4	Recording media	HBS	9 358	118	2 923	0	12 399
09.1.5	Repair of audio-visual, photographic and information processing equipment	HBS	3 068	39	11 275	0	14 382
09.2	Other major durables for recreation and culture		1 234	16	5 326	0	6 576
09.2.1	Major durables for outdoor recreation	HBS	468	6	366	0	841
09.2.2	Musical instruments and major durables for indoor recreation	HBS	372	5	4 482	0	4 859
09.2.3	Maintenance and repair of other major durables for recreation and culture	HBS	394	5	478	0	877
09.3	Other recreational items and equipment, gardens and pets		56 285	710	58 518	-798	114 715
09.3.1	Games, toys and hobbies	HBS	11 155	141	25 190	0	36 486
09.3.2	Equipment for sport, camping and open-air recreation	HBS	1 191	15	25 910	0	27 117
09.3.3	Gardens, plants and flowers	HBS	25 675	324	-167	-798	25 034
09.3.4	Pets and related products	HBS	16 276	205	1 963	0	18 444
09.3.5	Veterinary and other services for pets	HBS	1 987	25	5 622	0	7 634
09.4	Recreational and cultural services		188 404	167	25 509	3 459	217 539
09.4.1	Recreational and sporting services	HBS	13 225	167	25 509	3 825	42 727
09.4.2	Cultural services	Other	113 249	0	0	-366	112 884
09.4.3	Games of chance	Other	61 929	0	0	0	61 929
09.5	Newspapers, books and stationery		84 981	1 072	61 112	0	147 166
09.5.1	Books	HBS	32 033	404	18 287	0	50 724
09.5.2	Newspapers and periodicals	HBS	39 366	497	34 717	0	74 579
09.5.3	Miscellaneous printed matter	HBS	1 283	16	1 828	0	3 128
09.5.4	Stationery and drawing materials	HBS	12 299	155	6 281	0	18 735
09.6	Package holidays		78 764	0	0	0	78 764
09.6.0	Package holidays	Other	78 764	0	0	0	78 764

5.7.3.10. Education

154. The basic data source for the estimation of consumption expenditure on education is the Household Budget Survey. Household Budget Survey data are not used directly. For the estimation of household final consumption figures the extrapolation method is used. The result of this indirect method gives the value of the 'Adjustment as a result of extrapolation' (see next table). Then the extrapolated values are adjusted for definitions and concepts of National Accounts. It means adjustments for income in kind in case of 'Post-secondary non-tertiary education' (10.3.0.), 'Tertiary education' (10.4.0.) and 'Education non definable by level' (10.5.0.).

Table 5.22 Estimation process of consumption expenditure on education, 2002 (million HUF)

COICOP code		Data source	Raw data, grossed up	Population adjustments	Adjustment as a result of extrapolation	Other adjustments for definitions and concepts	NA data, actual used
10	Education		29 478	372	62 770	16 067	108 686
10.1	Pre-primary and primary education		5 066	64	27 932	0	33 062
10.1.0	Pre-primary and primary education	HBS	5 066	64	27 932	0	33 062
10.2	Secondary education		4 426	56	5 752	0	10 235
10.2.0	Secondary education	HBS	4 426	56	5 752	0	10 235
10.3	Post-secondary non- tertiary education		1 351	17	9 242	5 356	15 966
10.3.0	Post-secondary non- tertiary education	HBS	1 351	17	9 242	5 356	15 966
10.4	Tertiary education		9 897	125	7 785	5 356	23 163
10.4.0	Tertiary education	HBS	9 897	125	7 785	5 356	23 163
10.5	Education not definable by level		8 737	110	12 057	5 356	26 260
10.5.0	Education not definable by level	HBS	8 737	110	12 057	5 356	26 260

5.7.3.11. Restaurants and hotels

155. For the estimation of consumption expenditure on catering services the retail trade survey is used, excluding canteens.

156. The estimation of retail trade other than final consumption expenditure was made based on the supply and use tables for the 1998 benchmark. The same ratio was applied in 2002 too. For 2000 and 2001 a separate estimation was made for tips on catering services, using the result of a survey on tips, which was carried out in 1997.

157. For the estimation of consumption in 'Canteens' (11.1.2.), Household Budget Survey data are used directly.

158. In the case of accommodation services tourism statistics are used, which are the source of data on the receipts of public accommodation and private accommodation. When establishing the new benchmark on private household consumption data the supply and use tables were used to separate non-household expenditure.

159. Giving tips is a widespread phenomenon in Hungary. For the types of tips given in case of 'Restaurants' (11.1.1.) and 'Accommodation services' (11.2.0.) a new estimation was made when

finalising data of 2001 and revising those of 2000, using the result of a survey on tips, which was carried out in 1997.

**Table 5.23 Estimation process of consumption expenditure on restaurants and hotels, 2002
(million HUF)**

COICOP code		Data source	Raw data, grossed up	Population adjustments	Adjustment as a result of extrapolation	Other adjustments for definitions and concepts	NA data, actual used
11	Restaurants and hotels		658 067	1 225	-1 225	-207 561	450 506
11.1	Catering services		518 590	1 225	-1 225	-222 646	295 945
11.1.1	Restaurants, cafés and the like	RTS	421 513	0	0	-231 407	190 106
11.1.2	Canteens	HBS	97 077	1 225	-1 225	8 761	105 838
11.2	Accommodation services		139 477	0	0	15 085	154 561
11.2.0	Accommodation services	Other	139 477	0	0	15 085	154 561

5.7.3.12. Miscellaneous goods and services

160. The basic data source is the Household Budget Survey for the estimation of consumption expenditure on miscellaneous goods and services, excluding insurance. Data of the Household Budget Survey are not used directly. For the estimation of household final consumption figures the extrapolation method is used. The result of this indirect method gives the value of the 'Adjustment as a result of extrapolation' (see next table). Then the extrapolated values are adjusted for definitions and concepts of National Accounts. It means adjustments for income in kind concerning 'Social protection' (12.4.0.), 'Life insurance' (12.5.1.), 'Insurance connected with health' (12.5.3.) and 'Other insurance' (12.5.5.).

161. In the case of 'Insurance services' (12.5.) the data come from insurance companies and the services charge (net) concept is used for estimation. The household consumption expenditure directly financed by the insurance company is covered. The main data source is the business reports of insurance companies. These reports cover all payments irrespective of the payment recipient. The information on non-life insurance, coming from the Hungarian Financial Supervisory Authority, makes it possible to break down "non-life-insurance" output by insurance products and sectors. However, the whole Households sector is included in the household final consumption expenditure at present. In the future, through expert estimates, proper information will be available to separate final and intermediate consumption of sole proprietors in the estimated amount.

162. Giving tips is a widespread phenomenon in Hungary. For the types of tips given in case of 'Personal care services' (12.1.1.) a new estimation was made when finalising data of 2001 and revising those of 2000, using the result of a survey on tips, which was carried out in 1997.

163. The production and turnover of prostitution was estimated because there was a regular demand for these data. The starting point was to estimate the consumption of prostitution, using the number of consumers, number of occasions and average prices by different types of services. The main data sources were medical and judicial data, reports of the police, the tax office and the customs office, data of the chamber of prostitutes and special studies. For the estimation of intermediate consumption mainly reports of the police were used.

Table 5.24 Estimation process of consumption expenditure on miscellaneous goods and services, 2002 (million HUF)

COICOP code		Data source	Raw data, grossed up	Population adjustments	Adjustment as a result of extrapolation	Other adjustments for definitions and concepts	NA data, actual used
12	<i>Miscellaneous goods and services</i>		316 989	2 188	138 483	320 242	777 903
12.1	Personal care		126 927	1 602	39 819	21 233	189 581
12.1.1	Hairdressing salons and personal grooming establishments	HBS	20 195	255	32 446	22 105	75 001
12.1.2	Electric appliances for personal care	HBS	1 264	16	8 648	-75	9 854
12.1.3	Other appliances, articles and products for personal care	HBS	105 467	1 331	-1 275	-797	104 726
12.2	Prostitution		0	0	0	111 004	111 004
12.2.0	Prostitution		0	0	0	111 004	111 004
12.3	Personal effects n.e.c.		16 526	209	35 151	-1 141	50 744
12.3.1	Jewellery, clocks and watches	HBS	6 708	85	20 850	-209	27 433
12.3.2	Other personal effects	HBS	9 818	124	14 301	-933	23 311
12.4	Social protection		12 486	0	0	4 634	17 120
12.4.0	Social protection	Other	12 486	0	0	4 634	17 120
12.5	Insurance		131 080	0	0	-22 310	108 770
12.5.1	Life insurance	Other	74 519	0	0	1 545	76 064
12.5.2	Insurance connected with the dwelling	Other	27 970	0	0	-26 946	1 024
12.5.3	Insurance connected with health	Other	3 529	0	0	1 545	5 075
12.5.4	Insurance connected with transport	Other	23 685	0	0	0	23 685
12.5.5	Other insurance	Other	1 377	0	0	1 545	2 922
12.6	Financial services n.e.c.		2 345	30	68 187	203 262	273 823
12.6.1	FISIM		0	0	0	205 976	205 976
12.6.2	Other financial services n.e.c.	HBS	2 345	30	68 187	-2 714	67 847
12.7	Other services n.e.c.		27 625	349	-4 673	3 560	26 861
12.7.0	Other services n.e.c.	HBS	27 625	349	-4 673	3 560	26 861

5.7.4. Purchases of residents abroad and non-residents on the domestic territory

164. The total figure of household consumption expenditure refers to the consumption of resident households. However, this adjustment could be made on aggregate level only, using the currency exchange data from the National Bank of Hungary, and not on the level of individual items. Two new surveys were introduced in 2003 carried out by HCSO, one for Hungarian residents' travels abroad and one for non-residents' travels in Hungary. The results of these new surveys have been available since 2004 and from that time they have been used for national accounts and balance of payments purposes, including the total amounts residents spend abroad and non-residents spend on domestic territory as well as the breakdown of their consumption by purposes. In order to maintain the consistency within time series the National Bank made backward calculation on their currency exchange data until 2000

based on the results of tourism surveys. Data on currency exchange transaction were completed with the estimation of two factors:

- Grossing up the bank-card turnover;
- Use of HUF by the Hungarians abroad and foreigners in Hungary.

165. Shuttle trade is not covered at present. A survey was carried out by the Service Statistics Department of HCSO in co-operation with a research institute in 2000, and the results showed that this type of trade was very sensitive for the prices of the neighbouring countries and Hungary. In lack of financial resources, however, it was not possible to carry out this kind of surveys regularly.

Table 5.25 Household final consumption expenditure, total, 2002 (million HUF)

Domestic concept	Resident households expenditure in the rest of the world	Non-resident households' expenditure on the economic territory of Hungary	National concept
9 549 149	465 314	935 663	9 078 800

5.7.5. Further plans to improve the estimate on household final consumption expenditure

A) Using the Supply and Use Tables for balancing purposes:

Since the supply and use tables are compiled every year, it is possible to use them for balancing the household final consumption data. The supply and use tables will be ready for the final calculation of annual household final consumption data that is why they will be incorporated into the estimation regularly from 2006.

B) Data of new labour cost surveys will be built into the estimation of wages and salaries in kind.

C) Plans for improvements in estimating dwelling services:

1. An estimation method will be established for holiday homes, garages and empty dwellings.
2. Resident-owned dwellings abroad and non-resident-owned dwellings in Hungary: at present no estimation is incorporated in the HNA for these categories. Estimations for the number of dwellings purchased by non-residents are available in the Ministry of Interior, but for the "export" side it is an open question. Estimations for the import side could be obtained from the institution under the authority of the Ministry of Interior that is specialised for giving permissions to non-residents for purchasing real estate property in Hungary.

5.8. NPISH final consumption expenditure

166. **Final consumption expenditure** of NPISHs includes two categories as it is indicated in ESA95:

- 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 which means their non-market output
- expenditures by NPISHs on goods or services produced by market producers and redistributed through their intermediate non-profit activities to households for consumption

- It covers a line of individual actual final consumption of goods and services in the Households sector. Assuming that the organizations listed in this sector do not produce for their own final use but they really serve the households with their whole volume of production these social transfers in kind are calculated as the difference between their gross output and their sales income combined with the value of the redistributed goods and services.

167. We can verify this sum by comparing the results with the data collected directly from the NPIs.

5.9. Government final consumption expenditure

168. According to ESA 95 two expenditure categories can be distinguished within government expenditure:

169. Goods and services produced by the government other than own account gross fixed capital formation and sales

170. Expenditures of government on goods and services produced by market producers transferred to household without any alteration as a social transfers in kind for the households final consumption. This part also includes goods and services directly transferred from producers to households but financed by government.

171. In the case of the first item we start from gross output minus own account GFCF. In the next step operational revenues and sales of market production are subtracted from gross output. This information is coming from annual reports of government institutions. Revenues include revenues of primary activity, revenues related to primary activity and other, special revenues. Revenues can be obtained by functions as well besides market sales. There is no details available on market production by activity therefore market production is accounted in the same category as the main activity of the institution. Both output and revenues are available by industries therefore consumption is also available in the same structure. The next step is the split between individual and collective consumption. Individual consumption includes canteens in workplaces and schools, accommodation in colleges, education, health care, social assistance, sport, cultural services, other services. The rest is accounted as collective consumption.

172. The second category includes consumer subsidy on public transport compensating the lack of revenue because of services provided on reduced prices. The amount of this subsidy was 99 billion HUF in 2002. Subsidies of pharmaceuticals and medical appliances were 209 billion HUF and 28.9 billion HUF respectively. Other items are in this category are medical bath (4.2 billion HUF), travel reimbursement (4.3 billion HUF), compensation of free medical supply (18.1 billion HUF). These items are paid through the social security system. Compensation of television subscription fee is also accounted here 12.2 billion HUF. Subsidy on sewage and disposals accounted 6.4 billion HUF. Social security transfers 78.4 billion HUF to corporation in health care also accounted in Government sector as social transfers in kind as corporation could not have final consumption by definition.

Table 5.26. Government consumption expenditure in 2002 (million HUF)

		Gross output – own account GFCF	Operational revenues and sales of market production	Government transfer	of which:		Other government sources				Total		Government consumption expenditure	
					individual	collective	Public transport	Subsidies of pharmaceuticals and medical appliances	Health care by market producers	Other (e.g. compensation of television subscription)	Individual	Collective		
1	Agriculture.	24 099	7 359	16 740		16 740								
2	Forestry	2 465	184	2 281		2 281								
22	Publishing, printing	1 632	457	1 175		1 175								
45	Construction	8 619	988	7 631		7 631								
52	Retail trade	591	585	6		6								
5551	Canteens	75 674	41 489	34 185	34 185									
60	Land transport	95	41	54		54								
61	Water transport	49	35	14		14								
63	Supporting and auxiliary transport activities	63 334	18 698	44 636		44 636								
64	Post and telecommunications	704	235	469		469								
701	Real estate activities with own property	28 776	9 941	18 835		18 835								
702	Letting of own property	45 720	9 399	36 321	36 321									
72	Computer and related activities	439	239	200		200								
73	Research and development	65 798	9 316	56 482		56 482								
74	Other business activities	50 309	12 419	37 890		37 890								
75	Public administration	1 792 970	187 043	1 605 927		1 605 927								
80	Education	805 882	56 446	749 436	749 436									
851	Human health activities	617 173	38 210	578 963	578 963									
852	Veterinary activities	10 304	8 877	1 427		1 427								
853	Social work activities	156 800	32 449	124 351	124 351									
90	Sewage and refuse disposal	26 043	8 688	17 355		17 355								
924	News agency activities	4 074	2 267	1 807		1 807								
926	Sporting activities	14 449	3 098	11 351	11 351									
92	Recreational, cultural and sporting activities	127 782	20 938	106 844	106 844									
9303	Funeral and related activities	370	160	210		210								
9305	Other service activities	5 993	3 217	2 776	2 776									
Total		3 930 144	472 778	3 457 366	1 644 227	1 813 139	0	99 030	237 948	105 099	18 618	2 104 922	1 813 139	3 918 061

5.10. Acquisition less disposals of tangible fixed assets

173. This chapter describes the main methodological issues of the estimation procedure of gross fixed capital formation and changes in inventories, starting with the available data sources and concentrating on the most essential points of the compilation.

5.10.1. Gross Fixed Capital Formation (P.51)

174. The gross fixed capital formation consists of acquisitions less disposals and production of fixed assets for durable use (more than one year).

The gross fixed capital formation (GFCF) contains:

- the purchase and own account production of new buildings and other structures, machinery, equipment and transport equipment, and accounts all the imported assets as new assets;
- the acquisitions and disposals of existing assets;
- the acquisition of fixed assets by financial leasing;
- the value of capital transfer in kind from abroad;
- the costs of ownership transfer and other charges related to investments (planning fees and other costs);
- the investments in breeding and draught animals, plantations (forests, vineyards and orchard)
- the capital formation of intangible fixed assets;
- major improvements on land, (building) sites and other non-produced tangible assets;
- the cost of ownership transfers related to land transactions.

175. Major repairs carried out on existing fixed assets are considered as new asset acquisitions. There is no threshold to separate major repairs from regular maintenance but the accounting definitions clearly draw the distinction. Major repairs lead to the extension of service life, and to benefits expected to be gained in the future. The value of renovation is also part of major repairs if it increases the efficiency, utility, operation safety and productivity of assets. Considerable costs related to combined works that are needed because of neglected maintenance are excluded from the value of major repairs.

176. The distinction between GFCF and intermediate consumption is based on the threshold of 500 EUR. See detailed description in Chapter 3, paragraph 307.

5.10.1.1. Valuation

177. Acquisitions, own-account production and disposals of tangible fixed assets are accounted in the same way in gross fixed capital formation as those of intangible fixed assets.

178. The value of acquisitions of fixed assets covers the purchase price reduced with rebates and increased with additional prices, together with transport, storage, groundwork, installation, testing and starting costs, the commissions concerning the acquisitions, consignment fees, subsidies, taxes and custom duties – customs clearance costs and surcharges – related to the procurement, non-deductible value added tax levied beforehand and other incidental costs. Subsidies and allowances related to investments and granted by the general government are included in the concept of value but they are involved in the financial sources of the investment. The value of the fixed capital formation does not include the deductible value added tax levied beforehand.

179. The capital formation of own-account tangible fixed assets is valued at production cost, which is supplemented with other costs related to putting assets into operation (e.g. foundation, testing costs).

180. Financial leases are accounted in lump sum in the year of ownership change.

181. Exceptional and catastrophic losses reduce the fixed capital formation unless the damage requires discard and cancel.

182. Sales of assets are accounted at real sales prices. In-kind or uncompensated capital transfer in kind can be calculated at activated value in compliance with accounting rules but maximum at current (hand over) market value. Sellers and transferors of assets report prices of ownership transfer contracts, not including VAT. Buyers and transferees estimate the cost of ownership transfer. This estimated cost of ownership transfer is part of the GFCF (sales and disposals are negative, while purchases and acquisitions are positive accumulations. Their balance is zero).

5.10.1.2. Data sources

183. The main source of GFCF estimations is the annual investment report, which is part of the annual integrated economic survey. Corporations and sole proprietors employing more than 19 persons and, not considering the number of employees, all the public water utility companies, as well as all budgetary and social security institutions were observed exhaustively, while in the case of enterprises and sole proprietors employing between 5 and 19 persons, the observation was based on a stratified sampling. Data reported in the integrated economic survey generally comply with ESA95 requirements. Data collection allies to all units of national sectors are in production and all asset groups of gross fixed capital formation, except for second hand capital formation and intangible fixed assets of households.

184. Estimations for the non-observed scope of units were based on tax records, estimated capital stock data, and other administrative information which primarily was not collected for statistical purposes.

185. Administrative data and book-keeping data are corrected in some cases to align them with ESA95 definitions. Most of these corrections are accomplished during the data collection, calling the attention of respondents to the difference between book-keeping and required data. The value of land belonging to other buildings and structures and plantations, furthermore, rental rights related to property are excluded from GFCF. In the estimation of GFCF, acquisitions and sales of second-hand assets are corrected, too.

186. The investment activity of corporations operating in the industry of agriculture was not covered by the investment survey. Therefore, the main elements of Economic Accounts for Agriculture – a special agricultural survey, exact and exhaustive ministry information on industrial capital subsidies – are used in gross fixed capital formation. This also ensures the consistency between Economic Accounts for Agriculture and National Accounts.

187. Natural data on dwellings put to use are reported by owners to local governments. These latter forward the data to HCSO, which applies them in the calculation of dwelling investments.

188. The annual statistical survey on buildings and other structures owned by local governments provides information on disposals of local government-owned dwellings to households.

Table 5.27 Gross fixed capital formation

Categories	2002 (million HUF)
Acquisitions less disposals of tangible fixed assets	3 763 322
Acquisitions less disposals of intangible fixed assets	169 008
Additions to the value of non-produced non-financial assets	12 130
Total GFCF	3 944 460

5.10.1.3. Acquisitions less disposals of tangible fixed assets (P.511)

189. The main issue of the capital formation of tangible fixed assets:

Table 5.28 Tangible fixed assets composition of GFCF

Categories	2002 (million HUF)
Dwellings	828 760
Other buildings and structures	1 315 492
Transport equipment	334 461
Other machinery and equipment	1 223 377
Cultivated assets	61 232
Total GFCF (tangible fixed assets)	3 763 322

5.10.1.3.1. Acquisitions of new tangible fixed assets (P.5111)

190. The estimation of the value of investment in new assets is based on data of the yearly investment questionnaire, first of all. More detailed data on annual investments by asset type come from the Structural Investment Survey. Though this data source is mainly used for applying a more detailed breakdown of the finalized GFCF data, in order to know more about the asset structure, dwelling investments specifically are obtained from this source for the compilation procedure.

191. The separate asset categories which appear on the questionnaire are the following:

- Buildings and other structures

192. This group comprises purchases and constructions of new residential and non-residential buildings and other structures. Costs of planning, and other investment related charges are included. The value of additions, alterations, improvements and renovations undertaken on existing buildings and other structures also appears in this category. The value of land underlying buildings is excluded from the value of fixed assets.

193. The value of investments, extensions of and major improvements on tangible fixed assets making part of the infrastructure (like public roads, public utilities, dams, dikes and public vehicles) are accounted in this category.

194. The concept of dwelling investment consists of the construction of new dwellings and holiday homes, the costs of other build-ups related to a house (garage, fence), and also the improvements on existing dwellings and holiday homes.

195. Investment data on dwellings are part of the "Buildings and other structures" category of the (integrated) annual investment questionnaire. Data on structural investment are used to separate data on dwelling investment from the other part of the category. The whole value of dwelling investment could be allocated to sectors by using the data from the detailed, structural investment questionnaire.

- New machinery and equipment of domestic origin

196. This category covers purchases and own-account production of new machinery and equipment (including furniture, musical instruments and sports goods, but excluding small tools). All investment-related charges are included in the value of assets. The value of alterations and major improvements undertaken on existing machinery and equipment of domestic origin also constitutes part of the category.

- New transport equipment of domestic origin

197. Purchases and own-account production of new transport equipment of domestic origin are reported in this category. All investment related charges are included in the value of assets. The value of alterations and major improvements undertaken on existing transport equipment of domestic origin also appears in this category.

- Machinery and equipment of import origin

198. This category contains purchases of new and existing machinery and equipment (including furniture, musical instruments and sports goods, but excluding small tools) of import origin. All investment related charges are included in the value of assets. The value of alterations and major improvements undertaken on existing machinery and equipment of import origin also appears in this category.

- Transport equipment of import origin

199. Purchases of new and existing transport equipment of import origin are reported in this category. All investment related charges are included in the value of assets. The value of alterations and major improvements undertaken on existing vehicles of import origin also appears in this category.

- Plantations

200. Purchases and own account production of vineyards, orchards, fruit-trees, shrubs etc. is contained in this category, which produce goods for more than one year. Forests purchased and produced for environmental, tourism, recreation or hunting, trapping and game propagation purposes are contained as well. Purchase and production of forests for logging are excluded (these data are to be accounted as inventories). All investment related charges are included in the value of assets.

- Breeding animals

201. This category comprises purchases and own account production of animals of breeding, racing, dairy and draught animals etc. The main objective of breeding is to produce goods of animal origin (e.g. milk, eggs, wool, honey etc.). Purchase and production of animals for slaughter are excluded (these data are to be accounted as inventories). All investment-related charges are included in the value of assets.

Table 5.29 Annual investment data of the economy by category

Categories	2002 (million HUF)
Buildings and other structures (incl. dwellings)	2 014 681
Machinery and equipment	1 150 391
Transport equipment	317 231
Plantations and breeding animals	61 232
Major improvements to land	9 972
Total investment	3 553 507

5.10.1.3.2. Acquisitions less disposals of existing tangible fixed assets (P.5112, P.5113)

202. The data collection of annual investment data on existing tangible assets is as detailed as in the case of new tangible assets. Therefore, the cost of ownership transfer can be measured.

203. Two kinds of transactions on existing assets are distinguished depending on whether the assets were compensated for or not. It is the cost of ownership transfer that is valued in both transactions. The first case is a market transaction, while the second, the uncompensated ownership transfer, is recorded as uncompensated capital transfer in kind.

204. Ownership transfers related to transactions on existing assets are estimated on the basis of surveyed data for acquisitions less disposals. Theoretically the magnitude of the two items should be balanced, let alone the additional costs of ownership transfer, which usually appear in purchasers' figures. In order to maintain the expected balance which is practically hardly apparent from the surveyed data, the missing parts of transactions are applied as transactions performed by the non-observed scope of corporations (except for industry 75, the results of which are allocated to general government).

205. Considering the possible cost elements related to such transactions the value of ownership transfer is set to present a 6% gap between the values of acquisitions and sales in case of buildings, and 7% for machinery and transport equipment. Thus, after checking the reported data, adjustment is made either to acquisitions or sales in order to achieve the desired gap between the two sides, and all adjustments are put to the non-observed part of corporations as the value of GFCF in existing assets. This adjustment might increase the value of either total purchases or sales. Corrections to purchases may result from real acquisitions carried out by non-observed corporations, while corrections to sales may stem from sales by non-observed corporations, or from problems with the price level of the reported value of disposals by surveyed units.

206. Acquisitions of tangible assets as capital transfers in kind is part of the gross fixed capital formation, thus the incidental expenses of transfers should be estimated. The share of the corporations is very small in this special kind of transactions, therefore the estimated cost of transfers is accounted for the General government sector.

207. The most substantial proportion of transactions on existing dwellings takes place within the Households sector, so the duties on transactions are recorded as fixed capital formation of this sector. Data on duties are based on information acquired from administrative sources.

Table 5.30 Estimation of costs of ownership transfer on existing assets in the economy as a whole, 2002, (million HUF)

	Margins set by asset category	Acquisitions	Disposals
Buildings and other structures	6%	51 611	48 689
Surveyed data		41 778	48 689
Adjustment		9 833	
Machinery and equipment	7%	31 047	29 012
Surveyed data		27 257	29 012
Adjustment		3 790	
Transport equipment	7%	15 696	14 665
Surveyed data		12 502	14 665
Adjustment		3 194	

208. The decrease in the dwelling stock of local governments due to privatisation is measured in natural units. The value of the stock change is calculated from the previously determined net stock of

dwellings. The reported survey data on existing dwellings sold by local governments are corrected by the result of the above-mentioned statistical calculation, which then appears as negative fixed capital formation for local governments, and positive for the Households sector.

5.11. Acquisitions less disposals of intangible fixed assets (P.512)

209. Intangible fixed assets contain non-material produced assets which directly serve the activities of producer units for at least a year and the value of which is higher than the threshold for small goods (500 EUR). In the Hungarian GFCF calculation the following categories are considered as intangible fixed assets:

- mineral exploration,
- computer software,
- entertainment, literary and artistic originals,
- other intangible fixed assets (licence, know-how).

Valuation

210. The valuation of intangible fixed assets is similar to that of tangible fixed assets. Acquisitions are accounted at market prices, own-account assets are valued at production cost, while the purchases of assets are calculated at purchasers' prices.

Data sources

211. The above-listed breakdown for intangible fixed assets appears in the annual investment survey, so we have direct investment data of units covered by the survey. In the sampled part of the economy grossing up is undertaken for these asset categories. No supplementary estimation is made for possible investments in intangible fixed assets by non-observed units. Survey data, after basic data checks, are directly applied in the estimation process and there is no specific method to adjust them.

212. This data collection covers the value of purchased and own-account assets as well as the value of sales in the following breakdown:

- cost of mineral exploration
- purchased software
- own developed software
- licence, know-how (production licence, production process related intellectual property rights)
- entertainment, literary or artistic originals
- other intangible assets (licensed goods, leases and other transferable contracts, purchased goodwill)

Table 5.31 The intangible fixed asset composition of GFCF

Categories	2002 (million HUF)
Mineral exploration	10 974
Computer software	119 435
Entertainment, literary and artistic originals	3 830
Other intangible fixed assets (licence, know-how)	34 769
Total GFCF (intangible fixed assets)	169 008

5.11.1. Acquisition of new intangible fixed assets (P.5121)**Mineral exploration**

213. Mineral exploration is carried out to discover new, exploitable mineral, oil or gas fields. Such explorations are undertaken by mining, or oil and gas-exploiting companies, or may be executed by other specialized companies either for own purposes or against payment.

214. The valuation of mineral exploration is based on the costs emerged in the current year. These costs may derive from own development or implementation, as well as from expenses paid to others involved.

215. The cost of mineral exploration, either if it is successful or not, is accounted as part of the capital formation of intangible fixed assets.

Computer software

216. The value of computer software covers system software, application software, software descriptions and supporting tools, which are either purchased or developed in-house and serve the production activity for more than a year. The costs of development and extension of computer databases which are used for more than one year are also considered as part of GFCF, independently from their appearance in the market.

217. The estimation of the capital formation of software is based on the annual investment survey. Data on software purchases and own account developments are separated in the data collection. The data collection covers all industries of the economy, so the secondary production of software by non-software industries (non-NACE72) is also included in capital formation of software. The subcontracting of software services is treated as intermediate consumption.

218. When estimating GFCF in NACE 72, the estimation of own-account software to be used by the company itself can be separated from custom software, which is also own-developed but for sale. This custom software is accounted as sales of software. There is no separate estimation for the value of originals of pre-packed software in NACE 72.

219. Values of purchased and own-account software include planning, implementation, programming, installation and testing costs.

220. If – due to changes and developments of software systems – the regular use of the software system is changed, then it will be accounted as capital formation. Maintenance and repair of software are accounted as intermediate consumption.

221. The data available at present do not allow for the classification of software, so the delimitation between GFCF and intermediate consumption is sometimes limited. Hardware consulting cannot always be separate from software investment and start-up operation, in which case it is included in capital formation of software (and it is not intermediate consumption).

Entertainment, literary and artistic originals

222. This category includes original films, sound recordings, manuscripts, tapes, etc., on which musical and drama performances, TV and radio programmes and literary and artistic output are recorded. The valuation is similar to that of tangible fixed assets. Acquisitions are accounted at market prices, own-account assets are valued at production cost, while the purchases of assets are calculated at purchasers' prices.

Other intangible fixed assets

223. This category comprises new information, special knowledge and unclear ownership rights (e.g. licence, know-how, etc.) used in other production not classified in any other categories.

5.11.2. Acquisitions less disposals of existing intangible fixed assets (P.5122, P.5123)

224. Acquisitions of existing intangible fixed assets are accounted at purchasers' prices, while disposals of these assets are valued at real sales prices.

225. The data source of the estimation is the same as that referred to in the part about capital formation on new tangible fixed assets.

226. There is no cost of ownership transfer in case of software.

5.12. Additions to the value of non-produced non financial assets (P.513)

227. Fixed capital formation includes the investment value of additions to the value of land, sites and other non-produced assets. Examples include the cost of melioration, investment in the improvement of alkaline soil or in the recultivation of land belonging to a mine, for the sake of new utilization. Among these items of capital formation, the melioration of land and the major improvements on land have significant weights.

5.12.1. Major improvements to non-produced non-financial assets (P.5131)**Major improvements to land**

228. This category is part of the annual investment survey, thus the investments of both directly observed units and sampled ones are measured. By definition this category covers all significant capital expenditures related to land improvement which could not be physically separated from land itself, such as investments in land protection, melioration, land clearance, furthermore, the establishment of ditches or irrigation canals to drain marshes or to irrigate dry areas, and the construction of dams and dikes to prevent floods and erosion.

5.12.2. Cost of ownership transfer on non-produced non-financial assets (P.5132)**Cost of ownership transfer on land**

229. Cost of ownership transfers related to land is also part of the annual GFCF figure. Data from the investment survey were accepted for the observed part of the economy, while fees paid by other units were calculated and allocated to them on the basis of administrative data provided by the Ministry of Finance.

5.12.3. Estimation of GFCF by sector

5.12.3.1. Sector of corporations (financial and non-financial corporations)

230. Financial and non-financial corporations employing more than 4 employees were observed by the investment survey. Figures reported by the units were compared to their previously reported, aggregated sub-annual investment performances, and in case of discrepancies data providers were contacted again so that they correct their figures.

231. The investment activity of corporations operating in agriculture industry was mainly covered by the investment survey, but estimation on the non-observed part was also carried out based on special agricultural surveys or exact Ministry information on industrial capital subsidies. The opening and closing stock and the sorted out of breeding animals were monitored, the positive element of stock change could be calculated in natural units directly. Another agricultural survey provided information on the actual market prices of animals, which was applied as the basic data for the valuation of GFCF of breeding animals. A special agricultural survey collected data on plants owned by agricultural corporations exhaustively. Data are available by plant type, and estimates are the product of the size of area and that of plantation costs.

232. The estimation of fixed capital formation made under financial leases covers the whole sector of financial and non-financial corporations. For the scope not covered by the survey, estimations are based on data of the fully-observed scope, by using the relation of investments in machinery, equipment and vehicles, and the value of financial leases. By applying the industrial proportions for the non-observed scope, the value of financial leases is estimated in detail.

233. Ownership transfers related to transactions on existing assets are estimated on the basis of the exhaustive investment survey, assuming that more reliable information – according to the book-keeping regulation for investments – is available for the customer of assets. The role of the non-observed scope of the survey in transactions on existing assets is estimated indirectly. In the following we simply assume that sales and disposals of existing assets are included in the sector of corporations. (For more detail see 5.10.1.5)

234. A few public corporations were classified as non-market producers and were transferred along with all their reported investments to the General government sector.

235. There was a common indirect estimation of investments for the non-observed part of corporations – working with less than 5 employees – which are classified to industries other than agriculture. The stock of tangible fixed assets was revalued to 2002 prices based on empirical information taken from the previously executed direct stock observation – carried out in 2000 – and the application of official investment price indices. The stock was revalued for three main asset categories – buildings and structures; machinery; and transport equipment at two-digit NACE industry level.

236. The following data were used to estimate fixed capital formation:

- the ratio of the asset value to the net and gross book-keeping value of a tangible asset,
- revaluation multipliers expressing relations between the new replacement value and the book-keeping value of the asset,
- and the expected lifetime data.

237. When estimating GFCF, we assumed that activities of minor organizations require fewer tangible assets than major corporations. In case of these minor enterprises the share of buildings, constructions in tangible fixed assets is lower than the observed ratios.

238. Estimation procedure of the estimation of fixed capital formation:

- a) Opening gross stock data are revalued to the price level of the reference year by using industry indices of investment prices by asset types.
- b) Revalued gross stock data are divided by lifetime in each industry and each category. That is how we get the approximate annual capital formation data required.
- c) Data coming from the previous step are adjusted by using data from investment statistics of the previous year (rate of investment growth compared to the previous year, based on the structure of assets invested in by industries).

239. Aggregate procedure for the indirect estimation of investment data on buildings of corporations working with less than five employees (excl. agriculture):

Table 5.32 Estimation of GFCF of small corporations

Categories		2002
Gross book-keeping values of Building Stock (million HUF)	=	453 800
Revaluation multiplier	*	2,56
Gross Building Stock at current prices (million HUF)	=	1 159 727
Average service life	/	55,7
Annual replacement required to maintain the stock level (million HUF)	=	20 810

Table 5.33 Separate components of the GFCF (tangible fixed assets) figure of corporations in terms of estimation method

Categories	2002 (million HUF)
Annual investment survey data (direct data)	1 839 102
Estimated GFCF investment in new assets carried out by corporations with less than 5 employees (incl. agriculture)	65 543
Adjustment to the observed transactions of existing assets (adjusting surveyed figures to the margins previously set by category)	14 864
Total GFCF (tangible fixed assets) of corporations	1 919 509

5.12.3.2. General government sector

240. General government units were exhaustively covered by the investment survey, and provided information on transactions related to tangible fixed assets according to the asset structure as described above.

241. Public companies which do not perform market activity were transferred to this sector with all their investments.

242. Non-profit institutions, which are mainly financed and controlled by government, were placed in the General government sector as well.

Table 5.34 GFCF (tangible fixed assets) of the general government

Categories	2002 (million HUF)
General government entities	643 106
Non-profit institutions belonging to general government	15 413
Public corporations classified to general government	156 472
Total GFCF (tangible fixed assets) of general government	814 991

243. Privatisation of local government dwellings was not considered in the framework of value adjustments of other existing assets involved in the transactions of the period, but was estimated separately, based on information from a special survey of local government units. The book-keeping values of the dwellings sales reported by local governments in investment questionnaires were replaced with figures calculated on the basis of natural and value data of questionnaires on local governments. Data of the investment survey are presented at historical prices, furthermore, cover the value of transactions just in part. For that reason these data are replaced by the value data of quantity*price in the estimation procedure, to calculate an accurate value for local government dwellings privatized a year. All privatized dwellings were transferred to the Households sector.

244. Public investments in roads are all allocated to industry 75 (NACE), even though reporting units are classified to other industries. The same procedure is carried out in the case of road renovations, and constructions of dams and dikes.

245. Military assets of military units which could be used solely for destructive purposes (e.g. missiles, rockets, bombs), and the related transport equipment (e.g. aircrafts, tanks, rocket carriers, missile sites) do not constitute part of GFCF.

5.12.3.3. Households sector

246. Fixed capital formation of the Households sector covers investments performed by sole proprietors, or individuals producing marketable goods or services either for sale or own final use. The main part of annual GFCF performed by households is new dwelling constructions and dwelling renovations.

Table 5.35 Estimated GFCF of the Households sector

Categories	2002 (million HUF)
Dwellings	803 380
Sole proprietors (excl. agriculture)	54 688
GFCF by households (excl. dwellings and agriculture)	40 244
Agricultural investments	116 235
Total GFCF by households	1 014 547

5.12.3.3.1. Dwellings

247. The value of annual new dwelling constructions covers the value of dwellings and holiday homes built (put in use) a year, the cost of other structures (e.g. fences, garages) related to residential buildings, and the value of renovation of residential buildings and holiday homes.

248. The estimation of the value of dwelling investments is based on the floorspace of new dwellings put in use. It is calculated by multiplying building material costs by the effective average cost of a 1m² built area.

249. The basis of model calculation was 28 dwelling models established according to dwelling types, the place of construction and the quality of dwellings.

250. The separated dwelling types:

- single-family houses;
- multi-storey buildings with several flats; and
- new flats constructed through the exploitation of attics.

251. Four area categories were differentiated for the place of constructions, which were determined by monthly gross salaries of workers employed in construction industry.

252. The separated quality categories of dwellings:

- modest;
- average (flats constructed in attics may belong to this category only);
- luxury dwellings.

253. The important factors considered in the elaboration of model construction costs of the 28 dwelling types are as follows:

- resource requirement of the different types of dwellings (building material and labour);
- price database supported by a continuous monitoring system of prices of construction materials; and
- labour cost calculated on the basis of the average salary of workers in construction industry.

254. Considered costs are:

- cost of construction materials;
- price of transporting and loading or unloading materials to/on the building site;
- labour cost of the construction – wages and contributions;
- costs of machinery and equipment necessary for the construction of structures;
- special costs – costs of auxiliary and interim structures and other organizational costs (covers single and organizational costs emerging on the building site);
- indirect or “general” costs, costs of the central management; and
- profit, where the expected (fair) margin and the risk assumed by the entrepreneur is realized.

255. Method of cost estimation: building costs of all the 28 types of homes are updated quarterly on the basis of the relevant average wages and building material costs. The effective average cost per 1m^2 of built area is the mean value of specific home-building costs weighted with the area of dwellings (having a permission of usage) built in the reference period.

256. Method of index calculation: the standardized average of specific building costs – that are updated quarterly – is the ratio of standardized average costs per 1 m² in the reference period and in the same period of the previous year. Standard weights are the home-building structure of year 1999. Year 1999 is the reference period.

257. Quarterly standard average cost of dwelling construction

$$\bar{P}_{ti} \equiv \frac{\sum_{k=1}^{28} T_{1999}^{(k)} \cdot P_{ti}^{(k)}}{T_{1999}}$$

Base index

$$I_{ti} \equiv \frac{\bar{P}_{ti}}{\bar{P}_{1999}}$$

where

\bar{p} = standardized average cost of dwelling construction

p = modelled specific cost of dwelling construction

T = area of homes built, in m²

t = 0, 1, 2, ... years

i = 1, 2, 3, 4 quarters

k = 1, 2, ... 28 home-types

T₁₉₉₉ = area of homes built within the period (1999) providing the standard weight

p_{ti}^(k) = modelled specific cost of construction per 1 m² in case of home-type k in quarter i of year t

Standard annual average cost of dwelling construction:

$$\bar{P}_t \equiv \frac{\sum_{i=1}^4 \bar{P}_{ti} \cdot T_{1999(i)}}{T_{1999}}$$

258. The calculation of indices appertaining to building materials' prices and labour cost is similar to this, with the exception that building material cost or labour cost is used in the average cost necessary for the calculation.

259. Some cost elements which must be considered as part of the investment were not included in the construction cost model but were added separately to cover the whole value required.

260. Supplementary cost items were as follows:

- Preparatory costs of construction – engineering charges emerging in the process of planning, and other engineering

261. The magnitude of this cost item equals 2.2% of the already estimated total of specific cost elements, as set by the chamber.

- Costs of construction of public utilities outside the borders of the lot

262. Fixed, exact values were estimated for one or two residential buildings, which can be separated from other dwellings according to declarations on permissions of usage.

- Non-deductible VAT

263. New dwelling investments of households contain not only the cost elements listed before, but also the value of non-deductible VAT. Three types of works are separated on the basis of the workforce used in the construction process. In case a dwelling is constructed by a professional, registered party, all the listed costs are supplemented with a 25% VAT. Constructions partly incorporating construction activities of households are calculated with a 12% VAT. And finally, if households carry out the construction works themselves, and professional units are only involved in inevitable phases, a non-deductible, 25% VAT is calculated on the value of materials and on obligatory professional works. So construction costs of this latter category are increased by a 6.5% VAT on average. The average of the three categories provides a 12.5% VAT for the new dwelling investments of households.

Renovations, extensions, major repairs of dwellings

264. According to the rules of National Accounts maintenance works (e.g. painting) were separated from major repairs, extensions and renovations. The value of annual renovations and extensions of dwellings carried out by households are estimated from the data of a special stratified sample survey on dwelling conditions. Around 0.5% of dwellings were surveyed in 1999, putting an emphasis on questions related to the type and costs of investments executed on existing dwellings. The subject of this questionnaire was solely households, so dwellings belonging to other sectors were not considered. The extrapolation of renovation data is based on indices of dwelling construction costs. The non-deductible VAT related to renovation works was estimated on the basis of separate categories for new constructions of households. Construction activities were allocated in the questionnaire to the three categories explained before. The total value of non-deductible VAT for dwelling renovation investments of households could be calculated by applying the proper non-deductible VAT percentage to these categories.

Construction of holiday homes, and other structures related to dwellings

265. The estimated value of new holiday home constructions is based on the number of holiday homes put in use, which comes from "Detailed data of final occupancy of dwellings and holiday homes" (OSAP Nr. 1078/06).

266. The estimation takes into account the methods of construction, the quality types, and the location of holiday homes. The value of holiday homes put in use is calculated as the product of the floorspace of holiday homes and the estimated construction cost. The estimation is based on the construction cost model (see above).

267. Other structures related to dwellings are estimated from natural data. The calculation of construction costs of garages assumes that garages are of 15 m² in average, since the building of bigger garages requires special permission which is rarely acquired. The number of garages is available from the number of permissions of usage. The construction cost of garages was set on a basic cost level of HUF 100 000/m².

268. The value of construction of fences is derived from the average space of sites. With the average size being 800 m², the length of the boundary required to be covered is 60 m. The construction cost of the fence is calculated from the average cost of materials used for fences, and the estimated labour cost related to works carried out on the structure.

5.12.3.3.2. Estimation of fixed capital formation of the producer households

269. The fixed capital formation of producer households does not contain the stock of assets used for other than production purposes for more than one year. These durable goods (vehicles, furniture, valuable sports goods, etc.) are presented in national accounts as the final consumption of households.

270. Gross fixed capital formation of sole proprietors operating in the industry of agriculture is measured along with other agricultural units belonging to the Households sector. The word 'other' refers to both individual market producers without entrepreneurial status and households producing for own consumption. The estimation for these small units is undertaken by taking into account the records of the Ministry of Agriculture and Rural Development and the results of the investment survey. After estimating the investment value of agricultural corporations which were not covered by the investment survey, the remaining difference between total investments recorded by the ministry and statistical data of corporations, general government and sole proprietors with more than 4 employees is considered as agricultural investments by the Households sector.

271. There is no direct statistical information on the investment activities of the rest of sole proprietors, working in other industries of the economy. The method of indirectly measuring their annual investments was based on the annual depreciations they declare in the Personal Income Tax reports. Data from the survey on the stock of tangible fixed assets of small corporations on 1st January 2000 were also used.

272. The main assumption in order to execute estimations on the capital stock of the non-surveyed sole proprietors was that units in this sector do perform their production activities with relatively less assets than other corporations operating in the same sector.

273. The following steps were taken in order to estimate their capital stock:

- a) A possible asset structure was fixed taking into account industrial characteristics, which enabled experts to determine average depreciation rates by industry. The proportion of buildings, other structures, and machinery and vehicles was settled at 20–80%, assuming an average service life of 60 years for buildings and other structures.
- b) The category of machinery and vehicles was subdivided and separate service life estimates were determined for the newly created categories. 10 years were set for machinery of long service life, 5 years for machinery of short service life, and 8 years for vehicles.
- c) To assign average depreciation rate to machinery in each industry, industries were split to four different categories by assuming the possible composition of their machinery stocks:
 - industries with average machinery composition,
 - industries operating mainly machinery of long service life,
 - industries operating mainly machinery of short service life,
 - industries operating mainly vehicles.
- d) First of all, the gross book-keeping value of the stocks was estimated by dividing the reported data of annual depreciation by a depreciation rate. Controls of these data were obtained from the ratios of income/net book-keeping values for corporations with single-entry book-keeping, which were adjusted according to the gross/net book-keeping value of the stock for corporations with double-entry book-keeping (occasionally it was necessary to apply this industrial figure as the upper limit of the estimated stock for sole proprietors).

- e) In order to estimate the new replacement value from the calculated gross book-keeping value, the surveyed revaluation multipliers of corporations were adopted (new replacement value/gross book-keeping value).
- f) The annual fixed capital formation was estimated at two-digit level of NACE, by asset category based on the revalued gross stock value and on service life.

274. Investments of the following years were calculated from this initial investment value in line with the volume changes of investments measured for the sampled part of sole proprietors.

5.12.3.4. Non-profit institutions serving households

275. The investment data of NPISHs are collected from the investment survey. Non-profit units belonging to the General government sector are pinpointed by professional statisticians dealing with general government. All others, with a few exceptions which are classified as belonging to the financial or non-financial sectors, are considered as NPISHs. The very same rule is applied for them as for the data collection of corporations. These units are exhaustively surveyed if they operate with more than 19 employees, while they are sampled if they work with 5–19 employees. There is no investment estimates on the smaller NPISHs.

5.13. Changes in inventories (P. 52)

276. *Changes in inventories are the value of change in the stock of inventories for each sector occurring during the accounting period.*

277. According to the Hungarian accounting practice the gross fixed capital formation does not comprise the acquisition of assets having a value of less than HUF 50 000. These assets are covered by the items of changes in inventories. The methodological work to increase the limit value is in progress. The estimation for changes in inventories was made by types, sectors and industries.

5.13.1. Valuation

278. Purchased asset stocks are valued at **actual purchasing prices** excluding VAT values. Asset stocks include materials, commodities, supplies, etc. purchased to be sold without transformation to a third party.

279. Among own-produced assets are classified finished goods, other work in progress and slaughter animals, valued at **production costs**.

280. Planting cost data are registered under planting wood production forests.

281. *In case of selling purchased and own-produced assets a purchasing price based valuation is applied.*

282. The decrease of the stock of inventories because of normal losses is deducted from the stock. Accordingly, these have no effect on changes in inventories.

283. For the time being the valuation based on statistical data collections corresponds to the accounting practice, the value of inventories can be considered as a value at current prices. So the data on inventories contain holding gains or losses related to changes in price levels in the period of holding inventories. Holding gains may make distortions in the indicators of production, capital formation or wealth.

284. Holding gains/losses accounting has undergone major methodological developments. New estimation results and their effect on the data of production and capital accounts are analyzed at present.

5.13.2. Data sources

285. The estimation of quarterly and annual capital formation of inventories is based on different data sources. Data of the four quarters are directly observed, while the annual tax records of enterprises are used primarily in annual estimations.

286. The data source of the quarterly estimation is the sub-annual integrated economic statistical survey. The latter survey observes enterprises employing more than 49 persons comprehensively, while in the case of enterprises employing 5 or more employees it is based on sampling. Therefore, the correspondence between annual and quarterly data coming from „mixed” time series must be ensured.

287. The gap between the two different estimation methods for annual data was examined by industries and by size of enterprises. Small data adjustments were needed to harmonise quarterly and annual data. The value of the quarterly stock of inventories, adjusted based on the analysis of time series summarized for the given year was compared to tax data by industries, and, if necessary, further data correction was made based on tax data ensuring a wider coverage.

288. In the direct data collection data on inventories are available by industries in the following breakdown:

Stock of inventories at the beginning and at the end of the year:

Own account inventories

- finished goods
- work-in-progress

Purchased inventories

- materials
- goods for resale

289. In annual tax returns data refer to the closing stock of inventories. Data on both purchased and own-account inventories are broken down by industries.

5.13.3. The estimation procedure

290. Changes in inventories are estimated as the difference between the closing stocks of two neighbouring years.

291. Adjustments in the framework of the estimation procedure are carried out by comparing data from tax records with data from the quarterly survey. The necessary corrections relying on inventory data from the quarterly survey are executed as described below:

- a) The closing and the corrected closing stock data from tax records of the previous year are compared to the opening stock data appearing in the statistical survey of the first quarter of the current year. In case of significant differences between the two datasets to be compared, the opening stock data of the statistical observation are considered as correct.

- b) The closing stock data from tax records of the last quarter of the year are compared to the closing stock data from the statistical survey of the fourth quarter of the current year. If any significant differences occur the data from the tax records are considered as correct. So adjusted stock value data are considered as the closing stock of the current year.
- c) Changes in inventories are calculated as the difference between the closing stocks of the current and the previous year for both own-produced and purchased inventories.

292. The next table summarizes the main items of changes in inventories:

Table 5.36 Data on changes in inventories, 2002 (million HUF)

Denomination	Own account inventories	Purchased inventories	Sum of inventories
Closing stock in the previous year	1 054 751	2 842 595	3 897 346
Closing stock in the current year	1 064 241	3 052 063	4 116 304
Changes in inventories	9 490	209 468	218 958

5.14. Acquisitions less disposals of valuables (P.53), intangibles

293. There is no information available on this item, and no estimation process is elaborated to measure it for the time being.

5.15. Exports of goods

294. In 2002 the source of exports data was external merchandise trade statistics and balance of payments statistics. The statistical recording of external merchandise trade is based on customs documentation. Until 30 April 2002 the Ministry of Economic Affairs and the Central Statistical Office were jointly responsible for the statistical processing of data collected within the framework of customs procedures by the National Headquarters of the Hungarian Customs and Finance Guard (the customs authority). Since then the Central Statistical Office alone has been responsible for producing external trade statistics. Balance of payments statistics are compiled by the National Bank of Hungary.

295. Till 2003, more precisely till 1 May 2004, export and import data were compiled by using customs registries, based on SAD-like documents. Special transactions were defined according to customs procedures and transaction codes required to compile external merchandise trade statistics. Since 1 May 2004, data sources have been Intrastat and Extrastat. Estimation is generally related to the physical movement of products, except bunker fuel data, which are cash-based.

296. a) **Financial leasing transaction** data are collected on a separate transaction code, and accounted when products physically move. Rules on valuation were in compliance with the ESA regulation in 2002.

297. b) **Product movements among affiliated firms** are contained by external merchandise trade data in line with specific characteristics of transactions.

298. c) In case of contracted work on goods, minor and major contract works are not differentiated, all contracted works must be accounted by grossing up method.

299. Major and minor **repairs** are not differentiated, and are accounted in net costs. Since 2005 data on repairs have been collected through external trade-in-services statistics, a separate statistical data collection.

300.d) All merchandising data are recorded in net value, not regarding the time interval between purchases and sales (ESA paragraph 3.133).

301. Till 2003 (so in 2002, too) NBH's (National Bank of Hungary) cash data were used to estimate **services**. In 2004, HCSO introduced a survey on business services and tourism surveys, but transport, financial and insurance as well as government service data remained on cash basis. Since 2005 accrual data have been collected for the four above-mentioned services, too, while external trade data collections also cover these services. Estimates for outward processing data were cash-based from 2005 to 2007; and accrual-based from 2000 to 2004. Since 2008 accrual data have been collected again.

302. The export of goods accounted in national accounts consists of exports included in external merchandise trade statistics and some items recorded separately.

303. The Hungarian trade system is a special trade system based on the wide-sense definition of special trade system. Exports include the export of domestic goods originating in free circulation areas or industrial free zones and exports of foreign goods after inward processing, directly to the rest of the world or to customs transit. The flows of foreign goods between commercial free zones (or customs warehouses) and the rest of the world (including the transit area) are excluded from external merchandise trade statistics.

304. The export of goods recorded in external merchandise trade statistics consists of normal exports, exports after inward processing and exports for outward processing. External merchandise trade statistics comprise, for example, goods traded in accordance with barter agreements, non-monetary gold, goods traded on government account, food and other aids, goods for military use, electricity, gas, and water, goods for processing, returned goods, goods under financial lease, large volumes of goods acquired by travellers and goods on consignment. Goods temporally admitted or dispatched, goods in transit, monetary gold, goods under operational lease and goods treated as part of services are excluded from external merchandise trade statistics.

305. Statistical data on the export of goods and services contain items listed between points a) and j) as well as items indicated by points m) and n) (all contracted work transactions are accounted by gross calculation, while repairs by net calculation).

306.k) Among smuggled products only illegal drugs are estimated. Other smuggled products are not covered by data, while information production issues are presently studied in cooperation with the customs authority and the tax authority.

307.l) Acts on intra- and extra external trade (in annexed exception lists) list gifts and small value goods. A similar list was also applied in 2002. Since 2004 items of small value – at least partially (shopping) – have been contained by tourism estimates (ESA paragraph 3.135).

308. Tourism services distinguish two travelling categories (business and other travelling), moreover, since 2004 have explicitly contained health and education purpose costs.

309. Till 2003 (so in 2002, too) NBH (National Bank of Hungary) cash data were used to estimate service **turnover**. In 2004, HCSO introduced survey on business services and tourism surveys, but transport, financial and insurance as well as government service data are remained on cash basis. Since 2005 accrual data have been collected to the prior four above mentioned services, too, while external trade data collections are also cover these services. Outward processing data from 2005 to 2007 are estimated on cash basis; from 2000 to 2004 on accrual basis. Since 2008 accrual basis data have been collected.

310. Services contain items listed in points a) - d) as well as points f) - h), furthermore, points j), k) and m). External trade in goods contains all contracted work transactions and repairs, therefore, point e) is excluded. Insurance services (i) contained revenues till 2004 and service fees since 2005.

311.m) Tourism data do not include estimations on domestic second homes owned by non-residents.

312.a) – c) and e) External trade in goods statistics do not include transit goods but contain imported and exported products, transport equipment, temporary exports and imports, as well as operational leasing.

313.d) Major and minor processing are not distinguished in statistics, therefore the gross value of all contracted works is listed among products.

314.f) External trade in goods statistics survey products at borders. There is no information on **post-border-crossing** losses occurring before/after the ownership change (ESA paragraph 3.136).

315. The classification is made according to the national version of the Combined Nomenclature on ten-digit level (CN8+2 digits for national subdivisions).

316. The export of goods in external merchandise trade statistics is valued on fob terms.

317. Goods for repairs are recorded separately and valued in net values in national accounts. Commodity exchange trade and bunkers are estimated using balance of payments data.

318. HCSO made estimation for the two main types of illegal activities, namely drugs and prostitution. The results of the estimation were introduced into the calculation in 2006, and backward calculations were made until 2000. External trade in drugs is registered within external trade in goods, while external trade in prostitution is recorded among services.

319. The estimation of production and sales of drugs was based on a regular demand for data. The starting point was to estimate the consumption of drugs, using the number of consumers, the quantity of drugs and the prices by types of drugs. Main data sources were medical and judicial data, as well as reports of the police, the tax office and the customs office. For the estimation of intermediate consumption mainly reports of the police were used.

320. In the case of prostitution the method is similar. First of all, estimation was made for consumption, using the number of consumers, the number of cases and average prices. Two data sources were used in addition to the above-mentioned ones, namely, the chamber of prostitutes as well as special studies. For the estimation of intermediate consumption mainly reports of the police were used.

For more details see Chapter 7, paragraph 41.

5.16. Export of services

321. The data source of the export of services is the balance of payments statistics compiled by the National Bank of Hungary.

5.16.1. Transport services

322. The export of transport services includes all revenues of resident carriers, shippers, ports, railway stations and airports, the amount paid for the use of pipelines etc., revenues arising from the transport of domestic or foreign goods, net payments by non-resident railways, and the international transport of goods by airlines and carriers for resident enterprises. Such revenues comprise fees for

storage, re-loading, re-packaging, carrier vehicle cleaning and quick repair, carrier and agent commissions, commission-based fees and fees for the lease of carrier vehicles with operators. This title covers payments by non-residents to resident carriers arising from the transport of foreign goods not crossing the Hungarian frontier.

323. Passenger transport comprises revenues arising from the cross-border transport of passengers, such as fares, excess luggage fees, consumer spending on the carrier vehicle (including food, drink, duty-free goods, etc.), and also covers tickets sold as part of a travel package. Fees charged for cruises and for travels inside the destination country shall be recorded in '(Private) travel services'. There is no breakdown by transport modes (sea, road, railways, etc.).

5.16.2. Travel services

324. The revenues under this item include foreign currency income arising from transfer or direct payments by banknotes, Euro cheques, bankcards (VISA, Eurocard, MasterCard) and exports related to payments by forint banknotes, which are spent (on accommodation, food, entertainment, purchases of goods for own consumption or as gifts, etc.) by non-resident visitors in Hungary when making holidays, visiting relatives, using medical treatment services, participating in a study tour, etc.

325. The re-exchange of forints not used up by non-resident customers are recorded as reverse revenues.

326. This item comprises foreign currency revenues and expenses less agent commissions arising from the provision of travel services by organisations engaged in organising inward and outward travels or selling travel services for foreign currency (such as travel agencies, hotels, travel bureaus and other enterprises). Travel does not cover revenues of these organisations arising from the exports of goods or from international trade in tickets ('Passenger transport').

327. As individuals receiving medical treatment and university students are accounted as residents of their home country even if they spend more than one year abroad, scholarships received from institutions of education, travel costs and other expenses are recorded in this item.

328. Personal spending on goods and services by non-resident workers (such as seasonal labourers, border-area workers) residing in the territory of an economy for less than one year for the purpose of work are also included in travel services.

5.16.3. Communication services

329. This item includes revenues arising from telecommunications services (such as audio and visual transmission, telephone, telex, fax, broadcasting and satellite services, etc.) and postal and courier services (such as forwarding letters, newspapers, periodicals, publications and parcels).

5.16.4. Construction and installation services

330. These services comprise resident companies' revenues from fees for construction and installation work – including construction industry repair work and main contractor services – carried out abroad, and payments to non-residents for construction and installation work carried out in Hungary. (Wage-type payments are reported under 'Compensation of workers employed for less than one year'. Payments in exchange for goods and services by a non-resident main contractor to resident subcontractors in connection with a project in Hungary, and by a resident main contractor to non-resident subcontractors in connection with a project abroad are reported under 'Other business, professional and technical services'.)

331. Revenues and expenses arising from the maintenance of real property owned by residents abroad and by non-residents in Hungary are reported under this title.

332. Construction abroad and construction in Hungary are not distinguished.

5.16.5. Insurance services

333. Insurance services cover revenues and expenses arising from property, liability, personal and life insurance associated with the transport of goods, and payments arising from re-insurance and – based on the ‘green card’ and the registration number agreements – vehicle liability insurance. This item comprises insurance fees paid by non-resident trade operators to resident insurers.

334. As provided by the relevant sections of Act on Insurance, the insurance premium sent by resident to non-resident insurers is included in this item.

335. Insurance damages received and paid are not recorded under this title.

336. Till 2004, insurance service data included cash data in which the National Bank was not able to separate service fees either in exports or in imports. Since 2005, statistics made on accrual basis have contained insurance-specific service fees.

5.16.6. Financial services

337. This item includes fees received in connection with financial intermediation (such as service charges on securities accounts and securities deposits, broker’s fees, commissions paid to commodity exchange dealers, bank charges, fees and commissions associated with letters of credit, banker’s bills of exchange, foreign exchange transactions, factoring charges, etc.). The credit side of these services accounts comprises guarantee payments received. Default charges and interests on financial assets and liabilities, as well as fees associated with other types of financial collaterals are also recorded under this title.

5.16.7. Computer and information services

338. This item covers transactions in computerised data and news services between residents and non-residents. Transactions include payments arising from database development and data storage, direct access time series, data processing, hardware consultation services, software installation, the Internet, computer maintenance and repair, news services (transmission of news and photo content), as well as direct subscription for newspapers and periodicals.

339. Year 2002 and current data on external trade in goods include software sold in commercial quantities in software value (including its hardware costs too). Services contain the value of software sold in non-commercial quantities. Till now, there has been no experimental calculation to assess software values separately. HCSO has estimated services since 2004, and under existing conditions software and licence fees can be separated.

5.16.8. Royalties and licence fees

340. This item covers payments received for the use of non-produced, non-financial goods, intellectual products and other intangibles (e.g. copyright and publishing rights, patents, brand name usage, licence, know-how, trademark, franchise, goodwill and concession). Payments associated with the acquisition of an interest in a non-resident enterprise leading to concession rights in exchange for the payments shall be recorded as direct investment rather than as concession fees.

5.16.9. Other services

341. Re-export of imported goods and other trade related services cover payments arising from transactions involving non-resident goods not crossing the frontiers. The re-export of imported goods shall be preferably recorded in net terms. Official and inspection charges on goods crossing the

frontiers and the re-export of imported goods (including quality inspection fees, payments in exchange for various certificates) are recorded in other services.

342. Leasing fees include fees arising from rental and leasing services other than financial leasing (excluding real property), comprising rents and leasing fees paid for leasing various pieces of machinery, equipment, carrier vehicles (excluding operators) and containers. The commercial value of the leased object is not taken into consideration among exported and imported items, and ownership remains with the lessor. Rents received by Hungarian residents for letting real property in Hungary are recorded in this item, provided that the lessee is not a natural person. Should the lessee be a natural person, rents for the real property as specified above are accounted in '(Private) travel services'.

343. Other business, professional and technical services include payments arising from services such as legal representation and consultation, promotion and market research, advertising, research and development, architecture, engineering and other technical services, agricultural and mining services, as well as other personal, security and investigation services, translation, interpretation and tender fees, etc. This item shall cover the utility charges, etc. paid by resident enterprises providing services (usually in construction) abroad and payments made by non-residents providing services in Hungary. Special business, professional and technical service fees (charged by national security bodies and the police) are recorded under this title.

344. Operating and entertainment costs incurred by enterprises' representative offices abroad (excluding military and diplomatic missions) as well as fees arising from the provision of all other services not specified elsewhere (such as promotion and publicity, advertising, fairs and exhibitions, graveyard maintenance, etc.) are also included in these services. Furthermore, this item contains payments in exchange for goods and services made by a non-resident chief contractor of a Hungarian investment project to resident sub-contractors, and by a resident main contractor of an investment project abroad to non-resident sub-contractors. This title reports payments of branches, subsidiaries and associated enterprises to their parent companies to cover overhead expenses.

5.16.10. Personal, cultural and recreational services

345. Audiovisual and related services comprise payments for services arising from the production of motion picture (movies and videos), radio and television programmes, music recording, including rents, production costs and artists' fees, as well as broadcasting and coded transmission, etc.

346. Other cultural and entertainment services include payments in exchange for the services provided by institutions such as museums, libraries, archives and other organisations providing educational, sports and entertainment services.

5.16.11. Government services

347. This item covers the expenses on the maintenance and equipment, operation and entertainment duties of diplomatic missions as well as the expenses incurred by military missions (such as peace-keeping missions and international military exercises). The credit side of the account includes sums of foreign currency exchanged for forints by foreign missions operating in Hungary. Revenues arising from the issue by embassies and consulates of visas and certificates, etc. are also recorded under this title.

5.17. Imports of goods

348. In 2002, the source of import data was external merchandise trade statistics and balance of payments statistics. The statistical recording of external merchandise trade is based on customs documentation. Until 30 April 2002 the Ministry of Economic Affairs and the Central Statistical Office were jointly responsible for the statistical processing of data collected within the framework of customs procedures by the National Headquarters of Customs and Finance Guard. Since then the

Central Statistical Office alone has been responsible for producing external trade statistics. Balance of payments statistics are compiled by the National Bank of Hungary.

349. Till 1 May 2004, export and import data were compiled by using customs registries based on SAD-like documents. Special transactions were defined according to customs procedures and transaction codes required to compile external merchandise trade statistics. Since 1 May 2004, Intrastat and Extrastat have been the data sources. Estimation is generally related to the physical movement of products, except bunker fuel data, which are cash-based.

350. a) **Financial leasing transaction** data are collected on a separate transaction code, and accounted when products physically move. Rules on the valuation were in compliance with the ESA regulation in 2002.

351. b) **Product movements among affiliated firms** are contained by external merchandise trade data in line with specific characteristics of transactions.

352. c) In case of contracted work on goods, minor and major contract works are not differentiated, all contracted works must be accounted by grossing up method. Major and minor **repairs** are not differentiated, and are accounted in net costs. Since 2005 data on repairs have been collected through external trade-in-services statistics, a separate statistical data collection.

353. d) All merchanting data are accounted in net value, not regarding the time interval between purchases and sales.

354. Statistical data on the import of goods and services include items listed under point 3.135: a) non-monetary gold, b) silver bar, diamond, other precious metals, c) non-circulating paper money and coins, d) electricity, gas, water, e) living animals (livestock), f) mail consignments, g) government imports, h) asset items of storing companies, items of product flows between i) resident companies and j) their connected enterprises (subsidiaries) abroad. Contracted work (m) transactions are accounted on gross, while repairs on net basis.

355. 3.135 k) – Among smuggled products only illegal drugs are estimated. There are no data on other smuggled products, while information production issues are presently studied in cooperation with the customs authority and the tax authority.

356. 3.135 l) External trade in goods statistics do not cover advertising materials and cheap samples. Other gifts are surveyed by Extrastat, while Intrastat covers them only if the importer is VAT registered.

357. Till 2003 (so in 2002, too) NBH's (National Bank of Hungary) cash-based data were used to estimate services. In 2004, HCSO introduced business service and tourism surveys, but transport, financial and insurance as well as government services data remained on cash basis. Since 2005 accrual data have been collected for the four above-mentioned services, too, while data collections of the export of services also cover these services. External production data were estimated on cash basis from 2005 to 2007, on accrual basis in the period of 2000–2004, and accrual-based data have been collected since 2008 again. Service data collections comply with EBOPS (Extended Balance of Payments Services) categories.

358. Services contain transport items and construction services listed under 3.144 a) – d), as well as financial services accounted in paragraph 3.143. Tourism services (paragraph 3.145) distinguish two travelling categories (business and other travelling – EBOPS 237 and 240), furthermore, since 2004 have explicitly contained health and education purpose costs (points 3.142 j) and k)).

359. External trade in goods contains all contracted work transactions and repairs, therefore, they are excluded from services (paragraph 3.143). Insurance services included revenues till 2004 and service fees since 2005. Tourism data do not contain estimations on foreign second homes owned by residents.

360. The import of goods accounted in national accounts consists of imports included in external merchandise trade statistics and some items recorded separately.

361. The Hungarian trade system is a special trade system based on the wide-sense definition of special trade system. Imports include the import of foreign goods released for free circulation or entered into industrial free zones, commercial free zones, customs warehouses or customs transit areas from the rest of the world for inward processing, and imports of domestic goods after outward processing. The flows of foreign goods between commercial free zones (or customs warehouses) and the rest of the world (including the transit area) are excluded from external merchandise trade statistics.

362. The import of goods recorded in external merchandise trade statistics consists of normal imports, imports for inward processing and imports after outward processing. External merchandise trade statistics comprise, for example, goods traded in accordance with barter agreements, non-monetary gold, goods traded on government account, food and other aids, goods for military use, electricity, gas, and water, goods for processing, returned goods, goods under financial lease, large volumes of goods acquired by travellers and goods on consignment. Goods temporarily admitted or dispatched, goods in transit, monetary gold, goods under operational lease and goods treated as part of services are excluded from external merchandise trade statistics.

363. 3.136 a) – c) and e) External trade in goods statistics do not include transit trade but include imported and exported products, transport equipment, temporary imports as well as operational leasing.

364. 3.136 d) Major and minor processing are not separated in statistics, therefore, all contracted works are listed among products in gross value.

365. 3.136 f) External trade in goods statistics survey products at borders. There is no information on post-border-crossing losses occurring before/after the ownership change.

366. The classification is made according to the national version of the Combined Nomenclature on ten-digit level (CN8+2 digits for national subdivisions).

367. HCSO made estimation for the two main types of illegal activities, namely drugs and prostitution. The results of the estimation were introduced into the calculation in 2006, and backward calculations were made until 2000. External trade in drugs is registered within external trade in goods, while external trade in prostitution is recorded among services.

368. The estimation of production and sales of drugs was based on a regular demand for data. The starting point was to estimate the consumption of drugs, using the number of consumers, the quantity of drugs and the prices by types of drugs. Main data sources were medical and judicial data, as well as reports of the police, the tax office and the customs office. For the estimation of intermediate consumption mainly reports of the police were used.

369. In the case of prostitution the method is similar. First of all, estimation was made for consumption, using the number of consumers, the number of cases and average prices. Two data sources were used in addition to the above-mentioned ones, namely, the chamber of prostitutes as well

as special studies. For the estimation of intermediate consumption mainly reports of the police were used.

370. The import of goods is valued on c.i.f. terms in external merchandise trade statistics, and on f.o.b. terms in national accounts. Corrections are calculated by using fixed coefficients in two steps. Firstly, c.i.f./f.o.b. corrections are estimated by using the coefficients, and imports are valued on f.o.b. terms. Secondly, the differences between invoiced values of exports and imports and values of exports and imports on f.o.b. terms are calculated, and allocated according to the residence of carriers to the credit and debit sides of transport services. The c.i.f./f.o.b. correction includes the adjustment of import values recorded in merchandise trade statistics and in national accounts.

371. Goods for repairs are recorded separately and valued in net values in national accounts. Commodity exchange trade and bunkers are estimated using balance of payments data.

For more details see Chapter 7, paragraph 41.

5.18. Imports of services

372. The data source of the import of services is the balance of payments statistics compiled by the National Bank of Hungary.

5.18.1. Transport services

373. The import of transport services includes transport charges paid by a resident trade operator (importer or exporter) or carrier to a non-resident carrier for the import of foreign goods or export of domestic goods, as well as expenses of resident carriers arising from exports or imports to a non-resident customer. This item comprises payments to non-resident carriers arising from the re-export of imported goods. Transport includes net payments – associated with the international transport of goods – to non-resident railways, airlines and carriers by resident enterprises. Transport services also cover payments between residents and non-residents arising from other transport of goods.

374. Passenger transport includes expenses arising from the cross-border transport of passengers, such as fares, excess luggage fees, consumer spending on the carrier vehicle (including food, drink, duty-free goods, etc.). This title also covers tickets sold as part of a travel package. Fees charged for cruises and for travels inside the destination country are recorded in '(Private) travel services'.

375. There is no breakdown by transport modes (sea, road, railways, etc.).

5.18.2. Travel services

376. These services include expenses (such as daily allowances, spending on accommodation, the purchase of goods and services, as well as participation fees) incurred by enterprises and organisations on business trips (relating to sales campaigns, market research, commercial negotiations, launching a product, participation in congresses, training courses abroad or temporary assignments). Payments can be made in currency, by check or credit card. Expenses do not include spending on fares 'Passenger transport'. Currencies bought for the purposes of business trips and later re-exchanged are accounted as reverse expenses. Currency expenses less agent commissions by travel service providers (such as travel agencies, hotels, travel bureaus and other enterprises) arising from the provision of travel services for business and professional purposes are also reported under this item.

377. Expenses arising from resident individuals' travels abroad, such as currency purchases, fees charged by travel agencies in connection with individuals' travels, as well as currency expenses arising from the use of bankcards are reported on the debit side of travel services. The exchange of currency for forints by resident customers is accounted as reverse expenses only if the transaction actually involves the re-exchange of currency purchased previously for travel purposes. Currency expenses

arising from the purchase of tickets by travellers abroad are not reported under this item ('Passenger transport'), except for intra-destination country travels and cruises.

378. Payments arising from the exchange of domestic vacation rights for foreign ones (such as joining RCI and exchange of vacation rights) are also reported under this item.

379. As individuals receiving medical treatment and university students are accounted as residents of their home country even if they spend more than one year abroad, scholarships received from institutions of education, travel costs and other expenses are reported under this title.

5.18.3. Communication services

380. This item includes expenses arising from telecommunications services (such as audio and visual transmission, telephone, telex, fax, broadcasting and satellite services, etc.) and postal and courier services (such as forwarding letters, newspapers, periodicals, publications and parcels).

5.18.4. Construction services

381. These services cover payments to non-residents for construction and installation work carried out in Hungary. (Wage-type payments are reported under 'Compensation of workers employed for less than one year'. Payments in exchange for goods and services by a non-resident main contractor to resident subcontractors in connection with a project in Hungary, and by a resident main contractor to non-resident subcontractors in connection with a project abroad are reported under 'Other business, professional and technical services.')

382. Revenues and expenses arising from the maintenance of real property owned by residents abroad and by non-residents in Hungary are also reported under this title.

383. Construction abroad and construction in Hungary are not distinguished.

5.18.5. Insurance services

384. Insurance services cover revenues and expenses arising from property, liability, personal and life insurance associated with the transport of goods, and payments arising from re-insurance and – based on the 'green card' and the registration number agreements – vehicle liability insurance. This item comprises insurance fees paid by resident exporters and importers to non-resident insurers.

385. As provided by the relevant sections of Act on Insurance, insurance premium sent by resident to non-resident insurers shall also be reported under this item.

386. Insurance damages received and paid are not recorded under this title.

387. Till 2004 insurance services data contained cash-based data, in which the National Bank was not able to separate service fees in imports. Statistics made on accrual basis in the field of insurance have contained service fees since 2005.

5.18.6. Financial services

388. This item includes fees paid in connection with financial intermediation (such as service charges on securities accounts and securities deposits, broker's fees, commissions paid to commodity exchange dealers, bank charges, fees and commissions associated with letters of credit, banker's bills of exchange, foreign exchange transactions, factoring charges, etc.). The debit side of these services comprises guarantee payments paid. Default charges and interests on financial assets and liabilities, and fees associated with other types of financial collaterals are also reported under this title.

5.18.7. Computer and information services

389. This item covers transactions in computerised data and news services between residents and non-residents. Transactions include payments arising from database development and data storage, direct access time series, data processing, hardware consultation services, software installation, the Internet, computer maintenance and repair, news services (transmission of news and photo content), as well as direct subscription for newspapers and periodicals.

390. Year 2002 and current data on external trade in goods cover software sold in commercial quantities in software (including its hardware costs too) value. Services include the value of costs sold in non-commercial quantities. Till now, there has been no experimental calculation to assess software values separately. HCSO has estimated services since 2004 and under existing conditions software (EBOPS 263) and license fees (EBOPS 266, more specifically EBOPS 892 (Other patent rights and license fees)) can be separated.

5.18.8. Royalties and licence fees

391. This item covers payments for the use of non-produced, non-financial goods, intellectual products and other intangibles (e.g. copyright and publishing rights, patents, brand name usage, licence, know-how, trademark, franchise, goodwill and concession). Payments associated with the acquisition of an interest in a non-resident enterprise leading to concession rights in exchange for the payments shall be recorded as direct investment rather than as concession fees.

5.18.9. Other services

392. The re-export of imported goods and other trade-related services cover payments arising from transactions involving non-resident goods not crossing the frontiers. The re-export of imported goods shall be preferably recorded in net terms. Official and inspection charges on goods crossing the frontiers and the re-export of imported goods (including quality inspection fees, payments in exchange for various certificates) are also recorded under this title.

393. Leasing fees include fees arising from rental and leasing services other than financial leasing (excluding real property), comprising rents and leasing fees paid for leasing various pieces of machinery, equipment, carrier vehicles (excluding operators) and containers. The commercial value of the leased object is not taken into consideration among exported and imported items, and ownership remains with the lessor. Rents received by non-residents for letting real property abroad are recorded in this item, provided that the lessee is not a natural person. Should the lessee be a natural person, rents for the real property as specified above are included in '(Private) travel services'. Rents for non-residents' real property in Hungary and residents' real property abroad are not accounted in this item.

394. Other business, professional and technical services include payments arising from services such as legal representation and consultation, promotion and market research, advertising, research and development, architecture, engineering and other technical services, agricultural and mining services, as well as other personal, security and investigation services, translation, interpretation and tender fees, etc. This item covers the utility charges, etc. paid by resident enterprises providing services (usually in construction) abroad. Special business, professional and technical service fees (charged by national security bodies and the police) are recorded under this title.

395. Operating and entertainment costs incurred by enterprises' representative offices abroad (excluding military and diplomatic missions) as well as fees arising from the provision of all other services not specified elsewhere (such as promotion and publicity, advertising, fairs and exhibitions, graveyard maintenance, etc.) shall also be included under these services. Furthermore, this item contains payments in exchange for goods and services made by a non-resident chief contractor of a Hungarian investment project to resident sub-contractors, and by a resident main contractor of an

investment project abroad to non-resident sub-contractors. This title comprises payments of branches, subsidiaries and associated enterprises to their parent companies to cover overhead expenses.

5.18.10. Personal, cultural and recreational services

396. Audiovisual and related services comprise payments for services arising from the production of motion picture (movies and videos), radio and television programmes, music recording, including rents, production costs and artists' fees, as well as broadcasting and coded transmission, etc.

397. Other cultural and entertainment services include payments in exchange for the services of institutions such as museums, libraries, archives and other organisations providing educational, sports and entertainment services.

5.18.11. Government services

398. This item covers the expenses on the maintenance and equipment, operation and entertainment duties of diplomatic missions as well as the expenses incurred by military missions (such as peace-keeping missions and international military exercises).

Table 5.37 Exports and imports of goods and services, 2002 (million HUF)

	Exports	Imports	Balance
Trading of normal goods, total (except apports, financial lease, returned goods)	7 642 543	8 568 409	-925 866
Apports of tangible fixed assets	191	1 738	-1 547
Goods under financial leasing	4	192	-187
Returned goods	-38 719	-78 193	39 474
Goods after processing	1 153 228	59 124	1 094 104
Goods before processing	45 384	1 035 918	-990 535
Fees of repairs	9 382	8 586	796
Processing fees for goods under inward processing procedure delivered (sold) from domestic territory to industrial free zone	9 243	9 243	0
Processing fees for goods under inward processing procedure delivered (sold) from one industrial free zone to another	4 661	4 661	0
<i>Trading of goods, (external merchandise trade statistics concept + separately recorded) f.o.b./ c.i.f</i>	<i>8 825 917</i>	<i>9 609 672</i>	<i>-783 762</i>
c.i.f. /f.o.b. correction	0	-258 129	258 129
<i>Trading of goods f.o.b./f.o.b</i>	<i>8 825 917</i>	<i>9 351 59</i>	<i>-525 633</i>
Commodity exchange transactions	271	1 303	-1 031
Bunkers	0	6 718	-6 718
Illegal activity (drugs)	15 288	30 020	-14 732
Trading of goods, total (national accounts concept)	8 841 476	9 389 590	-548 114
Outward processing	30 000	0	30 000
Transport services	178 811	270 979	-92 169
Travel services	954 963	547 437	407 526
Illegal activity (prostitutions)	42 600	0	42 600
Communications services	31 926	30 508	1 418
Construction and installation services	46 179	62 810	-16 631
Insurance services	3 510	39 179	-35 669
Financial services without FISIM	37 791	38 533	-743
FISIM	6 009	12 038	-6 029
Computer and information services	51 503	43 840	7 663
Royalties and licence fees	88 909	106 866	-17 957
Other services	351 870	464 287	-112 418
Personal, cultural and recreational services	134 192	125 162	9 030
Government services	20 721	25 756	-5 035
Services, total	1 978 982	1 767 395	211 587
Goods and services, total	10 820 458	11 156 985	-336 527

CHAPTER 6. BALANCING OR INTEGRATION PROCEDURE AND VALIDATION OF ESTIMATES

6.1. GDP balancing procedures

1. GDP estimation is made on production and expenditure side. In the early and mid 90s the results of the output approach were considered more reliable based on the analysis of reliability of data sources that is why the expenditure components were adjusted in order to achieve the same GDP figures. Balancing procedure is recently made mainly on aggregate level. No detailed reconciliation procedure, such as annual IOT or SUT tables is used. The discrepancy between output and expenditure approach is explicitly shown on the expenditure side in annual publications.

6.2. Other approaches used to validate GDP

6.2.1. Supply and use tables

6.2.1.1. Introduction

2. In Hungary the compilation of input-output tables (IOT) has a long-standing tradition. It dates back to the fifties. In the past the benchmark symmetric IOT was compiled every five years on average. Between two benchmark years simplified versions were estimated, on the basis of the latest detailed one. At that time IOT were constructed as an extension to regular National Accounts (like a satellite account) rather than an integrated part of them, without having a key role in the estimation of GDP. The compilation of main aggregates of GDP and IOT were separated, therefore there was hardly any feedback between the two systems. The IOT were used as a weighting scheme for double deflation method for production-side figures of GDP. In this period the IOT served, first of all, analytical purposes and economic researches. In 1998 there was a big turning point in the compilation method. In the frame of the National Development Plan aiming at adopting the statistical acquis of the EU, an improvement programme was launched in this field to ensure better compliance with ESA95 rules. Since then annual supply and use tables (SUT) at current prices have been compiled on a regular basis using the commodity flow method. The next stage of the development was the introduction of the Dutch simultaneous compilation method of SUT at current and constant prices. Since 2000 SUT have been compiled at current and constant prices simultaneously. Symmetric input-output tables with the related import matrix are compiled every five years – for years ending 0 or 5 (excepting the year of 1998), in accordance with the Data transmission Programme under ESA'95. The further step of improvements is the integration of SUT/IOT into the system of National Accounts. This integration is one of the strategic elements of NA developments.

6.2.1.2. The system design

6.2.1.2.1. The structure of the system

3. The accounting of goods and services in SUT is made according to the origins of the supply and the destinations of the use. The supply table shows the supply of goods and services primarily at basic prices, by groups of goods and services across rows, and broken down by domestic output and imports across columns. Domestic output is detailed to the level of branches. Imports broken down by products in the supply table are valued at c.i.f. prices, while total imports are valued at f.o.b. prices in sector accounts. These two valuation principles are reconciled in SUT by calculating the c.i.f./f.o.b. adjustment item. To get total supply at purchasers' prices some additional columns for trade and transport margins and net taxes on products are added to the basic supply table. So margins in the supply table are presented in two different ways: as the output of an industry or imports on the one hand, and as an element of the valuation items between supply at basic prices and use at purchasers'

prices on the other hand. To avoid double accounting, total trade and transport margins are put into the columns of margins in the trade and transport services rows as negative items.

4. In the case of VAT only the non-deductible part of VAT is recorded in the supply and use tables. The following categories are identified for the calculation of non-deductible VAT:

- household final consumption expenditure (including also agricultural on-farm consumption and direct sales by flat-rate farmers to final consumers);
- social transfers in kind to households, purchased by government from market producers;
- intermediate consumption of the General government sector (excepting the part that belongs to market output);
- intermediate consumption of the NPISHs sector;
- intermediate consumption of other activities liable to non-deductible VAT (VAT exempt activities);
- gross fixed capital formation (GFCF) of the General government sector and the NPISHs sector (excepting the part that belongs to market output);
- gross fixed capital formation of other activities liable to non-deductible VAT (VAT exempt activities);
- expenditure of business enterprises falling under restriction on the right to deduct VAT.

5. The use table shows the use of goods and services at purchasers' prices, by groups of goods and services across rows and by destinations of use across columns. The items of use are intermediate consumption (broken down by branches), the final consumption expenditure of households, the final consumption expenditure of the government and non-profit institutions serving households, gross fixed capital formation, changes in inventories and exports. Furthermore, this table contains the gross value added at basic prices broken down by branches. In accordance with National Accounts, exports are valued at f.o.b. prices.

6.2.1.2.2. Classification of branches and commodity groups

6. During continuous improvements different lists of goods and services have been worked out at different levels of detail, which keep the information derived from branch statistics as well as possible and fit to international nomenclatures, but satisfy the requirements of a treatable system. The main aspects of aggregation were:

- the availability of basic value, volume and price information (PRODCOM statistics, agricultural account data, statistics of service activities etc.);
- homogeneity by purposes of use (household consumption, gross fixed capital formation, intermediate consumption);
- the weight of a commodity group within total supply;
- homogeneity by taxes (VAT rates, excise duties);
- homogeneity by price movements;
- the possibility of aggregation into 2-digit level of CPA.

7. The list of commodities included in the I/O benchmark table of 1998 contained 660 groups of goods and services. To connect the domestic output with imports the BRIDGE system was used, establishing a link between the two basic nomenclatures – the Hungarian Domestic Product Classification and the Combined Nomenclature. Services are grouped by the Hungarian Classification of Services.

8. Basic matrices were broken down across columns by the standard industrial classification of all economic activities (TEÁOR'98). Basic calculations in the case of manufacturing were made at 4-digit level of the activity classification system, while in the case of other branches at 2- or 3-digit level.

9. When calculating supply-side data of the SUT for 2000 the previously elaborated commodity structure was applied. Due to the lack of sufficiently detailed price indices the compilation and simultaneous balancing of supply and use tables at current and constant prices were carried out at a more aggregate level. To implement this work an aggregated accounting framework - containing 135 groups of goods and services – was elaborated and has been applied up to now.

10. Tables are published at two-digit level of the respective classification system across both columns and rows. The grouping established in the publication fully corresponds to the CPA and NACE classification systems applied in the European Union.

6.2.1.3. Main data sources and units

11. The most important sources of the Supply table at current prices:

- data of questionnaires of the structural business statistics survey,
- PRODCOM survey (statistics of industrial products),
- agricultural production data from the Economic Accounts for Agriculture (EAA) and agricultural commodity balances,
- data of the annual survey of construction,
- data of the following services: post and telecommunications, hotels and restaurants, computer and related services, research and development services, cultural activities, sewage and refuse disposal services, repair services,
- output of the Government sector broken down by functional tasks in detail,
- output of the sector of financial corporations,
- output of the sector of NPISHs,
- estimation of the output of the Households sector,
- data on imports from EXTRASTAT and INTRASTAT (database by CN code of imported products and branch code of importers), imports of services from the Balance of Payments and from statistical surveys, by headings and broken down by estimation into commodities,
- administrative data sources (tax returns, profit and loss accounts, VAT returns).

12. The most important sources of the Use table at current prices:

- input data on the structure of intermediate consumption from statistical surveys,

- the structure of expenditure of government institutions from budgetary reports,
 - data from branch statistics on the intermediate consumption structure of agricultural activity,
 - experts' estimation for the cost structure of financial corporations,
 - estimation for the cost structure of own-account construction of dwellings by households and of own-account housing services provided by owner-occupiers,
 - energy consumption data from the energy balance,
 - household consumption in detailed groups of commodities (household final consumption expenditure, the agricultural production for own final use, social transfers in kind, the balance of tourism expenditure),
 - collective consumption at a detailed level,
 - investment statistics and detailed data on other items of gross fixed capital formation,
 - inventory statistics broken down into own-produced and purchased goods,
 - data on exports from EXTRASTAT and INTRASTAT, export of services from the balance of payments by headings, and data from statistical surveys,
 - data on value added components (compensation of employees, other taxes on production, other subsidies on production, gross operating surplus).
13. The most important sources of the valuation matrices:
- trade turnover data, turnover data broken down by the CPA classification and by type of trade (sales of motor vehicles and automotive fuel, wholesale trade, retail trade),
 - statistics on freight transport by type of goods and transport activities (railway, road and other transport), data on freight transport performances in natural units,
 - VAT and excise duty rates and items by groups of commodities, other taxes on products, and customs data for the calculation of matrices of taxes and subsidies on products.
14. Other sources for constant price calculations:
- producer price indices of industrial products and services by the direction of sales (domestic, export),
 - volume indices of industrial production by branches (for consistency checking),
 - unit value indices for homogeneous product groups and actual price indices for heterogeneous product groups of imported/exported goods, at CN code level from external trade statistics,
 - consumer price indices by goods and services,
 - price indices from the EAA (Economic Accounts for Agriculture) at product level,
 - volume and price indices of construction industry at aggregate level;
 - secondary price indices of GFCF at aggregate level,

- volume and price indices of retail trade,
- volume data on transport activities from the transport statistics in natural units, other transport price information from statistical observations by type of transport,
- volume and price information available from statistical observations of other services activities.

15. The observed units, underlying SUT, are enterprises.

6.2.1.4. Balancing

16. After checking – in terms of consistency, validation and plausibility –, completing and correcting the data available from different basic sources, Supply and Use tables are filled up. At first, the supply and use tables filled with primary data are generally unbalanced. The elimination of inconsistencies is the balancing process.

17. The central part of the SUT/IOT compilation is the balancing process, i.e. the elaboration of equalities between supply and use by commodity groups.

There are two types of identities between supply and use tables (supposing that they are valued consistently, i.e. both at basic prices or both at purchasers' prices):

Identity by industry:

Output by industry = Input by industry, i.e.

Output = Intermediate consumption + Gross value added
for each industry;

Identity by product:

Total supply by product = Total use by product, i.e.

Output + Imports = Intermediate consumption + Final consumption expenditure
+ Gross fixed capital formation + Changes in inventories
+ Exports

for each product.

18. The income side does not play a significant role in balancing the SUT in our case.

19. Balancing requires the compilation of additional matrices beyond the basic tables, because the supply side of the balances in general can be primarily filled with basic price data, whereas the use side with purchasers' price data.

20. To bring into harmony supply and use tables it is necessary to compile matrices of trade and transport margins, and matrices of taxes on products and of subsidies on products – according to the structure of the use table. These valuation matrices can be calculated in an indirect way, by use of available branch statistical information and by applying experts' estimations (for example about trade channels and product-specific trade margins). In general, complete valuation matrices are compiled every 5 years because of their demand for a large amount of data. Between these years the vectors of margins, taxes and subsidies on products are compiled using new information by the update method. By the beginning of SUT balancing, we took into account that data on the supply side are in general more reliable – but not in all cases. Balancing was made manually. Because of the relatively large discrepancies automatic balancing methods were absolutely not applicable. After introducing the simultaneous compilation the balancing process has been changed. In the new system the following figures are available for each entry of SUT:

- data for year n at current prices
- data for year n at prices of year n-1
- data for year n-1 at current prices of year n-1
- price, volume and value indices.

21. The main advantages of compiling price and volume measures in the above framework are:

- extended checking on consistency of the set of data (finding mistakes in the balancing of data at constant prices may lead to the adjustment of current price figures);
- plausibility checking by product (comparable price indices gathered from different sources for the same commodity) and by branch (comparable volume indices of intermediate consumption, value added and output of the same industry);
- it provides the indices for balancing item of the production account directly (volume index for gross value added by double deflation method).

22. An important part of the implementation of the Dutch method was the specification of the level of aggregation, the choice of index formulae and the choice of the base year to be used in the Supply and Use framework. Due to the lack of price information we adjusted the product list used for the SUT of 1998 to obtain a shorter and more aggregated list of commodities (135 groups).

23. For the constant price estimations Paasche price indices, Laspeyres volume indices and changing base years (n-1) are applied. When compiling SUT at current and constant prices simultaneously, we apply the column-row-column working procedure. First the specialists of each branch transform data received from basic sources into NA format. They are responsible for completing the data, for making estimations and for price indices. The columns of SUT are filled up with input data by the specialists. There is an extra team of “integrators”, whose task is balancing the rows in SUT. In this second step data are “adjusted” across rows to achieve balance, while corrections across rows do not imply corrections across columns. Large discrepancies row-wise are analysed and discussed between integrators and specialists. Automatic balancing is used as a very final step only of compiling SUT to eliminate small discrepancies. So balancing is basically made manually. Manual routine procedures were elaborated to decide what information was more reliable when data from different sources were reconciled. Balancing is a very time-consuming process. Third step: occasional unacceptable changes across columns caused by row balancing are checked and, when appropriate, revised by branch specialists.

6.2.1.5. Compiling input-output tables

24. The balanced supply and use tables serve as ground for the compilation of the symmetric table. The symmetric input-output table (SIOT) – that consists of the same homogeneous units in respect of both output and input – can be derived from the supply and use tables via mathematical transformation and by use of complementary information. In Hungary two types of SIOT are compiled: product by product and industry by industry types. The industry by industry type SIOT is compiled by a transformation process assuming a “fixed product sales structure”. The transformation of the product by product type SIOT is based on Clopper Almon’s iteration process that is consistent with the assumption of product technology and also eliminates occasional non-negative input elements directly (meets the requirement of non-negativity).

6.2.1.6. The integration of SUT into the system of National Accounts

25. The theoretical concept and the definitions are the same for SUT/IOT and National accounts, but due to the different data sources, methodology and cross-checking possibilities data in SUT first differed from those calculated in the frame of regular National Accounts. The discrepancies are investigated, analysed and examined. On the basis of this examination a feedback is made to the system of NA and to basic statistics as well. Furthermore, the development of SUT compilation has not yet been finished, and in this work there is a close co-operation with improvements in other parts of the system of National Accounts. The new compilation process of SUT has a lot of new requirements from basic statistics in terms of availability, quality and timeliness of detailed data, so it stimulates quality improvements in basic sources.

26. Recently many developments have been made in the Hungarian System of National Accounts to improve compliance with ESA'95. In connection with this, experiences of the SUT compilation, problems in the balancing processes and their solutions all contribute to NA developments. Besides the change of base year (to 2000) several other methodological changes were introduced in the annual National Accounts for 2000-2001 to improve compliance with ESA'95.

27. Many of them were based on the SUT/IOT feedback or were tested in the SUT framework.

For example:

- In the new system the gross output of restaurants includes food and beverages consumed, and not only “trade margins” on them.
- Several adjustments on the structure of households’ consumption expenditure were based on the commodity flow approach.
- In the case of some special industries subcontractors’ performance is accounted by gross method, as a part of intermediate consumption, and certainly as a part of gross output. This way of accounting does not affect GDP, but influences the structure of gross output and intermediate consumption.
- Major processing work on imported materials is accounted by gross method in contrast with the earlier practice (net method); this adjustment was calculated and tested in the SUT framework.

28. In ESA95 SUT play an important role as an integration framework. Integration can be achieved in two ways: completely or by series of revisions. In the first case there is only one simultaneous compilation process. In the second the integration means basing provisional NA calculations on the latest SUT available, and revising provisional NA with the SUT for the same year to get the definitive NA figures. The final goal of current improvements is the full integration of SUT into the system of National Accounts – by means of a consistency “bridge” between basic data sources and the calculation of GDP –, but it can only be achieved step by step.

29. GDP can be estimated by production, expenditure and income method. Theoretically each measurement should result the same estimation, but in practice the three approaches compiled independently can result three different estimates of GDP. In traditional National Accounts the reconciliation between the three approaches takes place at a global level, manually. When using SUT as an integration framework for the compilation of NA data the reconciliation among the three different approaches of GDP calculation is achieved at a detailed product level. The main difference between SUT and regular NA is the product dimension.

30. Integration is one of the strategic elements of recent improvements aiming to build a fully integrated, more standard, transparent and more reliable estimation system of National Accounts figures.

31. At the beginning of 2006 a new project “S10705 Integration of the SUT/IOT into the National Accounts” was launched in the frame of the Modernisation Programmes by Strategic Fields of HCSO.

32. This project aimed at improving the quality of National Accounts and reducing the processing risk of National Accounts compilation by integrating current and constant price SUT/IOT in the frame of an efficient and well-documented production process. The integration of SUT into the National Account compilation process has a lot of methodological and practical advantages. Consistency and coherency for current and constant price estimates are achieved through an integrated supply and use framework. SUT confront supply and use estimates across products, and also confront estimates of inputs (including primary inputs) and outputs by industries. In a balanced table, supply for a product equals to demand and the total input of an industry (including value added) equals to its output. This provides an efficient framework for reconciling data on production, income and expenditure, and hence producing estimates of GDP. In this system the production account and the generation of primary income account are compiled as part of the annual SUT.

33. Integration is a very time-consuming process and requires a lot of resources (e. g. human resources, IT infrastructure). Three different methods of development were analysed and compared before decision-making. Finally it was agreed that the best way of the integration was to adopt the up-to-date, well-documented and tested SNA-NT (System of National Accounts – Norwegian Technology) software. This Norwegian IT system (SNA-NT) was developed for Statistics Norway, and follows the compilation technology for Norwegian annual National Accounts, in which the SUT compilation framework is fully integrated. Concepts, methodology, definitions, accounting rules/structure and classifications fully comply with ESA’95 requirements. The main characteristic of the SNA-NT system is that the input data of the production account are also estimated by homogeneity groups, and are put in and balanced in a SUT-based framework. National Account figures based on SUT technique compilation method are consistent and more reliable, and there is a permanent feedback to basic data sources to improve the quality of NA aggregates. In September 2006 HCSO and Statistics Norway signed a co-operation agreement on the use of the SNA-NT software. According to this agreement HCSO has the right to use this software free of charge to integrate SUT into National Accounts.

34. The project plan of implementing the SNA-NT software contains the milestones of developments and the steps needed to achieve the new integrated system.

35. The working plan is described in a sequence of six steps:

- training NA staff
- establishing the level of detail for commodities, industries and final uses categories and preparing input data for testing purposes
- installing the software (carried out in November 2006)
- compiling and balancing data of 2005 in the system (and compiling data of 2004 for constant price calculations made at prices of the previous year), which serves as a reference point for integrated accounts
- updating and balancing the system for 2006-2007

- after analysing the results of three consecutive years decision on the implementation of the new integrated compilation method as a regular method of calculating NA aggregates and on the revision of time series.

36. The timeframe of this medium-term plan is 2006-2009. The plan includes the working plan, time schedule and Gant diagram of the steps needed to implement the integration.

CHAPTER 7. OVERVIEW OF THE ALLOWANCES FOR EXHAUSTIVENESS

7.1. Output approach

1. This chapter gives an overview of adjustments made in Hungarian national accounts (HNA) in order to ensure the exhaustiveness of national accounts data in accordance with Commission Decision No. 94/168/EC. Exhaustiveness adjustments are calculated and tabulated according to Eurostat's Guidelines on Tabular Approach to Exhaustiveness (also referred to in Chapter 1.3.5 and 3.6), with respect to the recommended methods and available data sources. In the framework of this the following set of tables was compiled from output approach:

- Table 1A Elements of non-exhaustiveness
- Table 2A Exhaustiveness adjustments
- Table 3A Summary of adjustments.

2. Detailed tables are given in Appendix. Those elements of income are taken into account in estimations for the non-observed economy which are taxable and related to productive activity at the same time. Estimations cover most of the presumed volume of the non-observed economy.

3. The estimations of exhaustiveness from output approach are related to non-exhaustiveness types (N1-N7), institutional sectors and economic activities (NACE Rev. 1 sections). The table below shows the relative importance of types N1 to N7 in Hungarian national accounts. The importance of type N6, namely tax evasion due to misreporting by producers, is striking. It accounts for more than half of adjustments. Realizing that hidden activities related to N6 are so wide-spread in Hungary, it is necessary to study this area deeply. Therefore, special attention has been paid to misreporting in a recent project devoted to the improvement of quality of national accounts (also referred to in Chapter 3.6), which has aimed to develop estimations for the non-observed economy.

Table 7.1 Exhaustiveness adjustments: relative importance (%) of types N1 to N7

Non-exhaustiveness type:	N1	N2	N3	N4	N5	N6	N7	Total
% of total GDP	1.3	6.1	22.3	1.0	-	61.8	7.4	100.0

4. The table below shows that exhaustiveness adjustments were dominant in two sectors in 2002: households and non-financial corporations. Considering both absolute figures and ratios, more considerable adjustments were made for households than for non-financial corporations, which is typical in international comparison. Exhaustiveness adjustments are not significant for financial corporations and there is none of them for general government or non-profit institutions, since data for these sectors are usually accurate and cover most (if not all) units. (See Appendix in Table 3A.)

Table 7.2 Exhaustiveness adjustments: relative importance (%) of various institutional sectors

Breakdown by institutional sector	NFC	FC	GG	NPISH	HH	Sectors, total
% of total adjustment	17.6	0.4	-	-	82.0	100.0
% of institutional sector's GVA	5.6	2.3	-	-	65.4	-
% of total GDP	2.7	0.1	-	-	12.5	15.3

5. Exhaustiveness adjustments cover all industries, among which Real estate, renting and business activities (K); Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods (G); and Agriculture, hunting and forestry (A) are the most affected as can be seen in the table below. There are not any other striking figures. (See Appendix.)

6. After a brief summary, exhaustiveness adjustments are described in detail in what follows.

7.1.1. Financial and Non-financial corporations sectors

7. Before describing the non-exhaustiveness types in the non-Financial corporations sector, it is necessary to clear that only the estimation for wages and salaries in kind is considered as non-exhaustive and classified within N7 for financial corporations. It is calculated by expert estimation, and the Labour Cost Survey as well as Declarations on contribution liabilities to the budget are used as data sources. There is no other adjustment made for this sector, because data are usually accurate and cover most (if not all) units. The rest of this chapter is concerned with adjustments in the non-Financial corporations sector by non-exhaustiveness types.

N1. Enterprises deliberately not registering - underground

8. In Hungarian national accounts there are no estimations for the time being on producers who fail to register in order to avoid taxes. Illegal producers are recorded in N2, while missing output – for balancing reasons – in N6. Only entrepreneurs without or with small staff and with few administrative duties are supposed to be able to avoid government control. They are estimated in the household sector.

N2. Enterprises deliberately not registering - illegal

9. The estimation for illegal activities was introduced in Hungarian national accounts in 2007, with the reference year of 2005, retrospectively. The estimation is described in the part concerning the household sector.

N3. Enterprises not required to register

10. All enterprises in the non-Financial corporations sector have to pay (normal or simple) corporate tax, so they are required to register in commercial courts. Only special producer groups in the household sector (e.g. own-account agricultural producers, mainly natural persons) are not required to register. The estimation method is presented in the part on the household sector.

N4. Enterprises (legal persons) not surveyed

11. The Hungarian national accounts are mainly based on administrative data sources. The HCSO's Business Register (BR) is regularly updated with data from the administrative register and statistical surveys. The administrative register is also referred to as the Tax Office Register (TOR). Its maintenance is the responsibility of the tax office. When HNA obtain tax returns from the tax office, they are cross-checked with HCSO BR data to eliminate companies not supplying data.

12. There are two possible reasons for differences between the TOR and BR data files:

A) A unit is included in data files of tax returns, but the unit is not included in BR: it is due to the inconsistency between the two databases. However, after a special analysis the unit could be included in the JAVA database system. The missing unit is compared with the most up-to-date version of the BR, and if found or if there is a special register mistake, the enterprise is considered „active” for national accounts purposes.

B) If a unit is included in the BR, but it did not fill in a corporate tax return, it is kept in the file and

considered „active” for national accounts purposes. It is compared with the previous year’s database. If an enterprise’s registration number appears in the previous year’s database, but it did not submit a corporate tax return in the reference year, then it is paired with the file of „terminated and transformed” enterprises. If it does not appear there either, then its data are imputed from ABS statistics – supposing that they were provided by the enterprise. In case it is missing there too, it is considered as a „missing” enterprise within non-exhaustiveness type “N4”, and its data in the reference year are estimated according to the previous year’s data.

13. The estimation for registered legal persons that are not included in statistics is made by expert estimation on the basis of the data sources mentioned above. The adjustment covers all industries and it accounts for 5.9% of total adjustments for the non-Financial corporations sector and 1.0% of total adjustments for the national economy.

N5. Registered entrepreneurs not included in statistics

14. These types of data are classified into the Households sector.

N6. Enterprises deliberately misreporting

15. In case of small double-entry and single entry book-keeping corporations liable to corporate tax and enterprises registered to the simplified corporate tax, it can be assumed that there is a deliberate behaviour pattern to overestimate costs and underestimate revenues in order to avoid taxation, social contribution payments etc. Having some 10 years of experience in using tax returns for national accounts purposes a considerable knowledge accumulated in that field. Based on these experiences the data of all types of enterprises need to be adjusted to differing degrees.

16. In case of corporations with double-entry book-keeping researches underline the idea that small enterprises tend to sell goods and services without an invoice, so the incidence of under-reporting gross output is more characteristic than over-reporting intermediate consumption. Therefore, the gross output of small enterprises (with less than 10 employees) is adjusted (Exhaustiveness estimation for type 2 corporations). The calculation is made by expert’s estimation on the basis of corporate tax returns. The adjustment covers all industries and accounts for more than half (60.1%) of the total N6 adjustment for non-financial corporations. (For further details see Chapter 3.6.)

17. In case of corporations with single-entry book-keeping the picture seems to be different. This correction is needed because enterprises declare significantly higher costs than they actually have. The correction is based on a hypothesis according to which small-sized companies can account – partly due to the more simplified accounting regulations for single-entry bookkeeping – some final consumption items as intermediate consumption with the intention of avoiding taxation (Exhaustiveness estimation for type 3 corporations). The calculation is made by expert’s estimation on the basis of corporate tax returns. The adjustment covers all industries and accounts for 39.9% of the total N6 adjustment for non-financial corporations. (For further details see Chapter 3.6.)

18. The relative importance of misreporting by enterprises is significantly high (79.4%) compared to other non-exhaustiveness types relating to the non-Financial corporations sector. N6 adjustment accounts for 13.9% of total adjustments for the national economy.

N7. Other statistical deficiencies

19. According to Eurostat’s Guidelines the volume of tips and wages and salaries in kind should be included in N7. The following items are equivalent to those estimated by the income side approach (Chapter 4) and are classified among exhaustiveness types. Other statistical deficiencies have not yet been separated.

Tips

20. Tips are calculated in the same way in NFC and HH sectors. The output has to be increased by the estimated value of tips. Results of a household survey conducted by HCSO in 1997 were the basic source to estimate the volume of tips. The adjustment is made in 4 branches:

- 5530 Restaurants
- 5540 Bars
- 6022 Taxi operation
- 9302 Hairdressing and other beauty treatment

The adjustment accounts for 16.3% of the total N7 adjustment for non-financial corporations.

Wages in kind

21. The types of payment in kind – mentioned in the Commission Decision of 22 February 1995 on exhaustiveness – are the following:

- private use of business cars
- employers' contributions to the running costs of canteens, such as cleaning, heating, electricity and other costs connected with running the premises
- meal vouchers provided by employers to employees
- food and accommodation provided free of charge or at reduced prices to employees in hotels, catering establishments or agriculture
- dwellings let to employees rent-free or at below-market rents
- the value of the interest forgone by employers when they provide loans to employees at reduced, or even zero, interest rates
- travel tickets to employees free of charge or at reduced prices
- electricity and coal supplied to employees free of charge or at reduced prices
- free telephone use
- traders' consumption of own traded goods or services

22. As described in Chapter 4, wages and salaries in kind are accounted in the following way in Hungarian national accounts:

Table 7.3 Wages and salaries in kind

<i>D.112</i>	<i>Wages and salaries in kind</i>
D.1121	Value of employers' own-produced and purchased products given to employees
D.1122	Imputed value of welfare services
D.1123	Interest difference on preferential loans
D.1124	Representation, business gift
D.1125	Passenger car use for private purposes

Welfare services

23. Enterprises provide various social welfare services to their employees, either at reduced prices or free (for example kindergarten, subsidised meals). The subsidies on these services are valued as compensation of employees. Therefore, output is increased by total cost of social welfare services provided to employees minus the charges paid by employees.

24. These data are not directly available from corporate tax returns, but they are covered by the Labour Cost Survey. For enterprises which are observed by the Labour Cost Survey, data from that statistical survey are used. The data of other enterprises can be estimated on the basis of figures reported by observed enterprises, taking into account wages and salaries in kind declared in personal income tax returns submitted to the tax office.

Own products and services given to employees

25. In accordance with ESA95 requirements the value of own products and services given to employees are also accounted as part of gross output and wages and salaries in kind (for example free passes at transport companies or free beer in breweries).

26. These data are not directly available from corporate tax returns, but they are covered by SBS. For enterprises which are observed by SBS, data from that statistical survey are used. The data of other enterprises can be estimated on the basis of figures reported by observed enterprises, taking into account wages and salaries in kind declared in personal income tax returns submitted to the tax office.

Purchased goods and services given to employees

27. In business accounting material costs and the costs of contracted services contain the value of those benefits in kind which are first purchased and then given by an enterprise to the employees. These items are subtracted from intermediate consumption and added to the compensation of employees.

28. These data are not directly available from corporate tax returns, but they are covered by SBS. For enterprises which are observed by SBS, data from that statistical survey are used. The data of other enterprises can be estimated on the basis of figures reported by observed enterprises, taking into account wages and salaries in kind declared in personal income tax returns submitted to the tax office.

Value of the use of passenger cars for personal purposes

29. Enterprises account outlays related to company cars within costs (material costs or costs of contracted services). However, these cars are used for personal purposes as well, which are regarded as benefits in kind according to ESA95 regulations. Consequently, the estimated costs of personal use are subtracted from intermediate consumption, and added to the compensation of employees. The estimation is made with the help of relevant personal income tax items.

30. The estimation for wages and salaries in kind covers all industries. The adjustment for this item gives more than the two-thirds (83.7%) of other statistical deficiencies relating to the sector. Total N7 accounts for 14.7% of total adjustments for the sector and 2.6% of total adjustments for the national economy.

7.1.2. General government sector

31. This sector is considered to be exhaustive in national accounts, since all units in this sector comply with the requirements to submit their reports to supervisory entities.

7.1.3. Non-profit institutions serving households (NPISH)

32. The statistical survey of non-profit institutions in 2002 was a representative sample survey. There were around 52 000 active NPIs in Hungary that year. The sample size was 18 189. Non-response rate was around 30%, and imputations for non-responding units are based on data on respondents with similar characteristics.

33. The reasons for non-response are various: lack of willingness or the unit is temporarily inactive. Finally, there is a very common practical reason: experience indicates that it is hard to contact smaller NPIs.

34. Data collection and primary data processing are the tasks of regional statistical offices.

35. Before calculating statistical indicators for the entire sector, it is necessary to perform a gross-up because of non-response or sample size.

36. The starting point for this is the information available in the HCSO register of non-profit organizations – even about non-responding ones. For the purpose of making the data comprehensive, initially a system of multipliers was applied based on data of responding organizations. Later on the Social Statistics Department developed a “representation method”. Instead of multipliers they use a special representative „matching” method: every non-responding entity is paired with the most similar responding entity for grossing up to the whole population. The principle of this method is that the missing statistical data of all non-respondents are taken from other responding organizations that are similar in terms of their major characteristics. The organizations with similar amounts of total annual revenues are grouped by their other characteristics known from the register: legal form, main activity and type of municipality where company headquarters are. When matching responding and non-responding organizations, regional and county-level differences are taken into consideration as well.

37. The basis of the use of this method is the assumption that organizations with similar combination of these main characteristics have similar attributes in their production activity, too.

38. As a consequence of all this, there is no under-coverage because of missing units. The constantly updated register, the very detailed questionnaire and this meticulous way of stratifying and grossing up data minimize the rate of NOE in the non-profit sector in Hungary, the revenues of which sector are still highly concentrated in the capital

7.1.4. Households sector

N1. Producers deliberately not registering - underground

39. Individual entrepreneurs are treated as a special category in Hungarian legislation. They have to submit personal income tax returns only, and are not covered by Act on Corporate Tax. Information can be obtained on the number of entrepreneurs from many different sources: business register, tax returns, labour force survey and other statistical surveys. The numbers are spread over a wide range. The number of individual entrepreneurs in the business register is well above that of tax returns. The reason for this is that in spite of the efforts made in updating the register there is a time lag concerning the cessation of enterprises. Business surveys cover only enterprises with above 5 employees, therefore, a lot of individual entrepreneurs are out of the scope of surveys.

40. The estimation for underground activities of entrepreneurs covers all industries. The adjustment is made by using IC/GO ratios of small-scale enterprises with 0-10 employees, as a standard, because it is supposed that they are in a similar economic situation as entrepreneurs. According to our estimations the ratio of misreporting is significantly higher than that of underground activities among entrepreneurs. It means that most of the entrepreneurs prefer to register and avoid

taxation by misreporting rather than to miss both duties (administrative and taxation). The adjustment for underground activity of entrepreneurs accounts for 1.6% of total adjustments for the household sector and 1.3% of total adjustments for the national economy.

N2. Producers deliberately not registering - illegal

41. In the framework of the PHARE exhaustiveness project HCSO made an experimental estimation for the two main types of illegal activities, namely drugs and prostitution. The results were not applied in regular calculations and their introduction was postponed until a major revision was made. As a number of major changes were introduced during the preliminary calculation of year 2005 data, the estimation of illegal activities was updated and incorporated into the accounts, too.

42. The estimation of production and turnover of drugs was based on a stable consumer demand. The starting point was to estimate the consumption of drugs by using the number of consumers, the quantity of drugs and the prices by types of drugs. The main data sources were medical and judicial data, as well as reports of the police, the tax office and the customs office. For the estimation of intermediate consumption mainly reports of the police were used.

43. In the case of prostitution the method is similar. First estimation was made for consumption by using the number of consumers, the number of cases and average prices. There are two additional data sources to the above mentioned ones: data of the chamber of prostitutes on the one hand and special studies on the other. For the estimation of intermediate consumption mainly reports of the police were used.

44. The calculation was made from 2000 onwards, and had an impact on the gross output, intermediate consumption, final consumption and export and import figures.

Table 7.4 The effect of illegal activities, total, 2002 (million HUF)

Gross output	246 147
Intermediate consumption	54 595
Imports	30 020
Exports	15 288
GVA	161 533
Compensation of employees	65 385
Mixed income	96 149
Compensation of employees and mixed income paid abroad	21 902
Domestic consumption	176 265
Of which: consumption of non-residents	42 600

45. In 2006, the estimation of production, consumption and income deriving from illegal activities was introduced in the Hungarian National Accounts compliance with the ESA'95. (3.08).

46. According to the proposal of Eurostat, estimations for three main scopes of illegal activities have to be compiled, namely: prostitution, drugs and smuggling. From these three scopes HCSO has made estimations for prostitutions and drugs, because these activities do not change often and significantly in short term and a lot of information is available for these items. Smuggling is a different thing. Although, it has constant elements, it is an activity that can immediately adapt to the change of market and legal regulations but these can not be measured by statistical means. It is more unlikely to find other basic information than in the case of the first two items. So till now, HCSO did not try to estimate this activity.

Estimation for production, consumption and income of drugs

47. According to the Hungarian legislations the production, distribution and posses of certain quantity of drugs illegal, so the production, consumption and income deriving from this activity are a part of the hidden economy.

48. For the estimation of the quantity of income and consumption deriving from drug distribution and production, we estimate annually:

- the number of persons using drugs by the type of drugs,
- the quantity of purchased drugs,
- the import and sales price of drugs put into circulation,
- the income coming from trade of drugs by residency of traders
- the value of domestic production.

49. There are several official institutions that calculate the number of drug consumers annually, and apart from that some civil organizations publish their calculations. The report of the Drug Committee has great importance that is required to report on the spread of drugs to the Parliament annually. Every second year the Government's report on the situation of youth describes the success and failures of the struggle against the use of drugs. The departments of the police specialized on this matter report their experiences and opinions on the spread of drugs. On the basis of the above mentioned official findings, it can be said, that in Hungary there are about 200 thousand persons more or less addicted to drug consumption, including the occasional consumers, as well.

50. Ten per cent of the consumers of drugs prepare the narcotic for own use from glue, paint-thinner and pills. They are part of the above mentioned 200 thousand persons, but they do not belong to the drug market. Mostly for financial reasons, they are not ordinary drug consumers, because they are not able to purchase narcotics from their income. During the calculation of illegal GDP we did not count their purchase, because these consumed items (glues, paint thinner and pills) were already counted elsewhere.

51. About the half of the remaining 180 thousand consumers (after the above mentioned consumers) take pills (LSD, SPEED, Ecstasy, Amphetamine), one fifth take Marijuana and one fifth take Heroin. The number of hashish-, mescaline- and cocaine-consumers is relatively low.

52. The quantity of purchased drugs is determined by the above described number of drug consumers and the daily consumed doses. To determine the usual daily doses we used, above all, the findings published in medical papers. The quantity of dose we got this way is just a basis for the further calculation, because even a drug addict won't shoot up every day. So their annual consumption would be less than the daily consumption multiplied by 365. Besides, we have to take into consideration the smaller purchases of the non-regular consumers. Because of that the daily dose of an average consumer is always much less than the medical dose that was the starting point. For example, according to the Hungarian calculation the daily dose of an average heroin-consumer is 0,2 milligram, while a regular consumer's is 0,5 milligram that he/she consumes on a certain day. Thereby, that even the regular-consumers don't consume it every day, plus the smaller consumption of non-regular consumers lower the digits of the average consumption – the theoretical 0,5 milligram daily dose became 0,2 milligram daily dose in the practice. Using the similar calculating method the theoretical 1 gram daily dose of marijuana will be 0,5gram during the calculation of the consumption in practice.

53. Multiplying the practical daily doses by the estimated number of 180 thousand consumers we get about between 55 and 60 tonne of consumed drugs annually. The authorities of custom officers, and police each seize about 1,5-2 tonne of drugs yearly, so the ratio of reconnaissance is between 5-10 per cent out of the total consumption, that we think is similar to the international practice.

54. The sale prices of the distributed drugs are published regularly in the reports of the police and the custom officers, as well. These reports are available in the official reports of criminal investigation organisations and in the ordinary daily papers. The punishment of the detected drug dealers mostly depends on the quantity and estimated value of drugs having on them, so the data of the detection are generally published by the authorities. The data publish by the authorities are always at domestic "retail" price and not at import price that is much less, namely one fourth or one fifth of that. Since the quantity and the value are published, it is possible to calculate the average price and its change in time. It can be stated that the membership of Hungary in the European Union a bit lowered the previous risks of drug trade that is proved by the stagnation or slight decrease of average drug prices, too.

55. At the beginning of the 90's the developers of the domestic drug market were foreign criminals, because only they knew the production and manufacturing centres of drugs and the connected network of dealers. The leaders of drug trade were typically foreigners, only the dealers that spoke Hungarian and knew the local conditions better were Hungarians. About half part of the income deriving from drug trade belonged to foreign possessors, but by now this ratio decreased by a forth. Short statements about foreign drug dealers are published in the annual report of the Supreme Prosecutor's Office and in the Yearbook of the National Security Office every year. According to the latest report of the National Security, the spread of number of foreign drug dealers stopped in Hungary but lately, their income conditions became stable or even a bit stronger. (See Chapter 8...)

56. The negative impact of illegal income on the balance of foreign trade and the BOP - (i.e., a quarter of income deriving from drug are brought abroad) - is slightly reduced by the fact, that 6-8 per cent of drugs sold in Hungary are purchased by foreigners. On several international events (like the Formula I. Race or the Festival of Sziget) a third of the detected drug consumers were foreigners.

Table 7.5. The estimation of drug consumption, 2002

Type of drugs	Estimated number of consumers	Daily portion (average)	Estimated consumption per year	Average price	Con- sumption	Of which	
	Thousand persons	gr	kg	HUF/gr	Million HUF	domestic	foreign
Opium	3	1	825,9	3000	2 478	1 350	1128
Heroin	21	0,3	1547,4	5600	8 666	8 666	
Morphine	2	0,5	292,4	4200	1 228	1 228	
Cocaine	5	0,15	176,0	14900	2 622	2 622	
Marijuana	18	2	8771,9	1600	14 035	11 285	2750
Hashish	7	0,25	403,3	1600	645	645	
LSD	21	0,5	2532,4	600	1 519	1 519	
SPEED	16	0,3	1194,0	2400	2 866	2 866	
Amphetamine	15	0,8	2956,2	4000	11 825	10 545	1 280
Ecstasy	18	2	8807,6	2200	19 377	18 693	684
Total					65 261	59 419	5 842

Table 7.6. The estimation of income from trade of drugs, 2002 (Current prices, million HUF)

Type of drugs	Import goods	Export goods	Intermediate consumption	Value added	Gross output	Income paid abroad
Opium	1 109		1 142	1 368	3 619	742
Heroin	5 378		6 097	3 287	14 762	1 486
Morphine	513		674	715	1 902	308
Cocaine	562		756	2 061	3 378	879
Marijuana	1 026	15 288	15 066	28 296	44 388	990
Hashish	324		324	321	969	191
LSD	165		219	1 354	1 739	591
SPEED	613		840	2 253	3 706	982
Amphetamine	5 621		5 621	6 203	17 446	2 151
Ecstasy	3 162		3 162	16 215	22 539	13 582
Total	18 474	15 288	33 901	62 074	114 450	21 902

Estimation for production, consumption and income deriving from prostitution

57. According to the Hungarian legislations, the prostitution itself is not punishable (in case of following certain rules) but other activities connected to them (for example, procuring prostitutes and clients, managing girls, renting rooms for these occasions, collecting defensive money) are considered illegal. The incomes deriving from these activities are not returned (declared) and duties are not paid after them, even if they happen to be legal, so they are a part of the hidden economy.

58. For the estimation of production, income and consumption deriving from prostitution, we estimate annually:

- the number and composition of persons purchasing sexual services by the type of circumstances,
- the quantity of purchased cases,
- the average price of consumed cases,

- the value of domestic production,
- the income coming from prostitution.

59. Civil organisations representing the interests of prostitutes and sociology reports announce information about sexual services. These reports show that two-third of sexual service consumers are foreigners. Since Hungary is a transit area for the traffic of lorries/trucks and guests in hotels are mostly foreigners, the presence of foreign purchasers is dominant in most fields of prostitution. The sexual services at main roads, at restaurants and at hotels are consumed mostly by foreigners. The Hungarian consumers are in majority among the purchasers of peep-shows, sex-telephones or pornographic films through internet.

60. The annual number of purchased occasions concerning sexual services is defined by the purchasing frequency of consumers. The frequency can be determined by the help of documents on behaviour- and sociology-studies. The number and composition of prostitutes can be estimated by the help of women organisations and trade unions. Now, the number of prostitutes announced by civil organisations is much higher than we should expect on the bases of statistics on the “service”-numbers. According to sociological surveys, the ratio of “occasional” prostitutes is significant. Although, they are considered as prostitutes, they give services rarely, mostly during a period of time when they or their family is in a difficult situation. Since they are not defenceless they do not need the help of the procuring men. That is why we have to be cautious to estimate the real quantity and value of sexual services only based on the number of prostitutes.

61. The average price of these occasions is very different, depending on the circumstances of the consumption of the service. The cheapest one is the service by main roads, the price of occasions in rented rooms is half as much again of that, occasions in restaurants are doubled, and occasions in hotels are triple. The “escort” girls serving at home ceremonial events, the call-girls and the boys giving homosexual services have the highest average price per a consumed occasion. Information on prices are generally published in the reports of police and the interviews of prostitutes, as well.

62. The incomes deriving from prostitution are not equal to the revenues gaining from this activity. About a third of the income deriving from sexual services cover the production cost connected to the service, for example hair dressers, cosmetics, taxis, clothing etc. We do not take as cost payments like the money paid by the prostitutes to the procuring men, to the mediators, to the drivers or to the owners of rented rooms is income items. In the connected sociological studies, the volume of the income-portion given to the procuring men is the constant subject of the debate. In most of the studies, the estimated shares of income given to the procuring men are about a third or half of the whole income, but according to some authors, even the much higher income-portions are not rare. On the bases of the prostitutes’ statements, only the smaller portion of income deriving from prostitution is given to the employees, the bigger portion belongs to the enterprises.

63. During the compilation of GDP it has to be taken into account, that some production costs of prostitutes are already counted among the household consumption, so a certain part of purchased household’s consumption becomes intermediate consumption. Some of the enterprises offering sexual services are formally not part of the illegal economy, but in practice, they are. It is possible to make out a bill, for example, about cleaning, reception service, bookkeeping, repairing of machines, maintenance of buildings an so on, but in the reality, behind these activities sexual services can be found. It is good for the suppliers, because they can offer the sexual services disguised as legal business and it is good for the purchasers as well, because they do not need to buy the sexual services from their income after tax. The value of this sexual activity is already included in the amount of GDP, so it would be doubling to add the amount of these invoiced services as illegal incomes or consumptions again.

64. In contrast to the possessors of drug trade, the Hungarian criminal clans have domination over the prostitution.

Table 7.7. The estimation of consumption from prostitution, 2002

The condition of the services	Consumers		Cases of consumption		Cases of consumption		Average price	CONSUMPTION			
	1000 persons		Monthly averages		Per year, thousand		Thousands HUF	Current price, million HUF			Of which
	domestic	foreign	domestic	foreign	domestic	foreign		domestic	foreign	Total	Already counted
Main road, street	132	66	2,0	1,0	3 168	792	4	12 672	3 168	15 840	3 520
Dwelling	60	30	2,0	1,0	1 440	360	5	7 200	1 800	9 000	996
Restaurant	36	22	2,0	1,0	864	264	6	5 184	1 584	6 768	1 044
Hotel	12	40	0,5	1,0	72	480	17	1 224	8 160	9 384	356
Business transaction	3	10	0,2	0,2	7	24	40	288	960	1 248	14
Companion	1,8	2	4,0	3,0	86	72	30	2 592	2 160	4 752	280
Call girl	18	6	2,0	2,0	432	144	22	9 504	3 168	12 672	1 282
Social celebration	12	4	0,2	0,2	29	10	4	115	38	154	18
Peep-show	90	10	4,0	1,0	4 320	120	3	12 960	360	13 320	2 620
Photos	180	..	1,0		2 160		2	4 320	0	4 320	1 660
Film	240	..	2,0		5 760		2	11 520	0	11 520	1 224
Illegal publications	120	..	0,5		720		1	720	0	720	8
Illegal cassettes	120	..	0,5		720		2	1 440	0	1 440	132
Sex-broadcast and telephone (illegal)	60	..	1,5		1 080		2	2 160	0	2 160	240
Not regular	30	20	2,0	2,0	720	480	32	23 040	15 360	38 400	7 300
Total								94 939	36 758	131 698	20 694

Table 7.8. The estimation of income from prostitution, 2002 (Current prices, million HUF)

The condition of the services	The value of import	Intermediate consumption	Value added	Gross output
	a	b-c	e	a+b-c+d+e
Main road, street	1 404	3 520	10 916	15 840
Dwelling	324	996	7 680	9 000
Restaurant	540	1 044	5 184	6 768
Hotel	216	356	8 812	9 384
Business transaction	22	14	1 212	1 248
Companion	216	280	4 256	4 752
Call girl	594	1 282	10 796	12 672
Social celebration	22	18	114	154
Peep-show	216	2 620	10 484	13 320
Photos	1 080	1 660	1 580	4 320
Film	3 456	1 224	6 840	11 520
Illegal publications	108	8	604	720
Illegal cassettes	540	132	768	1 440
Sex-broadcast and telephone (illegal)	108	240	1 812	2 160
Not regular	2 700	7 300	28 400	38 400
Total	11 545	20 694	99 459	131 698

The main data sources:

- The fulfilment of the national strategic program, the screening and effectiveness of the system of supplying institute made for the drug suppression (regarding 2003-2005.) *Report of Government, 2007*
- The measures of Government made in 2005 in connection with the situation and the circumstances of lives of children and youth. *Report of Government, 2007*
- The parliamentary report of the General Prosecutor of the Hungarian Republic on the work of the Supreme Prosecutor's Office in 2006. (Legfőbb ügyész. 2007.)
- The Publication of the National Command of Customs and Excise Guard (two-three times a week)
- The Yearbook of the National Security Office, 2005 (NBH.2006)
- The enforcement of basic principles of social gender equality in human trade and for the prevent of sexual exploitation of women and children. Magyarországi Női Alapítvány (MONA) 2007.
- Betlen Anna: Social-political arguments against the legalizing of prostitution II. part, *Ezredvég 2007 március*

- Women for women against violence. (Nane) Egyesületi jelentés.2006
- Prostitutes ready for business. Népszabadság. 2007. IX. 25
- Women of streets seen by the experts. Ma 2006. 01.27.

N3. Producers not required to register

65. In Hungarian national accounts this category covers households' agricultural production for own account, construction of dwellings for own account, and some other activities which are not required to be registered, e.g. private lessons of teachers, rooms to let.

66. In Hungarian national accounts agricultural production, income and consumption are estimated by agricultural surveys and censuses carried out by HCSO. Data are comprehensive; available broken down by commodities, prices and sectors, and are of very good quality. No other data source match these high standards, therefore market and non-market production of agricultural goods are well captured this way. More than 50 per cent of GVA in agriculture is produced by the household sector, mainly in small scale.

67. The estimations of own account construction and renovation of dwellings are made by a model on cost of dwelling construction and based on surveys carried out by the Dwellings Statistics Section of HCSO. Building costs of the 28 types of homes are updated quarterly on the basis of the relative average wages and building material costs. The effective average cost of a 1m² built area means the mean value of the 28 types of specific home-building costs weighted by the developed area (having a permission of usage).

68. In national accounts unregistered domestic services provided by private persons such as cleaners, chairwomen, butlers, cooks, maids, drivers, gardeners, governesses, secretaries, tutors, au-pairs are recorded in the NACE division K 74 (Other business activities) at present. These services constitute a part of the non-observed economy, official sources are of little or no use.

69. The phenomenon of unregistered educational services, as second activity of teachers, is popular and widespread in Hungary. Basic data for the estimations are derived from „Report on Hungarian public education”, published by the National Institute for Public Education every two or three years since 1996. This publication regularly reports the percentage of students participating in extra lessons after school and the proportion of paid extra lessons.

70. GDP for unregistered artistic activities and other services are calculated by expert's estimations.

71. The ratio of activities of households that are not required to register is significantly high. They account for 27.1% of total adjustments for HHs and 22.3% of total adjustments for the national economy.

N5. Registered entrepreneurs not included in statistics

72. Estimations for entrepreneurs are included in the N1 and N6 non-exhaustiveness types.

N6. Entrepreneurs deliberately misreporting

73. In the case of entrepreneurs neither output nor intermediate consumption seems to be reliable. Therefore, the adjustment is estimated by using industry specific IC/GO ratios on regional level of small-scale enterprises with 0-10 employees as a standard, because it is supposed that their economic situation is similar to that of entrepreneurs.

74. The ratio of misreporting by entrepreneurs is striking compared to both total adjustments for the sector (58.4%) and total adjustments for the national economy (47.9%).

N7. Other statistical deficiencies

Tips

75. The data sources and the method used are described in Chapter 7.1.1. The adjustment for tips given by households accounts for 26.9 % of total N7 adjustments relating to the sector.

Gratuities

76. There is a widespread and tolerated illegal payment in the Hungarian health care system, called gratitude money, which goes from patients' pocket into doctors' pocket. Gratitude money donation is not covered by social security, but involves tax avoidance, thus this phenomenon is actually a part of the hidden economy.

77. Our calculations for the volume of gratitude money is based on a study of Social Research Institute (TÁRKI) published in 1999. This study summarizes the outcomes of a sample survey inquiring circa 1000 doctors and 1400 patients about the amount and frequency of both assumed and admitted gratitude money donation and about their opinion and attitude.

78. Results concerning year 1998 are revised annually using some health statistics. The number of treatment cases of outpatient services is obtained from the National Statistical Data Collection Programme, while statistics on inpatient services are reported by the National Health Insurance Fund, which data include the number of financed cases and the estimated weight numbers concerning about 740 health care events.

79. The estimation is made in health and social work industry. The adjustment for gratitude money accounts for 73.1% of total N7 adjustments relating to the sector.

80. The adjustment for total N7 concerning households accounts for 5.3% of total adjustments for the sector and 4.4% of total adjustments for the national economy.

7.1.5. Plans for improvement

Labour check method

81. Recently, the following improvements were made on the quarterly and annual time series for the period between 2004 and 2008:

- Transformation of the LFS data from national to domestic concept, and the corrections from LFS methodological concept to ESA calculation concept. We subtracted from the LFS data the number employed persons living in Hungary, but working abroad for a non resident company, and added to LFS data the number of employed persons living abroad, but working in Hungary for a resident company. This adjustment was made in consistency with the rest of the world account.
- Employed persons living in institutional households (e.g. worker hostels) were added, because LFS does not cover them.
- Number of working persons over the age of 74 years was added to LFS data, because they are not covered by LFS.

- LFS doesn't cover in the labour input of agricultural producers for own final use, so LFS figures were adjusted by them, as well.
82. The following tasks and improvements should be made on the currently available data:
- The above improvements should be introduced in the whole time series (data from 1995 to 2003).
 - Cross-checking and improving the LFS data with other data sources. We collected employment data for 2004 – 2007 from the following sources:
 - - Financial and non-financial corporations: Corporation tax records.
 - - Government sector: Statistical data collection of institutions on employment
 - - Households sector: Business Register data
 - - Non-profit institutions: Statistical data collection of non-profit institutions.
 - On the basis of the comparisons of the above data sources, we plan to clarify the differences in NACE Re.1.1 branches C, K, L and P until the end of 2009.
 - Labour input of people engaged in own account construction of dwelling should be added, because LFS does not cover this item.
 - The methodological problem of job vs. persons. LFS has special figures for second or more jobs, but they are not published, and they are lower than experts' expectations. It has been a well-known problem for years that respondents are not indicated for reliable answer about second job, especially about informal or illegal activity. We plan to make this adjustment until the end of 2009.

SUT integration

83. The estimation of non-observed economy by production approach needs improvements. It is in connection with the project on the full integration of SUT into the national accounts (see Chapter 6) that we intend to develop the estimation of non-observed economy. The new technology in the compilation of national accounts requires revision of and improvement in the sources and methods used for the estimation of non-observed activities. Current sources and estimation methods are not fully able to satisfy the requirements of the new compilation technology. However, combining data from both production and expenditure side in a SUT framework is a useful tool to check the consistency of data and to generate estimates for missing items including data on the non-observed economy.

7.2. Exhaustiveness adjustments to GDP expenditure components

84. Several sources are in use to estimate **household final consumption expenditure**. The two main sources are the Household Budget Survey and the Retail Trade Survey. According to the PHARE2000 Project on Household Final Consumption the adjustments made by the NA Department on Household Budget Survey data are not considered as exhaustiveness adjustments. However, in some important areas other adjustments have to be made in order to achieve exhaustiveness.

85. In the Household Budget Survey, expenditures by children are recorded under the given products or services, and not in one sum as pocket-money. The parents answering the questionnaire or keeping the diary may certainly have insufficient information in this respect, but the data are not corrected separately. Concerning infrequently purchased items data are collected in the course of

yearly diary-keeping. A household keeps a diary for one month, so it may occur that it does not purchase such a product that month. At the beginning of the year following the reference year each household which participated in the survey is therefore interviewed again concerning these items and the amounts of monthly diaries are corrected by these data.

86. For alcoholic beverages the supply and use tables were used (in physical terms). When the new supply and use tables were ready for 1998 and 1999 (at current prices) and were work in progress for 2000, it was possible to make a cross-checking for the estimation of consumption expenditure on alcoholic beverages and tobacco at current prices, too.

87. Giving tips is a widespread phenomenon in Hungary. The most important area is that of health services. For the time being estimation on tips (gratuity money) is based on the Household Budget Survey, completed by data from personal income tax returns. The first health satellite accounts were published in January 2003. Based on the satellite accounts data a detailed model was established for estimating the tips (gratitude money) on health services. This model uses the number of different kinds of treatments, the estimated amount of the given gratitude money by type of treatments and the possibility of giving gratitude money by treatments. The first results of this new type of estimation were used for the final calculation of year 2001 data and the revisions of data of 2000. Estimations for the other types of tips given on many different types of services were also made during the finalisation of year 2001 and revision of year 2000 data. The calculations were made in the areas of catering, passenger transport and hair-dressing, using the result of a survey on tips conducted in 1997.

88. In the framework of the PHARE exhaustiveness project HCSO made an experimental estimation for the two main types of illegal activities, namely drugs and prostitution. The results were not applied in regular calculations, and their introduction was postponed until a major revision was made. As a number of major changes were introduced during the preliminary calculation of year 2005 data, the estimation of illegal activities was updated and incorporated into the accounts, too.

89. The estimation of production and turnover of drugs was based on a stable consumer demand. The starting point was to estimate the consumption of drugs by using the number of consumers, the quantity of drugs and the prices by types of drugs. The main data sources were medical and judicial data, as well as reports of the police, the tax office and the customs office. For the estimation of intermediate consumption mainly reports of the police were used.

90. In the case of prostitution the method is similar. First estimation was made for consumption by using the number of consumers, the number of cases and average prices. There are two additional data sources to the above-mentioned ones: data of the chamber of prostitutes on the one hand, and special studies on the other. For the estimation of intermediate consumption mainly reports of the police were used.

91. The calculation was made from 2000, and had an impact on the gross output, intermediate consumption, final consumption and export and import figures. (See Table 7.1)

92. In the case of **final consumption expenditure of NPISHs and government** no adjustments are made for exhaustiveness.

93. The units classified into NA sectors, which are engaged in production, are all considered to be the subject of **GFCF** estimation. The data collection system currently provides direct data on enterprises working with 5 or more employees, but the annual GFCF of non-observed units is also estimated, by applying supplementary information. The data collection covers all the required asset categories and transactions on them which are covered by GFCF. No estimation is made for the GFCE items which are negligible in the national economy and for which no information is available. For

example, transactions on second-hand assets affecting the Households sector, and the value of investments by non-observed units in intangible fixed assets are not estimated at all.

94. No special adjustment is made to **changes in inventories**. It is the part of calculating the production of small enterprises.

95. For the figures of **exports and imports of goods and services** HCSO does not make any adjustment to ensure exhaustiveness, taking into account that data on exports and imports of goods come from customs declarations, which are considered as a full-scope data source, and data on exports and imports of services come from the balance of payments. Corrections for illegal activities were incorporated from 2000 onwards, as described in 7.1.4.

96. Concerning the recommendation of the GNP Committee Task Force on Intrastat (CPNB 203) on exhaustiveness, mirror statistics are not checked regularly with all our partners, except for the main ones like Germany and Slovakia. The last detailed analysis was made on year 2005 data. According to this, the difference between the data of Hungary and the Member States are not outstanding. Concerning the disparities with other countries we look for explanations ad hoc by investigating our own data.

7.3. VAT fraud

97. Concerning VAT fraud, adjustments to be made on national accounts data are laid down in Commission Decision No. 98/527/EC.

98. The adjustment to be made aims at balancing the estimations from production and expenditure side of GDP, and at achieving that the revenue and income from VAT evasion should be reflected in the data. On the production side the payable VAT is accounted for in the balance of undistributed taxes less subsidies on products. The value of items accounted for on the expenditure side contains the payable (non-deductible) VAT.

- In the first case when the tax fraud results from the common agreement of the seller and the buyer, the VAT is not paid so the value of the “hidden tax” is not included in the GDP calculation either on the production (seller) or the expenditure (buyer – final consumer) side (there is a balance). In this case basic data do not have to be corrected.
- In the second case when the seller charges the VAT to the buyer but does not pay it to the budget (the buyer is without complicity), the charged VAT is not accounted for on the production and income side, but is accounted for on the expenditure side. The value of this VAT – paid by the customers but not passed on to the budget by the seller due to fraud (without complicity) – is to be included in the operating surplus of the seller and not in the Taxes on products (D211). That is why it is necessary in this case to complete the estimation from production and income side.

99. In Hungary it is typical in case of products and services provided by sole proprietors to households that the buyer is without complicity in the VAT fraud (case 2). In this case the data collected from households to estimate household consumption (e.g. HBS) include the non-deductible VAT, so here no correction is required. The data sources of the calculation from production side (SBS, PIT – personal income tax), however, do not include the hidden revenue. This is a reason, too, for not making our estimations on the production of sole proprietors based on directly reported tax data, and for adjusting them significantly (see chapter 3.3.4). The method applied at present does not allow us to show explicitly the adjustments for exhaustiveness, therefore the correction because of VAT fraud is also considered to be implicitly made during the estimation.

100. As a result of the project under way aiming to integrate the SUT (see chapter 7.1.5) into the national accounts compilation process, we will be able to examine this phenomenon indirectly, in a much more detailed breakdown by products and services than today. In the framework of this project we intend to transform the estimation concerning the non-observed economy so that the correction because of the VAT fraud described in case 2 can be accounted for separately.

CHAPTER 8. TRANSITION FROM GDP TO GNI

8.0. Introduction and reference framework

8.0.0. Gross National Income (GNI)

1. GNI calculations started in the KSH in 1996. The definitions in ESA'95 are used to make the transition from gross domestic product to gross national income. Gross national income is obtained from GDP by deducting primary income paid to the rest of the world (compensation of employees, property income, production and import taxes to the EU) and adding primary income received from the rest of the world (compensation of employees, income on property and EU subsidies). Table 8.0 shows the transition from GDP to GNI in accordance with ESA'95.

Table 8.1 Transition from GDP to GNI in accordance with ESA95, 2002

Operation	ESA Code	Transactions and balancing items	Billion HUF	% in GDP total
	B.1*g	Gross domestic product (at market prices)	17 148.4	100.00
-	D.1	Compensation of employees paid to the rest of the world (section 8.1)	117.1	0.68
-	D.4	Property income paid to the rest of the world (section 8.5-8.8)	1 242.9	7.25
		From it: rents on land and subsoil assets (section 8.8)	-	-
-	D.2	Taxes on production and imports paid to the Institutions of the EU (section 8.2)	-	-
+	D.1	Compensation of employees received from the rest of the world	232.5	1.36
+	D.4	Property income received from the rest of the world (section 8.5-8.8)	256.4	1.50
		From it: rents on land and subsoil assets (section 8.8)	-	-
+	D.3	Subsidies received from the Institutions of the EU (section 8.3)	-	-
=	B.5*g	Gross national income	16 277.4	94.92

Table 8.2 Transition from GDP to GNI, 2000-2003, billion HUF

Operation	ESA Code	Transactions and balancing items	2000	2001	2002	2003
	B.1*g	Gross domestic product (at market prices)	13 512.3	15 238.4	17 148.4	18 914.9
-	D.1	Compensation of employees paid to the rest of the world (section 8.1)	79.5	93.0	.117.1	137.1
-	D.4	Property income paid to the rest of the world (section 8.5-8.8)	1 030.7	1 154.4	1 242.9	1 261.4
-	D.2	Taxes on production and imports paid to the Institutions of the EU (section 8.2)	-	-	-	-
+	D.1	Compensation of employees received from the rest of the world (section 8.1)	216.8	243.8	232.5	292.4
+	D.4	Property income received from the rest of the world (section 8.5-8.8)	282.9	276.0	256.4	253.0
+	D.3	Subsidies received from the Institutions of the EU (section 8.3)	-	-	-	-
=	B.5*g	Gross national income	12 901.8	14 510.7	16 277.4	18 061.9

8.0.1. Main components

D.1 Compensation of employees

2. Compensation of employees comprises wages, salaries, and other benefits in cash or in kind. Payments to/from the ROW relate to non-resident employees of a resident institutional unit (i.e. employees working in the resident economy for less than one year). It also relates to non-resident employees working for a resident employer, but based in their own country. For further information see Chapter 8.1.

D.4 Property income

3. This category represents incomes, which are received by Hungarian owners of financial assets held abroad and by foreign owners of assets held in Hungary.

- Interest is defined as the amount that a debtor becomes liable to pay to a creditor over a given period of time without reducing the amount of principal outstanding (see Chapter 8.4);
- Distributed income of corporations is the income to which shareholders are entitled as a result of placing funds at the disposal of corporations (see Chapter 8.5);
- Reinvested earnings on direct foreign investment record earnings on direct investment which are retained by the enterprise (see Chapter 8.6);
- Property income attributed to insurance policyholders is the net property income received from the investment of insurance technical reserves held in financial assets, land and buildings (see Chapter 8.7);
- Rents on land and subsoil assets (see Chapter 8.8).

D.2 Taxes on production paid to the ROW

4. This item covers those taxes on production (particularly in the agricultural and energy sectors) and imports, which have to be paid to the institutions of the European Union. For further information see Chapter 8.2.

D.3 Subsidies received from the ROW

5. Subsidies from the ROW are current unrequited payments, which the institutions of the EU make to resident producers with the objective of influencing their levels of production or their prices. For further information see Chapter 8.3.

General remarks

6. The main data source for the GNI transition items is the BOP compiled by the National Bank of Hungary (Magyar Nemzeti Bank, MNB).

7. It is the intention of the authorities to change the main data source in the near future. The plan is that by 2008 a new data collection system will be launched for the BOP statistics by the MNB, in general terms replacing the ITRS system by direct reporting of the respondents. As it is foreseen on the basis of the experiences of the majority of EU member states, where new BOP data collection system was introduced in the near past or will be launched in the near future, in the new system BOP current account items (except investment incomes) are mainly to be provided by the national statistical institutes. Authorities will make efforts to explore other sources which will replace the current BOP data and meet both national accounts and BOP needs.

8.0.2. Reference framework

8.0.2.1. BOP data collection system and data sources

8. In Hungary, the central bank (MNB) is responsible for the compilation and official publication of balance of payments (BOP) statistics and the international investment position (IIP) data. The data collection is based on the closed International Transaction Reporting System (ITRS), combined with statistical surveys and foreign trade in goods statistics based on the Intrastat/Extrastat system.

The changes in the BOP data collection system from 2008

9. The increase in the MNB's statistical needs to meet international data provision requirements, the growing complexity of financial relationships and changes in the regulatory environment have made it necessary to implement changes to the BOP statistical data collection system. In 2008 the Magyar Nemzeti Bank launched a new data collection system based on direct reporting. With the launch of the new data collection system, the former indirect cash-based data provision (ITRS) was terminated. While in the previous ITRS system the compilation of the BOP mainly relied on the use of transaction codes for payments based on reports by credit institutions, in the new regime the MNB obtains the necessary information directly from reporting agents via monthly (large companies („big players”), reporting the full set of BoP and IIP statistics), quarterly (a cut-off sample of SMEs, based on a reporting threshold), and annual reports (FDI) covering mostly the financial account items and international investment position statistics.

10. In developing the new system, attention was paid to avoiding parallel activities within the national statistical services and to reducing the social costs associated with the compilation of statistics – for data providers and during the compilation process. To this end, the MNB and the HCSO cooperated with each other to design and develop the new system. Formal cooperation (maintenance of the data reporting registers, data exchange, joint solutions for methodological problems) between the central bank and the statistical office has also been growing in importance in Hungary, consistent with

the general approach within the European Union. The co-operation with the HCSO in data production has also been enhanced in order to get the non-financial account elements of the balance of payments statistics. After having the HCSO as being the source of data on goods since 2003, on business services and travel since 2004, and on other services since 2005, from 2008 data on compensation of employees and government and household transfers has also been provided by the HCSO. The compilation of financial and capital account data and investment income still directly rests with the NBH. Report on investment income data is integrated into the closed and consolidated reporting scheme for financial assets and liabilities (opening position, all type of flows separately and closing position).

11. The new data reporting obligations for 2008 were ordered by the Decree 3/2007. (II.21.) MNB.

12. More details are provided in the subchapters exploring the specific issues.

(i) MNB provides data on reserve assets, other claims and liabilities vis-à-vis non-residents and all its own transactions affecting its claims and liabilities vis-à-vis non-residents in aggregated form, broken down by currency, country and BOP transaction type (under a closed system). In addition, the MNB report covers government transactions with non-residents, which are channeled through MNB.

(ii) The other monetary institutions sector is composed of commercial banks, special credit institutions, cooperative credit institutions and building societies. They submit monthly reports on their assets and liabilities vis-à-vis non-residents and on all their own and their clients' transactions affecting their claims and liabilities vis-à-vis non-residents in aggregated form, broken down by currency, country and BOP transaction type (under a closed system). Above a simplification threshold of EUR 50,000, each transaction is reported separately (transaction-by-transaction reporting). From May 2004, transactions below a threshold of EUR 12,500 are reported aggregately under a single transaction code by currency. All credit institutions conducting foreign exchange transactions or holding accounts in HUF for non-residents are obliged to meet the reporting requirements.

(iii) The General government sector comprises the central and local governments, extra-budgetary funds and social security funds. The Hungarian Privatisation and State Holding Company (ÁPV Rt.) also belongs to this sector. The sector's BOP transactions are reported either indirectly by MNB or directly by the ÁKK for the transactions managed by institutions other than MNB.

(iv) Other sectors include non-financial corporations (corporations subject to the Act on Corporate Tax, except those with financial intermediation as their principal economic activity), other financial corporations (GIRO Ltd., Central Clearing House and Depository (Budapest) Ltd. [KELER], insurance corporations and pension funds, as well as other financial intermediaries and auxiliaries), households and non-profit institutions serving households. Enterprises holding accounts at non-resident banks or participating in an intra-group settlement system fill out a structured BOP and IIP questionnaire, which is used for compilation of the monthly statistics. They submit the data in aggregated form, broken down by currency. Below a threshold of HUF 200 million of total annual (either credit or debit) transactions on afore-mentioned foreign accounts, details of transactions other than just total credits and debits, such as e.g. interest, are not reported. For certain financial account items, the following supplementary sources are used: reports by enterprises directly borrowing from/lending to non-residents (other investment), quarterly and annual reports by FDI companies and resident direct investors (direct investment) and reports by security traders and KELER (equity capital, equity securities, and HUF-denominated government bonds). The supplementary sources are primarily used for cross-checking purposes. They serve as a control to the ITRS financial account data.

8.0.2.2. Legal background

13. The general legal background is the Act on Statistics (Act XLVI of 1993) and for BOP and IIP compilation, the Act on the MNB (Act LVIII of 2001) and the related government and MNB decrees

of relevance. (See in the Annex.) The reporting obligations of credit institutions, exchange offices and security custodians are specified in the MNB Decree of the Governor of MNB.

8.0.2.3. Residency

14. The residence concept applied in the balance of payments statistics is in conformity with BPM5. The definition is set in the *MNB Decree No. 8/2004. (XII. 19.) by the Governor of the Magyar Nemzeti Bank*. Reporting agents shall apply this definition in their regular reporting to the compilation of the balance of payments statistics. On the basis of this definition, banks shall assign registry information of residency status to their customers. The compliance with the rules is always checked whenever the MNB makes an on-site inspection at the reporting banks.

15. For balance of payments statistical purposes and for national accounts – as a main rule – each natural person, legal entity and institutional unit without a legal entity shall qualify as a Hungarian resident, whose direct economic interest (permanent residence, seat or production, etc) is primarily linked to the economic area of Hungary. Consequently, any economic entity engaged in a long-term economic activity on the territory of Hungary (for over one year) and any natural person being present in Hungary for a long time (at least for a year) or wishing to stay shall be regarded as a resident (except for students or people under medical care). The economic area shall not include the representations of foreign states and premises of international organisations situated in Hungary, although these are located within the geographical boundaries of the country (government, diplomatic, military, etc. representative offices and inter-governmental commercial and cultural representations of other states or international organisations).

Natural persons

16. In the case of natural persons (or private individuals), their economic ties to Hungary, in other words the resident or non-resident status of natural persons shall be determined in due observation of all relevant circumstances. Resident persons are mainly Hungarian citizens who are born in Hungary or immigrated to the country. (The issue of students, seasonal and border workers will be dealt with in subchapter 8.1)

17. Under the current regime of International Transaction reporting System (ITRS) as a BOP settlements system, banks decide on the residency of their customers or account holders (resident or non-resident) on the basis of a number of factors in practice. Fundamentally, long-term stay in Hungary (one year or more), implying having a permanent place of residence, is decisive. The factors used by the bank concerned to classify residency of its customers consider first of all the information received from the client, the type of bank account the customer maintains (e.g. payroll account), any indication of a permanent residence or mailing address in Hungary, any payment of public utility charges (water, gas, electricity etc.) in Hungary, the frequency of visits to the bank, personally or publicly known facts (for example, the key account manager is familiar with the client's business activities and private life). The above does not apply to foreign students and people undergoing medical treatment, since they are considered non-residents regardless of how long they stay in the country.

Legal entities

18. In fact legal entities are considered resident when there is a registration at the Registry Court (having a HCSO business register number).

19. Free zone companies and other similar categories are to be considered residents.

20. Legal entities, as indicated above, are considered resident when there is a registration at the Registry Court (having a HCSO business register number). Companies registered in Hungary in

accordance with company laws in force – either through their registration at the Registry Court, or in accordance with other statutory provisions – should be considered residents. This is irrespective of the type of the business organisation and refers also to other organisations registered in Hungary (political parties, foundations, religious organisations, associations etc.)

21. In light of the above, the decisive criterion is in the case of legal persons that the economic entity concerned has an assigned HCSO business register number (which also appears in the Company Register). From the point of view of the resident status it is irrelevant whether the resident is entitled to any tax, customs or other allowances (for example, tax breaks granted to “off-shore” companies). It means, that companies located on custom free zones and private or public limited companies registered in the country but operating abroad (off-shore companies) are also considered residents, since they have direct economic ties to Hungary.

8.0.2.4. Applied exchange rates in aggregation in BOP and IIP statistics

22. Monthly flow data, reported by the reporting agents in aggregated form by currencies, are recalculated and aggregated to national level in Hungarian forint, at the workday weighted monthly average of the daily official MNB exchange rates. End-month stock data, also reported by currencies, are recalculated and aggregated to national level in Hungarian forint at the end-month official MNB exchange rates. Statistics in Euro can be computed from forint data using the monthly average HUF/EUR (flows) or end-month HUF/EUR (stocks) exchange rates (for the pre-1999 period Euro = ECU).

8.0.2.5. Cooperation between HCSO, NBH and other possible institutions in the framework of the regular work for the GDP-GNI transition

23. The KSH is responsible to compile and publish GNI figures. Because of the tight connection between GNI calculation and BOP compilation, close cooperation is necessary between the two national institutes. For the time being the majority of the data is collected by the MNB and KSH gets and uses this information for GNI estimation. In 2008, a new data collection system will be launched for BOP statistics by the MNB, in general terms replacing the ITRS system by direct reporting of the respondents. As it is foreseen on the basis of the experiences of the majority of EU member states where a new BOP data collection system was introduced in the near past or will be launched in the near future, in the new system BOP current account items (except investment incomes) are mainly to be provided by the KSH. KSH will make further efforts to supplement or replace the recently available information sources, meeting the national accounts and BOP needs as well.

8.1. Compensation of employees

8.1.0. Introduction

24. Compensation of employees comprises wages, salaries, and other benefits in cash or in kind. Payments to/from the ROW relate to non-resident employees of a resident institutional unit (i.e. employees working in the resident economy for less than one year). It also relates to non-resident employees working for a resident employer, but based in their own country. Students, sportsmen and employees working abroad for a long time are excluded.

25. This will relate also to seasonal or other short term workers, and border workers who have centres of economic interest in their own economies. There are two exceptions to this rule: construction activity undertaken in another country is always considered to be part of the economic activity of that country, even if it takes less than one year. So, no production or payments of compensation of employees will be recorded in the domestic accounts. The opposite situation applies to maintenance and repairs where the activity is recorded in the home country of the institutional unit undertaking the work, even if it takes longer than one year. This means that payments to locally engaged staff will be treated as to the ROW whatever the duration. Compensation of employees also

includes pay received by local (host country) staff of embassies, consulates and military bases as such entities are considered non-resident of the host economy. This should also include such staff employed by overseas subsidiaries without a centre of economic interest in the host country. Personal expenditure made by non-resident seasonal and border workers in the economies in which they are employed is recorded under travel within trade in services.

26. **In Hungary there is no** regular exchange of data with neighbouring countries on cross-border workers. HCSO asked for information concerning the number of border-area workers, cross-border workers, seasonal workers, etc. from the neighbouring countries in mail, but has not received any valuable data. The compensation of employees is compiled on the basis of information from bank reports and not on an accrual basis. From 2008, HCSO will estimate the compensation of employees on accrual basis when compiling foreign accounts, since estimations will be based on personal income tax data. Therefore, compensations will be recorded when the work is performed. The compensation of employees is based on bank cash-flow reports and does not include social contributions (net item), but the new elaborated system will include it from 2008. The actual social contribution payable by employers will be a part of D. 1.

27. Information on the compensation of employees based on bank reports contains net and not gross (income taxes, social contributions) values.

28. From 2008, compensation of employees published by HCSO will contain income taxes and social contributions paid by employees, as well.

8.1.1. Description of sources and methods – current procedure

29. Until the end of 2007 the MNB BOP data are used for the compensation of employees estimation. For the reference year 2007 methodological change was introduced in the second estimation. In this new system, data on gross compensation of employees (CoE) - including income taxes and social contributions -, paid abroad and received from abroad are provided by the HCSO. According to the HCSO data, in 2002 Hungarian workers abroad received 232 billion HUF, and foreign workers in Hungary received 117 billion HUF thus the net credit balance was 115 billion HUF. The current procedure for compensation of employees is the following :

- Information based on gross basis, including income taxes and social contributions, which is required by international statistical standards.
- Information implies coverage.
- In principle proper timing as information is recorded when the work is undertaken so accrual basis is used as it is required.

Recently used calculation method: Estimate of HSCO including illegal activities

Table 8.3 Compensation of employees including illegal activities, 2002.

Type	Billion HUF
Credit	232.5
Debit	117.1
Net	115.4

Illegal activities

30. In 2006, the estimation of production, consumption and income deriving from illegal activities was introduced in the Hungarian National Accounts compliance with the ESA'95. (3.08).

31. According to the proposal of Eurostat, estimations for three main scopes of illegal activities have to be compiled, namely: prostitution, drugs and smuggling. From these three scopes HCSO has made estimations for prostitutions and drugs, because these activities do not change often and significantly in short term and a lot of information is available for these items. Smuggling is a different thing. Although, it has constant elements, it is an activity that can immediately adapt to the change of market and legal regulations but these can not be measured by statistical means. It is more unlikely to find other basic information than in the case of the first two items. So till now, HCSO did not try to estimate this activity.

32. The estimation of production and turnover of drugs was based on the regular data demand. The starting point was to estimate the consumption of drugs, using the number of consumers, the quantity of drugs and the prices by type of drugs. The main data sources were medical, judicial data, reports of the police, the tax office and the customs office. For the estimation of intermediate consumption mainly reports of the police were used.

33. In the case of prostitution the method is similar. First estimation was made for the consumption, using the number of consumers, number of cases using average prices. There are two additional data sources to the above mentioned ones: the data of the association of prostitutes and special studies. For the estimation of intermediate consumption mainly reports of the police were used.

34. The calculation was made from 2000 and had an impact on the compensation of employees paid to the ROW and on GNI.

The estimation of income paid abroad from illegal activity

35. The estimation was based on the annual reports of the Supreme Prosecutor's Office and the findings of police concerning foreign crime perpetrators.

36. We have made two assumptions

1. The balance of amount paid abroad and received from abroad concerning prostitutions is about zero. The basis of this assumption according to the data available is that the number of prostitutes working abroad and foreigners working in Hungary are almost equal. In case of drug trade it is not true, in this case the main source is the rest of the world.

2. During the estimation we made the assumption, that the ratio of foreign perpetrators abusing with drugs is higher than that of domestic perpetrators, namely this is the most common crime they commit. So we set the ratio of income paid abroad from drug trade between the two ratios.

Table 8.4. The number and ratio of foreign citizens out of crime perpetrators against public order

Year	Perpetrators ⁵ abusing with drugs	Perpetrators of crime against public order	Of which: foreigners	Ratio of foreigners among the crime perpetrators against public order, percentage	Ratio ⁶ of foreigners among the perpetrators abusing with drugs, percentage
2005	7 622	36 707	3 773	10,3	49,5
2006	6 735	31 902	2 192	6,9	32,5
2007	4 672	27 661	1 577	5,7	33,8

Table 8.5. The foreigners' share from the income of drug production and drug trade

Year	Production and trade of drugs, GDP million HUF	Of which: foreigners million HUF	Shares of income paid to foreigners, percentage
2005	106 272	29 874	28,1
2006	112 868	26 732	23,7
2007	118 242	27 638	23,4

Table 8.6 Table Effect of estimation of illegal activities on GNI, resources (billion HUF)

Year	Compensation of employees paid to the rest of the world (without illegal activities)	Illegal activities	Compensation of employees paid to the rest of the world (with illegal activities)	GNI (without illegal activities)	GNI (with illegal activities)
2002.	95,2	21,9	117,1	16 299,3	16 277,4

8.1.1.1. Compensation of employees received from the Rest of the World – new experimental procedure

37. Data on the number of Hungarians working abroad – available from the national balance sheet of labour compiled by HSCO and the study of the Office for European Affairs – were used for the estimation of compensation of employees received from abroad. Labour statistics provide information on workers abroad by countries and industries. To this information Eurostat data on average monthly earnings by countries were added. For the five most important countries employing Hungarian residents (Austria, Germany, Italy, the United Kingdom and the United States) detailed calculations were made. Data on other countries were estimated by using the average of these five countries. Our assumption is that Hungarians working abroad earn less than the average, around 75% of the employees of the country in question. It was considered in the estimation. The study of the Office for

⁵ Hungarian Statistical Yearbook 2007. Budapest, 2008. page 194

⁶ We supposed, that all the crime committed by foreigners against public order is abusing with drugs

European Affairs mentions that the number of Hungarian employees working abroad is much higher (around 40% more) than the data available from official sources. Hence the number of employees recorded by official statistics was regarded as the number of temporary workers (employed during less than one year) only. The rest of this population was regarded as permanent employees (employed during more than one year), i.e. residents abroad.

Table 8.7. Wages of resident workers working abroad

2002.		Austria	Germany	Italy	Great Britain	USA
D.11	million	281	229	33	18	33
Number of Hungarian employees in individual country	person	11 090	9 290	2 214	1 178	1 548
Exchange rate of HUF		242,97	242,97	242,97	386,65	258,00
Total wages and salaries of workers	millionHUF	68 274	55 605	8 006	6 826	8 474

38. The number of Hungarian residents working abroad was estimated by the KSH and published in the Labour Account of Hungary. 44 thousand people worked abroad (less than one year) according to the last Labour Account published in 2004, which regards a theoretical date: 1st of January 2004.

39. Since Hungary has become a member of EU (May 2004), many countries have allowed the employment of Hungarian workers in general or only in certain trade/profession. Nevertheless, the number of Hungarian employees abroad did not increase considerably (including workers without permissions).

40. Based on the above mentioned official data, the number of Hungarian employees abroad is estimated to about 60 thousand people on average in 2004. (As in the opinion of outside experts more people are working abroad than indicated in the official sources.) For the time being, there are no official figures for the length of time in working, so our expert made assumption using oral information of the above mentioned experts.

Table 8.8 Number of Hungarians working abroad and their estimated income, 2004

2004.		Number of employees		D.1 Compensation of employees	D.11 Wages and salaries	D.12 Social contributions
		person	%	million HUF	million HUF	million HUF
S.2	Rest of the World	44 000	100,0	334 099	267 279	66 820
S.21	The European Union (EU-25)	38 366	87,2	291 320	233 056	58 264
S.22	Third countries and international organisations	5 634	12,8	42 779	34 223	8 556

8.1.1.2. Compensation of employees paid to the Rest of the World – new experimental procedure

41. The estimation of compensation of employees paid abroad was based on the personal income tax records of resident non-Hungarian citizens employed in Hungary. Among the citizens of foreign countries those were regarded as non-residents who declared their personal income tax only in one single year. Persons travelling from neighbouring countries on a daily basis, and temporary workers from Romania, Slovakia, Ukraine, Croatia and Serbia were also regarded as non-residents, since they remain residents in their country according to their permanent place of residence. On the basis of the tax data of legal workers on wages and salaries, the income of non-registered employees was estimated. According to expert judgements, the total number of foreign workers is twice as much as the number of work permits issued. The estimated number of non-registered employees was obtained by deducting from this amount the number of employees who declared their personal income tax.

Their salaries were estimated by using the salaries data of legally employed workers. The above estimation was supplemented by the estimated income from illegal activities (production and distribution of drugs, and sexual services) of foreign citizens.

42. The net income of foreign workers in Hungary in 2004 was 117,6 billion HUF.

Table 8.9 Number of foreigners working in Hungary and their estimated income, 2004

2004.		Number of employees		D.1	D.11	D.12
		person	%	Compensation of employees	Wages and salaries	Social contributions
				million HUF	million HUF	million HUF
S.2	Rest of the World	117 546	100,0	146 895	132 310	14 585
S.21	The European Union (EU-25)	23 914	20,3	29 885	26 918	2 967
S.22	Third countries and international organisations	93 632	79,7	117 010	105 392	11 618

8.2. Taxes on products and imports

8.2.1. Introduction

43. This item covers taxes on production and imports paid to the institutions of the European Union. The elements of this item are EU VAT, EU import duties, Agricultural levy and Sugar levy.

8.2.2. Description of sources and methods

44. This category covers taxes on production and imports paid to the European Union. In the reference year, 2002, Hungary was not yet Member of the Union and therefore, the value of this tax item is nil. The preparation work on the content of this item from 2004 onwards has been started. From 2004 onwards (EU entry), the issue will be relevant. The source of the information is the State Treasury which can provide information on accrual basis for the following items:

EU VAT
EU import duties
Agricultural levy
Sugar levy
Total

45. The taxes on products paid to the institutions of the EU and recorded as foreign taxes on production, are the following:

Payment of value added type taxes – D.211 (taxes on products): the amount is recorded based on the data of MÁK, which is cash basis data.

Payment of duties on import – D.212 (taxes on products): data of the final consolidated accounts.

Payment of duties on sugar-import – D.214L (taxes on products).

According to recent recordings, 75% of the liabilities of duties on import and sugar-import of the given year are paid to the EU. 25% of the duties on import and sugar import are recorded as P1 – rendering government services to the EU – to cover the expenses of levying taxes.

Other payments:

Payment based on GNI, UK rebate – D.75: current transfers to the EU.

Reimbursement from the EU – D.74: current international cooperation against abroad according to the accession treaty.

46. No steps were taken to ensure the application of accrual time of recording principle to the estimates of taxes on production and imports, because there is not any deferred item according to ESA 4.26.

47. Monthly regulation of value added type taxes: accrual time of payment principle for duties on import and sugar-import.

48. **In 2002**, not all current taxes on wealth and income and capital taxes (ESA 95 D5 and D91) are fully excluded from the estimate of cross-border tax flows (ESA 95 §§4.77-4.81). Between 2003 and 2005 D.51B (Taxes on the income or profits of corporations including holding gains) income taxes of financial and non-financial corporations contained the deducted taxes on dividends paid from the profit to foreign owners of the partnerships. This type of tax on dividends was repealed in 2006.

49. The compensation of employees, published by HCSO, will also include income taxes (D.51A) paid by employees from 2008.

50. For other items (D.5 and D.91) there is no cross-border tax flow.

51. The UK rebate is not part of the taxes on products and imports, it is recorded as payments based on GNI.

52. Contributions to the EU based on GNI figures will be part of the item D.75 Other income transfers and not of this item.

8.3. Subsidies

8.3.1. Introduction

53. Subsidies from ROW are current unrequited payments, which the institutions of the EU make to resident producers with the objective of influencing their levels of production or their prices.

54. The sources and procedures used permit the identification, a full coverage and a correct classification of cross-border flows of subsidies, notably those from the institutions of the European Union.

55. EU subsidies can be divided into three types according to the primary source of data:

- recorded on treasury accounts and affecting government expenditure (final consolidated accounts): EU transfers (Structural Funds, Cohesion Fund, Schengen Fund, National Rural Development Plan, SAPARD, Phare)
- recorded on treasury accounts but not affecting government expenditure (not recorded on final consolidated accounts) (agricultural subsidies – within these: intervention subsidies – SAPS)
- not recorded on treasury accounts: direct producer subsidies of the EU.

56. The source of data of agricultural subsidies of EU is the FM final consolidated accounts and the monthly report of the Agricultural and Rural Development Office from which cash basis data of the transfers recorded on treasury accounts can be obtained.

57. In this source of data such items are also registered, which are related to government accounts through EU transfers only (EMOGA, KESZ)

58. Our indirect source of data is the EMIR (database system of EU transfers) and TEIR. We have access to these databases, but the practice of their application is under testing at present.

59. Recorded items are:

Subsidies of domestic market – D.319 (subsidies on products)
Direct export subsidies of the EU – D.312 (subsidies on products)

From the National Rural Development Plan:

National agro-environmental protection program – D.392 (subsidies on production)
Single Area Payment Scheme (SAPS) – D.392 (subsidies on production)

60. The final consolidated accounts of the Treasury are the primary source of data for the current EU transfers. The final consolidated accounts are recorded on cash basis. Subsidies have to be registered on accrual basis, the source of data for the adjustment is the Economic Accounts for Agriculture of HCSO.

Table 8.10 Summary figures on taxes and subsidies of the rest of the world, million HUF

ESA-code	Item	2004	2005	2006
D.2	Taxes on production and import	38 298	64 298	66 901
D.21	Taxes on products	38 298	64 298	66 901
D.211	Value added type taxes	19 112	26 821	30 457
	Value added tax	19 112	26 821	30 457
D.212	Taxes and duties on imports	19 186	35 415	35 644
	Import duties	19 186	35 415	35 644
D.3	Subsidies	80 532	141 302	185 199
D.31	Subsidies on products	845	17 206	19 827
D.312	Export subsidies	487	10 399	5 552
	Agricultural and food industrial export subsidy			
	Subsidies from the EU	487		5 552
D.319	Other subsidies on domestic products	358	6 807	14 275
	Subsidies resident producers	85		13 768
	Other direct subsidies	273		507
D.39	Other subsidies on production	79 687	124 096	165 372
	Simplified Area Payment Scheme /SAPS/	79 687	93 744	121 937
	Subsidy on other agricultural activity		30 352	43 435
	of which: Subsidy on Environment agricultural			32 919

8.3.2. Description of sources and methods

61. This category covers those subsidies which are current unrequited payments made by the European Union. In the reference year, 2002, Hungary was not yet Member of the Union and therefore, the value of this subsidy item is not yet relevant. The preparation work on the content of this item started in 2004. The necessary information on accrual basis is available from 2004 onwards and is provided by the State Treasury as a total.

8.4. Interest

8.4.1. Introduction

62. Interest is defined as the amount that a debtor becomes liable to pay to a creditor over a given period of time without reducing the amount of principal outstanding

63. Interest is payable in accordance with a binding agreement between the creditor and the debtor. Interest is the amount that the debtor becomes liable, under the terms of the financial instrument agreed between them, to pay to the creditor over a given period of time without reducing the amount of principal outstanding. Interest income should be recorded on an accrual basis. However, for the pre-2004 period interest income is recorded on a cash basis instead of an accrual one in the BOP statistics.

64. The cross-border interest flows are not recorded before the deduction of taxes and inclusive of grants for interest relief (ESA 95 §4.51), since the source of data is a settlement system (ITRS) they are reported on a cash basis and only adjusted for accruals. Cross-border interest flows are recorded after deduction of taxes.

Table 8.11 Interest income in balance of payments*, 2002

Type of income	Billion HUF
FDI income on debt, credit	5.9
FDI income on debt, debit	33.8
FDI income on debt, net	-27.9
Portfolio income on debt, credit	142.0
Portfolio income on debt, debit	248.2
Portfolio income on debt, net	-106.2
Other investment income	95.2
Other investment income	150.0
Other investment income, net	-54.9
Total interest, credit	243.0
Total interest, debit	432.0
Total interest, net	-188.9

* Data may not add up to the totals due to rounding.

65. Investment income in the BOP is part of the general reporting system as it is described in section entitled *BOP data collection system – General overview*. The major types of investment income are dividends linked to equity and interest linked to debt.

66. FISIM allocation

In order to make FISIM calculation more advanced, reference rate is allowed to calculate separately for transactions denominated in local and in foreign currency.

67. Internal and external reference rates were defined based on local currency and foreign currency transactions.

68. The FISIM items are recorded in the Allocation of primary income account, where total interest receivable and total interest payable are adjusted by FISIM.

Table 8.12 Effect of FISIM on interest, 2002 (million HUF)

ESA code	Transactions	Published in 2009 without FISIM	Published in 2009 with FISIM	Difference	
					%
D.41	Interest received from the ROW	240 711	241 060	347	0.14
	Interest paid to the ROW	-452 932	-447 252	5 682	1.25
	Balance of interest	-212 221	-206 192	6 029	2.84

69. As regards the interest flows on financial leasing, respondents are required to make a split between the amortization and the income flow and these are to be reported separately in the new data collection system (i.e. from 2008).

70. With regard to the interest accruing on trade credits, since it is a non-directly observable and reportable data, and the imputation would have an impact on the reported trade in goods and services data as well, the conceptual and practical aspects should be further explored including the study of the compilation practice of other member states, too.

8.4.2. Description of sources and methods up to 2003

71. All relevant transactions channeled through the resident banking sector are recorded by reporting banks under transaction codes according to an *MNB Decree*. Transaction codes are by financial instruments, i.e. income on FDI other capital, on bonds and notes, on money market instruments, on loans, on deposits, on other assets and liabilities. Transactions that are channeled through accounts with non-residents are reported directly by non-financial companies according to the *Government Decree*. Debits relate to income on debt of resident institutional unit vis-à-vis non-residents (i.e. interest payable to the ROW) and credits relate to residents' non-equity claims on non-residents (i.e. interest receivable from the ROW).

72. The following sub-items are recorded in the BOP as interest income:

- direct investment income:
 - income on debt (other capital);
- portfolio investment income :
 - income on bonds and notes;
 - income on money market instruments;
- Other investment income
 - income on loans, credits, deposits, repos, etc. not covered by FDI and portfolio investment income

73. Since 1999, in line with the 1997 change in the BOP methodology, cash-flows in form of interest payments related to financial derivatives (i.e. interest rate swaps and currency swaps) have been excluded from the income of current account and have been recorded as financial derivatives in the financial account.

74. Income on international reserves is reported by the MNB from 2004 onwards and recorded in the current account as income generated on the underlying type of instrument. Thus incomes

concerning international reserves on deposits, and on loans, are recorded under other investment incomes. Income on bonds and notes and income on money market instruments are classified under the proper portfolio income subcategories.

75. Incomes on trade credits and financial leasing are not recorded in the BOP.

76. No investment income is recorded for off-shore enterprises in the BOP.

77. Two types of off-shore companies are distinguished for the purposes of compiling the balance of payments statistics.

78. The first group is made up by pass through companies (no local operations, little or no employment, no domestic value added, substantial capital inflow and outflow passing through), which use assets from equity investments to place funds as loans abroad almost immediately. On the ground of economic nature of these pass-through enterprises in the balance of payments statistics under FDI the financial flows data are recorded on a net basis (net of inflow and outflow) instead of gross recording of the transactions. The related FDI stock data are derived from the cumulative net transactions data.

79. The second group is comprised of companies engaged in some kind of real economic transactions. In case of these enterprises, services or capital account transactions - sale or purchase of non-produced non-financial assets - are recorded in the balance of payments.

80. The weak points of the interest accounting applied up to 2003:

- Non-accrual information.
- The recording of trade credits and financial leasing operations is missing, therefore there are no recording on the related interest income either.
- Data deriving from ITRS are accounted on a net and not on a gross basis (excluding tax deductions and including interest relieves).

81. In the future a new BOP data collection system will be introduced on the basis of direct reporting by companies; this system is expected to replace the current ITRS regime. In the new system, the harmonization of flows (income and other flows) and stocks will be indispensable.

8.4.3. Description of sources and methods from 2004 onwards

82. From 2004 onwards, the interest incomes are recorded on an accrual basis in the quarterly BOP. With regard to the interest income data on accrual basis:

- The monetary institutions, including the MNB, report their interest incomes deriving from their reserve assets as well as from their claims and liabilities on an accrual basis to the MNB's Statistics Department. The report covers all components of the financial account that is relevant for the own business of the banks. Thus loans, deposits, portfolio investment related to debt instruments, repos, current accounts, other receivables and payables, etc. are regarded. The report covers foreign assets and liabilities.
- In case of the Government sector, for the BOP Division, the Financial Accounts Division of the MNB provides data on the accrual interest income of the foreign financial liabilities, which are mainly non-resident owned government bonds and treasury papers. Regarding, among others the ROW, the accrued interest is calculated by security types by the Financial Accounts Division on

the basis of information received from the ÁKK (Debt Management Agency) and data deriving from securities statistics.

- In case of other sectors, based on foreign financial assets and liabilities, interest rates are estimated on an accrual basis by the MNB. Information from the ITRS on interest flows are combined with estimated stocks of relevant foreign financial assets and liabilities for twelve-month periods and a moving 12-month average interest yield is calculated. The latter yield is applied to end-of-month stocks of the reporting month concerned. Annual estimates are a summation of twelve months. This procedure applies for any financial instrument of relevance. The formula of the applied rate of interest for each relevant month is the following:

$$R_{j,v} = \frac{\sum s_{j,v-n}}{\sum a_{j,v-n}}$$

where:

R = the estimated monthly interest rate

S = reported settlement interest flow

a = end-of-month stock (without accrual)

j = financial instrument

v = reference month

n = values are from 0 to 11

This "historical" yield is applied to end-of-month stock (without accrual) in order to calculate the monthly interest income flows on accrual basis.

- Stocks of financial assets and liabilities are estimated on the basis of cumulated flows. Income on trade credits and financial leasing is in the same situation as it was before 2004, it is not recorded in the BOP, which is a weak point.

83. In future, when the new BOP collection system based on direct reporting will be implemented by 2008, specific surveys will be used to collect information on stocks at end of period. In the new system, reconciliation of flows on accrual basis (income and other flows) and stocks will be required from respondents.

Table 8.13 Settlement vs. accrual data for investment income in Balance of payment, 2004 (Billion HUF)

	Settlements data	Estimated accrual data	Difference
3.2.2. Direct investment income, Income on debt, credit	9.8	7.8	-2.1
debit	31.7	72.3	40.6
net	-21.9	-64.6	-42.7
3.3.2. Portfolio investment income, Bonds and notes, credit	71.0	68.0	-3.0
debit	282.7	303.5	20.7
net	-211.8	-235.5	-23.7
3.3.3. Portfolio investment income, Money market instruments, credit	13.5	13.5	0.0
debit	0.2	0.1	-0.1
net	13.3	13.3	0.1
3.4. Other investment income, credit	101.8	93.8	-8.0
debit	147.4	145.5	-1.9
net	-45.6	-51.6	-6.1
Income on debt, Total, credit	196.1	183.1	-13.0
 debit	462.1	521.4	59.3
 net	-266.0	-338.3	-72.4

8.5. Description of sources and methods current procedure

84. Until 2007 interest figures of institutional sectors in national accounts were defined on non-harmonised data sources, so there was no adequate consistency between the figures ensured.

85. In 2007, an expert group established by the HCSO and the MNB to harmonise financial and non-financial accounts developed a new method for calculating quarterly and annual interest income. Using the new method, the figures for the period 1995-2007 were compiled by the MNB in 2008.

86. The basis of the calculation is the *from whom to whom matrix* on stocks available in the system of financial accounts covering all financial instruments. All interest-bearing financial assets in the Hungarian economy are classified under deposits (AF.22-29), loans (AF.4), debt securities (AF.33) or mutual fund shares (AF.52) in the financial accounts statistics. For deposits and loans, the aggregated stocks at nominal value recorded in the financial accounts or their source statistics are used. For securities, the main source of information is the security-by-security database maintained as part of the securities statistics of the MNB.

87. The following breakdown of instruments is used in the matrix:

- Transferable deposits
- Other short-term deposits
- Other long-term deposits
- Short-term loans
- Long-term loans
- Short-term debt securities
- Long-term debt securities
- Mutual fund shares

Currency breakdown of instruments: domestic and foreign currency

Sector and counterpart sector breakdown of data:

- Non-financial corporations
- Central bank
- Other monetary financial institutions
- Other financial intermediaries
- Financial auxiliaries
- Insurance corporations and pension funds
- Central government
- Local government
- Social security funds
- Households
- Non-profit institutions serving households
- Rest of the world

Further data sources of the interest income matrix:

- General government non-financial accounts (HCSO)
- Statistical report of the Debt Management Agency (stocks, interest rates, accrual interest)
- Balance of payments statistics (MNB)
- Profit and loss account of the central bank
- Supervisory reports (profit and loss accounts of financial corporations)
- Annex of the annual corporate tax declarations (profit and loss accounts by corporation)
- Monetary interest rates statistics (MNB)
- Securities statistics (interest rates, stocks and flows of different securities, MNB)
- FISIM calculation for the non-financial accounts (MNB)

88. The National Bank of Hungary is the institution where the stocks of different financial instruments and accrued interests split by sectors and sub-sectors are available on quarterly basis. The National Bank of Hungary compiled a matrix of interest flows between institutional sectors. The matrix contains interest flows among resident sectors and the rest of the world, and the consistency with the basic FISIM input is ensured.

Table 8.14 Effect of the change of new interest matrix on GNI (at current prices, billion HUF)

	2002	2003	2004	2005	2006	2007
Total	-23.3	-45.4	-29.9	-29.4	+14.3	..

8.6. Distributed income of corporations

8.6.0. Introduction

89. Distributed income of corporations is the income to which shareholders are entitled as a result of placing funds at the disposal of corporations (see Chapter 8.5);

8.6.1. Description of sources and methods

90. Dividends represent investment income that is payable without a binding agreement between the creditor and the debtor. Dividends are the distribution of earnings allocated to shares and other forms of participation in equity.

Table 8.15 Dividends and distributed income in BOP*, 2002

	Billion of HUF
Dividends and distributed income on FDI equity, credit	4.7
Dividends and distributed income on FDI equity, debit	316.6
Dividends and distributed income on FDI equity, net	-311.9
Income on portfolio equity, credit	0
Income on portfolio equity, debit	7.9
Income on portfolio equity, net	-7.9
Total dividends and distributed income, credit	4.7
Total dividends and distributed income, debit	324.5
Total dividends and distributed income, net	-319.8

* Data may not add up to the totals due to rounding.

Future plan for the dividends:

91. The purpose of compiling the dividend matrix is to improve interest and dividend accounting in national accounts. In this field, the compilation of annual sector accounts discovered problems that can be traced back to differing non-harmonised data sources of individual sectors. Looking at present at property income in national accounts, dividends received and paid of economic sectors are determined on the basis of different data sources of individual sectors. As a consequence of all this, the system is not closed in itself, consistency is not ensured. A new work plan was worked out by HCSO in cooperation with the NBH.

92. Steps made to improve dividend accounting:

1.) At the invitation of HCSO, NBH examines the possibility of compiling a matrix – in 2009, in the framework of the co-operation agreement made between HCSO and NBH – that presents dividend flows of different economic sectors and the rest of the world.

2.) The dividend matrix would contain in a consistent manner the dividend flows of resident economic sectors as well as the sector of the rest of the world in compliance with ESA95 regulations. The anchor in the matrix will be a stable basis for the total dividend data of sector accounts.

93. The two institutions together are going to establish the methodology of dividend accounting at the end of 2009.

94. The dividend matrix is going to be compiled and calculations are going to be analysed until the end of May 2010. The decision on implementing the output will be made at 2010. and the new method and data will be used in national accounts in September 2010 back to 1995.

8.6.2. Income on FDI equity – Description of sources and methods

FDI register

95. The compilation of Hungary's balance of payments statistics has been based on a direct reporting data collection system replacing the former ITRS data collection since January 2008. With the launch of the new data collection system settlement-based data provision by the credit institutions was terminated. Under the new regime the MNB obtains the necessary information directly from reporting agents via monthly quarterly and annual reports covering mostly the financial account items and international investment position statistics. Report on investment income data is integrated into the closed and consolidated reporting scheme for financial assets and liabilities (opening position, all type of flows separately and closing position). The co-operation with the HCSO in data production has also been enhanced in order to get the non-financial account elements of the balance of payments statistics. The HCSO has been the source of data on goods since 2003, on business services and travel since 2004, and on other services since 2005. From 2008, data on compensation of employees and government and household transfers has also been provided by the HCSO.

96. As from 2008 there is a separate special survey form aiming at collecting registry information on non-resident partners of reporting resident institutions involved in FDI. In the frame of the new direct reporting system large companies (711 "big players" at the end of 2008), report the full set of BoP and IIP statistics (including FDI) on a monthly basis. The monthly information is supplemented by further information derived from quarterly (831 reporting entities in 2008Q4) and annual reports [only for FDI] (3050 reporting entities in 2008 on their 2007 data). These quarterly and yearly reporting obligations are based on thresholds, i.e. if one of the thresholds (see below) is met by a reporting entity, it is legally obliged (MNB Decree 3/2007.(II.21.) to submit its reports directly to the MNB. If an enterprise meets the required conditions becomes the part of the monthly, quarterly or annual sample.

Reporting thresholds for the quarterly FDI survey

97. Companies which or in case of which

1) at the beginning or at the end of the reference quarter the value of the equity capital investment of foreign investors in the reporting institution is not less than 1 billion HUF (or less than minus 1 billion HUF in case of losses) [inward FDI equity]; or

2) have a direct equity link of at least 10 % in terms of the subscribed capital in one or more foreign enterprises and the total value of equity capital or the value of assets transferred to a foreign branch is not less than 100 million HUF [outward FDI equity]; or

3) at the beginning or at the end of the reference quarter, the total value of non-equity claims or liabilities vis-à-vis foreign direct investor, foreign direct investment, foreign branch or other fellow-company is not less than 250 million HUF [other FDI capital]; or

4) the transaction value of acquisition or sale of equity in another resident entity of at least 10 % vis-à-vis non-residents is not less than 250 million HUF during the reference period [third party transactions].

Reporting threshold for the yearly FDI survey

98. Business entities which or in case of which

1) have foreign investors and on the last day of the reference financial year or that of the previous period the value of total equity capital of foreign investors in the reporting entity is not less than 250 million HUF (or less than minus 250 million HUF in case of losses) or the value of dividends declared payable to foreign investors is not less than 250 million HUF [inward FDI]; or

2) on the last day of the reference financial year or that of the previous period have a direct equity investment of at least 10 % in terms of the subscribed capital in one or more foreign enterprises or have a foreign branch and the total value of equity capital or the value of assets transferred to the foreign branch is not less than 10 million HUF [outward FDI]

FDI survey

99. In close cooperation with the KSH in 1999 the MNB introduced a questionnaire-based survey to monitor direct investment by residents abroad and non-residents in Hungary. The survey – replacing the ITRS data – has made possible to record FDI income on equity (i.e. dividends and reinvested earnings) and stock data consistent with international statistical methodology. The FDI survey is composed of quarterly and annual questionnaires. The annual questionnaires serve to collect – among others - data on dividends and reinvested earnings based on the enterprises' profit and loss account. No any adjustments are applied to this "all inclusive" data during the compilation. However these accounting data for profits by themselves are partially corresponding to the COPC, since they exclude depreciation, provisions for host-country income and corporation taxes and debt repayments receivable/payable, and include interest receivable/payable. Contrary to the COPC, realized and unrealized capital gains and losses are also included. This after tax profit is used for calculating RIE in the BOP.

100. The deadline for submitting responses to the questionnaire on direct investment capital for the reference year is 30 June of the year following the latter year. Consequently, until the annual questionnaire is processed in T+9 months, the BOP contains estimates of (i) the after-tax profit component of reinvested earnings and, of (ii) dividends. In September the MNB has the reported data on after tax profits for the previous (reference) year and on dividends for the current year. The MNB also estimates the amount of dividend tax for the current year, projecting the average percentage share of dividend tax for previous years into the future. In September of the year following the reference year, the MNB replaces the estimates of after-tax profit recorded and dividends declared payable with preliminary actual data derived as a result of the processed questionnaires.

101. It is a fundamental issue from the perspective of the entire survey to create and maintain the proper corporate register. From the perspective of direct investment, the most important criterion of determining the range of entities to be monitored is foreign ownership of at least 10% or more of the equity capital. For the time being only direct equity links are covered by the survey, indirect ownership is not monitored. As far as indirect ownerships are concerned, the implementation of a fully consolidated system is under consideration and put on the MNB-KSH work program.

FDI in the domestic economy

102. As for the FDI in Hungary, the sample of enterprises for the annual survey contains direct investment enterprises with direct investors' equity holdings above a threshold of HUF 300 million

(EUR 1.2 million). The register is based on the corporate tax returns for the year preceding the reference year and updated based upon the ITRS information. Out of the 20,000–25,000 enterprises operating in Hungary with foreign equity participation, some 1900–2100 enterprises are entered into the sample of enterprises, covering some 90-95 percent of the total of the relevant equity stock. The response rate is close to 90 percent. For 2007 the reporting threshold in inward FDI was decreased from 300 million to 250 million HUF and the FDI survey form was modified according to the requirements of the new data collection system of 2008.

Table 8.16 Annual Inward FDI Survey: Number of Respondents

Reference period					
2002	2003	2004	2005	2006	2007
1630	1700	1740	1940	2070	3050

103. In grossing up the data for the total economy, the MNB uses the questionnaires as a starting point. The data from the corporate tax records on enterprises not covered by the sample or not responding are used as a supplement to the questionnaire data. The sum of these two data sets gives the amount of shareholders' equity, after tax profits and dividends accounted for the non-resident investor.

104. Since the afore-mentioned corporate tax returns only provide information on the size of non-resident equity capital holdings on an aggregate basis, direct investments can not be separated from portfolio investments in those cases where non-residents' direct equity holdings are reaching at least 10%. Such data, used on behalf of grossing-up, may contain portfolio investment.

105. Listed enterprises, irrespective of minimum holding criteria, are fully covered by the survey. Except building societies, the MNB does not request credit institutions to provide data, as any required information may be extracted from the detailed statistical balance sheet of credit institutions provided to the MNB and to the Hungarian Financial Supervisory Authority (PSZÁF).

FDI abroad

106. With regard to direct investment abroad, the sample of enterprises for the annual survey contains enterprises having invested at least HUF 10 million (EUR 40.000) in terms of equity. The register is kept updated by using ITRS information. Credit institutions are also required to report, as the MNB has no data available from other sources on reinvested earnings and equity capital of their foreign subsidiaries. Since the reporting threshold is quite low and the outward FDI is very concentrated, in terms of equity invested abroad the coverage is considered to be close to 100%.

Table 8.17 Annual Outward FDI Survey: Number of Respondents

Reference period					
2002	2003	2004	2005	2006	2007
221	240	274	295	255	360

107. In the new direct reporting system indirect FDI links in terms of other capital transactions and positions are fully observed. With regard to the equity, on the FDI survey forms information on indirect equity links are also to be provided by the respondents. However the methodological and technical aspects of using this information in producing the income and equity data are still need to be explored. It is planned that we build on the experience and practice of other Member States that had already shifted also to a direct reporting data collection system and follow the international standards in this field.

Concluding remarks

108. The level of income accruing on direct investment equity depends solely on the income generated in a given year which may be negative in case of loss making. This level has nothing to do either with owners' decisions regarding the amounts of dividend declared payable (which only affects the distribution of income between dividends and reinvested earnings) or actual dividend payments. Dividends may not only be approved vis-à-vis profits earned within the given period, income repatriated from the company may be raised by the owners at the expense of equity.

109. Dividends and distributed income is recorded in the BOP when declared payable before deduction of tax. Debits relate to FDI equity investment in Hungary by non-residents (i.e. dividends payable to the ROW) and credits relate to residents' FDI equity investment abroad (i.e. dividends receivable from the ROW).

110. The sources and procedures used permit the identification of cross-border flows of dividends, but the full coverage of them is not permitted, since a cut-off survey was applied instead of a census. These should include dividends from smaller companies, shares issued in payment of dividends (bonus shares must be excluded), dividends on investments by mutual funds (capitalised or not) and income paid to general government by public enterprises recognised as independent legal entities as foreseen in ESA 95 §4.54.

8.6.3. Quasi-corporations

111. Income from quasi-corporations such as land and buildings is included indistinguishably in distributed income as these investments are recorded under FDI. The information is derived from the ITRS. This is true for legal entities and for natural persons involved as owner of land and/or buildings as well. This way, coverage is guaranteed for quasi-corporations.

112. Dividends are recorded, when declared payable. Cross-border flows of dividends are recorded before deduction of income and wealth taxes, respondents are requested to report the data on dividends as declared payable before deduction of taxes.

The income is reported according to the "all-inclusive" concept instead of COPC.

113. Income from quasi-corporations such as land and buildings is included indistinguishably in distributed income as these investments are recorded under FDI. The information is derived from the ITRS. (This is true for legal entities and for natural persons involved as owners of land and/or buildings as well. This way, coverage is guaranteed for quasi-corporations.)

114. The cross-border withdrawals from the income of quasi-corporations are measured as paid, since the source of data is a settlement system (ITRS).

8.6.4. Income on portfolio equity

115. Income on portfolio equity in the BOP (foreign ownership of less than 10% of the equity capital) is part of the general reporting system as it is described in the section entitled *BOP data collection system – General overview*. All relevant transactions channeled through the resident banking sector are recorded by reporting banks under transaction codes according to the *MNB Decree*. Transactions that are channeled through accounts with non-residents are reported directly by non-financial companies according to the *Government Decree*. Debits relate to income on portfolio equity liabilities of resident institutional units vis-à-vis non-residents (i.e. dividends paid to the ROW) and credits relate to residents' equity claims on non-residents (i.e. dividends received from the ROW). Dividends on portfolio equity are recorded in the BOP when they are paid, which is in principle a weak point.

8.7. Reinvested earnings on foreign direct investments

8.7.0. Introduction

116. Reinvested earnings on foreign direct investments record earnings on direct investment which are retained by the enterprise.

117. Reinvested earnings comprise direct investors' shares, in proportion to equity held, of earnings that is not distributed as dividend or remitted to the direct investor.

Table 8.18 Reinvested earnings in balance of payments, 2002 (Billion of HUF)

Credit	6.8
Debit	462.9
Net	-456.1

8.7.1. Description of sources and methods

118. On the basis of the annual FDI survey (*see Section 8.5*) reinvested earnings are calculated as after-tax profit realized in a given year (which may be either positive or negative) less dividends declared payable for the same period. Since dividends may not only be approved vis-à-vis profits earned within the given period, reinvested earnings may even be negative, reflecting the fact that income repatriated from the company has been raised (lowered) by the owners at the expense of equity. (As a result of the accounting technique employed, i.e. the same sum appears with an opposite arithmetic sign when accounted as dividends on the one hand and as reinvested earnings on the other hand, the income balance remains unaffected by the owners' decisions concerning the distribution of earnings.) Debits relate to FDI equity investment in Hungary by non-residents (i.e. income of non-resident investor generated on equity in Hungary and reinvested in Hungary) and credits relate to residents' FDI equity investment abroad (i.e. income of resident investor generated on equity abroad and reinvested abroad).

119. The annual questionnaires serve to collect data on dividends and reinvested earnings based on the enterprises' profit and loss account. No any adjustments are applied to this "all inclusive" data during the compilation. However these accounting data for profits by themselves are partially corresponding to the COPC, since they exclude depreciation, provisions for host-country income and corporation taxes and debt repayments receivable/payable, and include interest receivable/payable. Contrary to the COPC, realized and unrealized capital gains and losses are also included. This after tax profit is used for calculating RIE in the BOP.

120. Indirect links within big multinationals are only partially captured, only for FDI other capital is correct, but as regards the equity and RIE only direct links are accounted for. Profits and distributed earnings of direct investment enterprises are from the same source: the FDI survey.

121. There are adequate sources to ensure an updated FDI register(s), in order to detect births, deaths and changes of resident direct investors abroad and non-resident direct investors inland the general business register of HCSO is updated by ITRS information.

122. The holding companies, branches (unincorporated enterprises wholly owned by foreign companies) and special purpose entities are covered by the register(s).

8.8. Property income attributed to insurance policy holders

8.8.0. Introduction

123. Property income attributed to insurance policyholders is the net property income received from the investment of insurance technical reserves held in financial assets, land and buildings.

124. As the rest of the world accounts were not compiled for 2002 (and years before), the process of compilation is still in development. This fact regards thus also the issue of property income attributed to insurance policy holders.

8.8.1. Property income payable to the rest of the world - sources and methods

Life insurance

125. For the time being the KSH does not have data, including property income, on life insurance provided by resident insurance companies to non-residents. In 2004 a new report (Number 42A17) has been introduced by the Hungarian Financial Supervisory Authority on premiums payable and service charge broken down by country. According to our plan, estimation will be done, using both the data source of the afore-mentioned supervisor and the ratio of domestic property income of life insurance / domestic premiums payable of life insurance. The final estimation method is still under revision for the time being. We are going to investigate another source such as from the industry itself and/or from supervisory sources e.g.

Non-life insurance

126. In the case of non-life insurance the source of the property income calculations will be the monthly payment data of the MNB (namely the number 190, 200 and 210 reports) both for the source and use side of the Rest of the world account. Using these data an experimental estimation was made with the help of this data source and the ratio of domestic property income of non-life insurance / domestic premiums payable of non-life insurance for 2002, as follows:

Table 8.19 Property income payable (Non-life insurance) (million HUF)

	Data source	2002	2003
1. Premiums of non-life insurance from the ROW	ITRS	3 510	7 395
2. Domestic premiums of non-life insurance	Profit and loss accounts of insurance companies	291 522	331 077
3. Domestic property income of non-life insurance	Profit and loss accounts of insurance companies	17 420	14 978
4. Ratio of 3./2.		5.98%	4.52%
5. Property income payable to non-residents by resident insurance companies		210	335

8.8.2. Property income receivable from the rest of the world

Life insurance

127. The Act on Insurance Institutions and Insurance Business (XCVI of 1995) did not allow for Hungarian residents to buy policies from non-resident life insurance companies until the date of EU entry of Hungary (May 1, 2004). Therefore, until 2004, calculations for property income receivable from the rest of the world related to life insurance are not applicable for the GDP-GNI transition. However, the new Act on Insurance Institutions and Insurance Business (LX of 2003) allows residents to buy life insurance policies from non-resident providers from 1 May 2004 onwards. Thus the calculations for 2004 (and years after) should include this item, as well. There are problems with the availability of data concerning premiums of life insurance payable by residents to the ROW. In our opinion, the greater part of this type of life insurance policies is from Austria, so we are planning to contact the Statistics Austria in this subject. Assuming that the ratio for Hungary's life insurance sector

also apply to ROW life insurance contracts we may estimate property income receivable from the rest of the world.

Non-life insurance

128. According to our information from ITRS the sum of premiums from non-life insurance payable by residents to the rest of the world was very small – HUF 369 million in 2002 and HUF 341 million in 2003. As the ratio of property income / gross premium in foreign markets is unknown for us we use the ratio of the domestic market for our calculations concerning property income from non-life insurance payable to the ROW.

129. The result of our investigation was that the property incomes of non-residents were negligibly small in 2002 (HUF 24 million) and in 2003 (HUF 15 million) a same figure is to be expected for 2004, as well. A moderate increasing is possible after the EU entry, probably in 2005.

Table 8.20 Property income receivable (Non-life insurance) (million HUF)

	Data source	2002	2003
1. Premiums of non-life insurance to the ROW	ITRS	396	341
2. Domestic premiums of non-life insurance	Profit and loss accounts	291 522	331 077
3. Domestic property income of non-life insurance	Profit and loss accounts	17 420	14 978
4. Ratio of 3./2.		5.98%	4.52%
5. Property income of non-life insurance payable to residents by the Rest of the World		24	15

130. Weak points of the estimations:

- 1) Neither the data sources nor the estimation permit the identification and full coverage of cross-border services.
- 2) Since the monthly ITRS data are on cash basis, our experimental estimations are cash-based as well.

8.9. Rents on land and on sub-soil assets

8.9.0. Introduction

131. Rents on land and sub-soil assets are treated as property incomes in line with ESA95 rules. When these transactions occur between resident and non-resident units, they are recorded as property income exchanged with the rest of the world in the transition between GDP and GNI. These transactions can only occur if a non-resident is renting land either for non-production purposes or for production lasting less than one year. Land and sub-soil assets can be owned by non-residents, but ESA95 states that, in this capacity, they must always be treated as notional resident units, so any purchase of land or property by a non-resident is treated as direct investment in property. Income from direct investment in property is treated as income from equity rather than rent and recorded under distributed income of corporations, since the rent is treated as an operating surplus of a quasi-corporation.

8.9.1. Description of sources and methods

132. FDI equity data in BOP include ownership of land and buildings. The same applies to expenditures related to natural resources exploration and expenditures on bonus payments made for the right to undertake exploration for natural resources when there is a clear intention to establish a direct investment enterprise. Income on these items is indistinguishably included in income on FDI equity. This income is part of the general reporting system as it is described in the section entitled *BOP data collection system – General overview*. All relevant transactions channeled through the resident banking sector are recorded by reporting banks under transaction codes according to the *MNB Decree*. Transactions that are channeled through accounts with non-residents are reported directly by non-financial companies according to the *Government Decree*. Concluding, it can be said that up to now, the use of land and exploration of sub-soil assets for a duration of less than one year is not relevant and thus there is no income flow to be estimated for rents.

133. The sources and procedures used permit the identification and full coverage of cross-border flows of rents on land, including rents payable to the owners of inland waters and rivers (ESA 95 §4.72), and of royalties related to the exploitation of sub-soil assets (ESA 95 §4.74)

The accounting is made according to ESA95 rules.

8.10. Conclusions

8.10.1. Strengths and weaknesses of the recent system:

134. The GNI calculation is mainly supported by a well organised BOP data collection system (ITRS), which is managed (including the compilation of data) by the MNB.

135. The estimation on compensation of employees was changed by using HCSO data sources and estimations than central bank data collection system. From 2008, the compensation of employees is recorded on an accrual basis. In this new system, data on gross CoE including income taxes and social contributions.

Weaknesses of the recent system:

136. The estimation on compensation of employees should be changed from bank data collection system to using other data sources in order to comply with both international statistical standards and attaining good coverage of the phenomenon. Improvement is highly necessary on behalf of a correct GNI estimate. Also the plan for a new data collection for BOP requires other (better) sources. Both NA and BOP will profit from a needed change.

137. Dividends on portfolio equity should be on an accrual basis not on a cash basis and should be on a gross (before deduction of taxes) instead of on a net basis (inherent to ITRS).

138. The COPC concept for profits, functioning as a basis for the estimate of reinvested earnings, is not fully applied. Profits are based on the so-called 'all-inclusive concept' and may include exceptional gains (losses) not resulting from normal business operations.

8.10.2. Development of data sources for the GNI estimations:

139. The main data sources KSH and MNB have made efforts for other sources which verified the BOP data or replace them partly from 2006 or 2007. In 2008, a new data collection system was launched for the BOP statistics by the MNB, in general terms replacing the ITRS system by surveying respondents based on direct reporting. On the ground of the experience of the majority of EU member states, where a new BOP data collection system was introduced in the near past or will be done so in

the near future, in the new system BOP current account items (except investment incomes) are mainly to be provided by the KSH. The KSH have made further efforts to supplement or replace the recently available information sources in order to meet both national accounts and BOP requirements.

140. Taxes on products and imports was included in data from 1 May 2004.

141. Subsidies was included in data from 1 May 2004.

142. Use of the COPC concept in reporting in the case of FDI data collection, amending the FDI questionnaires from 2008 onwards.

143. Property income on insurance was included in GNI figures from 2005 onwards.

144. Recording of investment income flows (including interests) on an accrual basis and before taxation.

CHAPTER 9. FISIM: CALCULATION, ALLOCATION AND IMPACT ON GNI

9.0. FISIM: calculation, allocation and impact on GNI

1. According to Council Regulation No 448/98 and Commission Regulation No 1889/02 the estimation of FISIM was changed on 1st of January, 2005. FISIM (Financial Intermediation Services Indirectly Measured) has to be calculated on a new methodology and has to be allocated to user sectors/industries.

2. The Hungarian Central Statistical Office carried out a survey for the NBH in order to collect all the basic data concerning FISIM allocation to user sectors.

FISIM is calculated at current prices and at constant prices as well.

Data sources were the following:

- a) Balance sheets of financial institutions supervised by National Bank of Hungary
- b) Balance of payment of NBH.
- c) Monetary statistics of NBH.

3. Stock of loans and deposits and accrued interest were split by user sectors as it is laid down in the Council Regulation.

4. For sub-sector S.122, the loan and deposit stocks were derived from the balance sheets of financial institutions supervised by the NBH. Nostro and loro accounts and subordinated debts and supplementary subordinated debts were not taken into consideration in our calculation. Stocks are not adjusted with loss in value and valuation difference. In line with the National Accounts, repurchase agreements are accounted in all cases as loans and not as deposits. Repos and discounted bills were classified to short term instruments.

5. Data of sub-sector S.123 are taken from financial accounts. Financial enterprises, investment companies, investment funds and investment fund managers are taken into account in this sub-sector. We applied some estimation in this sub-sector. Loans granted by S.123 to Households were considered as consumer loans. Deposits of S.123 are placed at non-resident financial institutions (FI), loans granted by S.123 are at non-resident non-FI's and loans of S.123 are borrowed from non-resident FI's.

Accrued interest:

6. NBH has no direct information on interest payments by sector breakdown. Interest payments were calculated by known interest rates. These interest rates were in many cases interest rates of new contracts and the weighting were carried out by the stock of loans and deposits.

7. HUF interest rates either at S.122 or at S.123 were the following:
Interest rates weighted by unsecured HUF interbank placements both at sub-sectors S.122 and S.123.

8. Interest payments of non-financial corporations were calculated by weights of new loans and deposit stocks.

9. Loans granted by non-resident FI's and deposits with non-resident FI', interest rates coming from the balance of payment. One loan and one deposit interest rate were applied; they were not separated by maturity (short term and long term) or sight and term deposit.

10. Concerning foreign exchange interest rates at sectors S.122 and S.123:
Values of stocks are average of 12 month values, accrued interests are year interest values.

11. At sub-sectors S.122 and S.123 non-FISIM producers are money market funds and investment funds with estimated values. Small value loans borrowed by funds and deposits placed by them were at resident credit institutions according to this estimation.

12. Transactions between FI's contain all transactions within FISIM producers (both asset and liability side loans and deposits).

13. Figures on asset and liability sides contain transactions between resident FI's: transactions of S.122 and S.123 FISIM producers between each other.

14. On asset and liability side transactions between resident and non-resident FI's, transactions between S122 and S.123 FISIM producers and non-resident FISIM producers.

15. As for sector S.13, the total amount of import is treated as a position against non-resident FISIM producers. On the asset side, for the S.11 sector transactions with non-resident FISIM producers 50 percent of the whole sum is estimated. The other 50% is treated as transaction with non-resident non-FISIM producers.

16. Intercompany loans are excluded from calculation. At non-FISIM S.122 and S.123 according to estimation their transactions are related in 100% to deposit with non-resident FISIM-producers. These stocks were taken from the monetary statistics and the applied interest rates were taken from the balance of payment.

17. Transaction between non-resident non-FISIM producers S.122 and S.123 and S.11 and S.13 which is the residual value in the balance of payment between resident and non-residents, according to the methodology is an item which has not to be taken into account in FISIM calculation. Loans on asset side in all sectors and S.11 deposit rates are taken from the balance of payment. In any other cases interest rates are calculated by using average loan and deposit rates and appropriate period loan interest rates.

18. According to Council Regulation No 448/98 the internal reference rate is the asset side interest of loans of other monetary financial institutions (commercial banks, specialized credit institutions) and other financial intermediaries (financial leasing companies, other credit granting financial enterprises) divided by their stock of loans. At the calculation of the external reference rate (which is related to transactions between residents and non-residents) not only loans are taken into account, but deposits as well.

19. FISIM to industries of Non-financial and Financial corporations sectors was split by their stock of loans and deposits. FISIM to industries of General Government, Household and Non-profit institutions serving households sectors were allocated by the proportion of their original output.

20. To measure FISIM in a more advanced way, we have changed our reference rate calculation method. Data on loans and deposits and interest flows were split between domestic currency (HUF) and foreign currency (DEV) supplied by the NBH. There is one internal reference rate for HUF and one reference rate for DEV transactions, and one external reference rate for HUF and one reference rate for DEV transactions as well. Total FISIM of HUF and DEV transactions are added up at the end of the process and there are single FISIM results broken down by allocated sectors.

21. Stocks and interest flows split to local and foreign currency were compiled by NBH. The stocks were taken from the supervisory balance sheets by HUF and other currency breakdowns. Interest flows were estimated separately for local and for other currency transactions of S.122 HUF interest rates were calculated as a weighted average of uncovered contracted interbank HUF placements. S.11, .123, S.124, S.125, S.13 interest rates were taken by the weighted average of newly contracted loans. Interest rates on loans and deposits of non-resident FI's were taken from balance of payments. Interest flows of S.11 taken from the balance of payment were split by the stocks HUF / DEV proportion.

22. National Bank of Hungary (S.121) has to be excluded from the FISIM calculation, but according to the above mentioned Council Regulation No 448/98 concerning the FISIM allocation, its output (sum of its cost) has to be accounted as the intermediate consumption of S.122 and S.123. We applied this method during our calculation procedure.

23. At the Households sector FISIM on loans and deposits for households as owners of unincorporated enterprises are treated as intermediate consumption, while FISIM on deposits as individuals are treated as final consumption.

24. Taking into account the cost-based accounting of owner-occupied dwelling services FISIM on loans granted for dwelling owners were treated as FISIM output intermediate consumption and final consumption expenditures of Households sector.

25. Following the rules of the FISIM Council Regulation, NBH broke down Households sector (S.14) into sub-sectors S.141, S.142 and S.143. Concerning S.122 (monetary institutions), FISIM on consumer loans are accounted in sub-sector S.141, while those on loans for housing purposes and connected deposits are in sub-sector S.142 and FISIM on loans and deposits connected with sole proprietors are accounted in sub-sector S.143.

26. Loans granted by S.123 (other financial intermediaries) to households (S.14) are considered as consumer loans.

27. D.41 Interest is adjusted by the allocated FISIM to user sectors. It has an impact on all resident user sector's and the rest of the world's property income accounts.

28. As could be seen in the next table, in 2002, HUF 179 412 million was allocated into intermediate consumption, HUF 231 595 million into households expenditure on final consumption, HUF 23 101 million into government and non-profit institutions expenditure on final consumption. The amount of net export was HUF -6 029 million. This allocation of FISIM has an impact on the value of GDP by an amount of HUF 248 667 million (1.4 %).

29. Considering the balance of property income with the rest of the world, the impact on GNI can be quantified. Property income received amounted to HUF 349 million and property income paid amounted to -5 680 million HUF. The value of GNI increased by FISIM allocation by HUF 254 696 million (1.6%).

Table 9.1 Impact of FISIM allocation on GDP and GNI, 2002 (million HUF)

GDP by production approach	
P.1 Output	424 516
P.2 Intermediate consumption	175 849
B.1.g Gross domestic product	248 667
GDP by expenditure approach	
P.3 Households expenditure on final consumption	231 595
P.3 Government expenditure on final consumption	17 251
P.3 Non-profit institutions expenditure on final consumption	5 850
P.6 Export	6 009
P.7 Import	12 038
B.1.g Gross domestic product	248 667
D.4 Property income received from the rest of the world	349
D.4 Property income paid to the rest of the world	-5 680
B.5.g Gross national income	254 696

FISIM calculation by the two-type reference rates**Calculation of internal reference rate:**

- HUF internal reference rate is calculated in the following way:

30. Interest on HUF loans on the asset side of resident financial institutions is divided by the stock of HUF loans on asset side of resident financial institutions.

- Foreign currency (DEV) internal reference rate is calculated in the following way:

31. Interest on foreign currency loans on the asset side of resident financial institutions divided by the stock of foreign currency loans on asset side of resident financial institutions.

Calculation of external reference rate:

- HUF external reference rate is calculated in the following way:

32. Interest of HUF loans and deposits between resident and non-resident financial institutions on asset and liability side divided by the stock of HUF loans and deposits between resident and non-resident financial institutions on the asset and liability side.

- Foreign currency (DEV) external reference rate is calculated in the following way:

33. Interest of foreign currency loans and deposits between resident and non-resident financial institutions on asset and liability side divided by the stock of foreign currency loans and deposits between resident and non-resident financial institutions on the asset and liability side.

Table 9.2 Detailed description of HUF FISIM calculation containing source data and the corresponding figures used for export and import of FISIM, 2002

FISIM producers in S122+S123 average stocks and accrued interest

in million HUF

ASSETS

Transactions between FI's (Loans and Deposits)	
- between resident FI's (S122+S123)	503 612
- between resident and non-resident FI's	83 337

LIABILITIES

Transactions between FI's (Loans and Deposits)	
- between resident FI's (S122+S123)	566 160
- between resident and non-resident FI's	25 989

INTEREST RECIEVED

Transactions between FIs (Loans and Deposits)	
- between resident FIs (S122+S123)	49 154
- between resident and non-resident FIs	6 330

INTEREST PAID

Transactions between FIs (Loans and Deposits)	
- between resident FIs (S122+S123)	50 047
- between resident and non-resident FIs	2 423

Reference rates (%)

2002

Internal reference rates (49 154 / 503 612)	9,76%
External reference rate ((6 330+2 423) / (83 337+25 989))	8,01%

Table 9.3 Source data and HUF FISIM allocation to user sector of the national economy**FISIM output of S122+S123 : Breakdown by domestic sector***in million HUF***Stocks**

2002

LOANS = ASSETS S122/S123

S11	- Non-financial corporations	2 575 690
S123	- Other fin. intermediaries-Not FISIM prod.	46
S124	- Financial auxiliaries	3 829
S125	- Insurance corporations and pension funds	52
S13	- General Government	116 668
S14	- Households	1 219 204
S141	<i>as consumers</i>	613 288
S142	<i>as owners of dwellings</i>	506 717
S143	<i>as owners of unincorporated enterprises</i>	99 199
S15	- Non-profit institutions serving households	9 121

TOTAL**3 924 610****DEPOSITS = LIABILITIES S122/S123**

S11	- Non-financial corporations	1 459 447
S123	- Other fin. intermediaries-Not FISIM prod.	121 232
S124	- Financial auxiliaries	6 097
S125	- Insurance corporations and pension funds	25 661
S13	- General Government	161 156
S14	- Households	3 070 766
S141	<i>as individuals</i>	2 874 439
S142	<i>as individuals</i>	129 329
S143	<i>as owners of unincorporated enterprises</i>	66 998
S15	- Non-profit institutions serving households	98 414

TOTAL**4 942 773****Accrued interest**

2002

LOANS = ASSETS S122/S123

S11	- Non-financial corporations	266 018
S 123	- Other fin. intermediaries-Not FISIM prod.	5
S124	- Financial auxiliaries	400
S125	- Insurance corporations and pension funds	5
S13	- General Government	12 001
S14	- Households	226 268
S141	<i>as consumers</i>	138 300
S142	<i>as owners of dwellings</i>	71 356
S143	<i>as owners of unincorporated enterprises</i>	16 612
S15	- Non-profit institutions serving households	1 534

TOTAL

506 232

DEPOSITS = LIABILITIES S122/S123

S11	- Non-financial corporations	60 589
S 123	- Other fin. intermediaries-Not FISIM prod.	8 914
S124	- Financial auxiliaries	310
S125	- Insurance corporations and pension funds	1 138
S13	- General Government	5 436
S14	- Households	181 518
S141	<i>as individuals</i>	170 378
S142	<i>as individuals</i>	9 060
S143	<i>as owners of unincorporated enterprises</i>	2 079
S15	- Non-profit institutions serving households	4 644

TOTAL

262 550

Internal reference rates (IIR) 9,76%

FISIM calculations

2002

LOANS = ASSETS S122/S123

S11	- Non-financial corporations	P.2	14 622
S.123	- Other fin. intermediaries-Not FISIM prod.	P.2	0
S124	- Financial auxiliaries	P.2	26
S125	- Insurance corporations and pension funds	P.2	0
S13	- General Government	P.1.P.2.P.3	614
S14	- Households		107 270
	<i>as consumers</i>	P.3	78 441
	<i>as owners of dwellings</i>		
	<i>P.1/P.2/P.3</i>		21 899
	<i>as owners of unincorporated enterprises</i>		
	<i>P.2</i>		6 930
S15	- Non-profit institutions serving households	P.1.P.2.P.3	644
TOTAL			123 176

DEPOSITS = LIABILITIES S122/S123

S11	- Non-financial corporations	P.2	81 858
S.123	- Other fin. intermediaries-Not FISIM prod.	P.2	2 918
S124	- Financial auxiliaries	P.2	285
S125	- Insurance corporations and pension funds	P.2	1 366
S13	- General Government	P.1.P.2.P.3	10 293
S14	- Households		118 199
	<i>as individuals</i>	P.3	110 177
	<i>as individuals</i>	P.3	3 563
	<i>as owners of unincorporated enterprises</i>	P.2	4 460
S15	- Non-profit institutions serving households	P.1.P.2.P.3	4 961
TOTAL			219 882

TOTAL FISIM (Loans *plus* Deposits) 343 058

S11	- Non-financial corporations	96 480
	- Other fin. intermediaries-Not FISIM prod.	2 919
S124	- Financial auxiliaries	311
	- Insurance corporations and pension funds	1 367
S13	- General Government	10 908
S14	- Households	225 469
	<i>as consumers</i>	188 618
	<i>as owners of dwellings</i>	25 461
	<i>as owners of unincorporated enterprises</i>	11 390
S15	- Non-profit institutions serving households	5 605

Table 9.4 Calculation of exported HUF FISIM

FISIM output of S122+S123 : Exports
in million HUF

Stocks	2002
LOANS	
Non-resident non-FIs	15 983
Non-resident FIs	10 752
TOTAL Exported FISIM on loans	26 735
	-
	-
DEPOSITS	
Non-resident non-FIs	51 571
Non-resident FIs	16 403
TOTAL Exported FISIM on deposits	67 975

Accrued Interest	2002
LOANS	
Non-resident non-FIs	1 654
Non-resident FIs	964
TOTAL Exported FISIM on loans	2 618
	-
	-
DEPOSITS	
Non-resident non-FIs	3 787
Non-resident FIs	1 443
TOTAL Exported FISIM on deposits	5 230

External reference rates

8,01%

Export of FISIM calculations	2002
LOANS	
Non-resident non FIs	374
Non-resident FIs	103
TOTAL Exported FISIM on loans	477
DEPOSITS	
Non-resident non FIs	342
Non-resident FIs	-130
TOTAL Exported FISIM on deposits	213

TOTAL Export of FISIM

690

Table 9.5 Calculation of imported HUF FISIM

Imports of FISIM by domestic sector

in million HUF

Stocks

2002

LOANS = ASSETS S2

	-	Non-financial	
S11	corporations		67 290
S124	- Financial auxiliaries		0
S125	- Insurance corporations and pension funds		0
	- Non-FISIM producers S.122-S.123 (investment funds, money market funds)		0
S13	- General Government		3 345
S14	- Households		0
		<i>as consumers</i>	
		<i>as owners of dwellings</i>	
		<i>as owners of unincorporated enterprises</i>	
S15	- Non-profit institutions serving households		
TOTAL			
L			70 635

DEPOSITS = LIABILITIES S2

	-	Non-financial	
S11	corporations		7 516
S124	- Financial auxiliaries		0
S125	- Insurance corporations and pension funds		0
	- Non-FISIM producers S.122-S.123 (investment funds, money market funds)		0
S13	- General Government		44
S14	- Households		0
		<i>as individuals</i>	
		<i>as individuals</i>	
		<i>as owners of unincorporated enterprises</i>	
S15	- Non-profit institutions serving households		
TOTAL			
L			7 560

Accrued interest

2002

LOANS = ASSETS S2

	-	Non-financial	
S11	corporations		6 878
S124	- Financial auxiliaries		0
S125	- Insurance corporations and pension funds		0
	- Non-FISIM producers S.122-S.123 (investment funds, money market funds)		0
S13	- General Government		448
S14	- Households		0
		<i>as consumers</i>	
		<i>as owners of dwellings</i>	
		<i>as owners of unincorporated enterprises</i>	
S15	- Non-profit institutions serving households		
TOTAL			
L			7 326

DEPOSITS = LIABILITIES S2

	-	Non-financial	
S11	corporations		556

S124	- Financial auxiliaries	0
S125	- Insurance corporations and pension funds	0
	- Non-FISIM producers S.122-S.123 (investment funds, money market funds)	0
S13	- General Government	3
S14	- Households	0
	<i>as individuals</i>	
	<i>as individuals</i>	
	<i>as owners of unincorporated enterprises</i>	
S15	- Non-profit institutions serving households	
TOTAL		558

External reference rates **8,01%**

Imports of FISIM calculations 2002

LOANS = ASSETS S2

	- Non-financial	
S11	corporations	1 490
S124	- Financial auxiliaries	0
S125	- Insurance corporations and pension funds	0
	- Non-FISIM producers S.122-S.123 (investment funds, money market funds)	0
S13	- General Government	181
S14	- Households	0
	<i>as consumers</i>	0
	<i>as owners of dwellings</i>	0
	<i>as owners of unincorporated enterprises</i>	0
S15	- Non-profit institutions serving households	0
TOTAL imported FISIM		1 671

DEPOSITS = LIABILITIES S2

	- Non-financial	
S11	corporations	46
S124	- Financial auxiliaries	0
S125	- Insurance corporations and pension funds	0
	- Non-FISIM producers S.122-S.123 (investment funds, money market funds)	0
S13	- General Government	1
S14	- Households	0
	<i>as individuals</i>	0
	<i>as individuals</i>	0
	<i>as owners of unincorporated enterprises</i>	0
S15	- Non-profit institutions serving households	0
TOTAL imported FISIM		47

TOTAL Import of FISIM **1 717**

Table 9.6 Detailed description of DEV FISIM calculation containing source data and the corresponding figures used for export and import of FISIM

TABLE 1 - FISIM producers in S122+S123 : average stocks and accrued interest

<i>in million HUF</i>		
		2002
<u>ASSETS</u>		
Transactions between FIs (Loans and Deposits)		
- between resident FIs (S122+S123)		640 128
- between resident and non-resident FIs		448 719
<u>LIABILITIES</u>		
Transactions between FIs (Loans and Deposits)		
- between resident FIs (S122+S123)		623 898
- between resident and non-resident FIs		800 541
<u>INTEREST RECIEVED</u>		
Transactions between FIs (Loans and Deposits)		
- between resident FIs (S122+S123)		22 313
- between resident and non-resident FIs		12 957
<u>INTEREST PAID</u>		
Transactions between FIs (Loans and Deposits)		
- between resident FIs (S122+S123)		20 054
- between resident and non-resident FIs		28 606

Table C : Reference rates (%)

		2002
Internal reference rates	(22 313 / 640 128)	3,49%
External reference rate	(12 957 + 28 606) / (448 719+800 541)	3,33%

Table 9.7 Source data and DEV FISIM allocation to user sector of the national economy

TABLE 2 - FISIM output of S122+S123 : Breakdown by domestic sector

in million HUF

Stocks		2002
LOANS = ASSETS S122/S123		
S11	- Non-financial corporations	1 457 341
S123	- Other fin.intermediaries-Not FISIM prod.	0
S124	- Financial auxiliaries	280
S125	- Insurance corporations and pension funds	1 733
S13	- General Government	53 037
S14	- Households	212 374
	<i>as consumers</i>	200 635
	<i>as owners of dwellings</i>	9 828
	<i>as owners of unincorporated enterprises</i>	1 911
S15	- Non-profit institutions serving households	3 438
TOTAL		1 728 204
DEPOSITS = LIABILITIES S122/S123		
S11	- Non-financial corporations	382 646
S123	- Other fin.intermediaries-Not FISIM prod.	0
S124	- Financial auxiliaries	183
S125	- Insurance corporations and pension funds	6 711
S13	- General Government	22 695
S14	- Households	687 997
	<i>as individuals</i>	680 049
	<i>as individuals</i>	0
	<i>as owners of unincorporated enterprises</i>	7 948
S15	- Non-profit institutions serving households	10 183
TOTAL		1 110 416

Accrued interest		2002
LOANS = ASSETS S122/S123		
S11	- Non-financial corporations	54 973
S 123	- Other fin.intermediaries-Not FISIM prod.	0
S124	- Financial auxiliaries	10
S125	- Insurance corporations and pension funds	71
S13	- General Government	1 975
S14	- Households	16 906
	<i>as consumers</i>	16 289
	<i>as owners of dwellings</i>	501
	<i>as owners of unincorporated enterprises</i>	116
S15	- Non-profit institutions serving households	209
TOTAL		74 144
DEPOSITS = LIABILITIES S122/S123		
S11	- Non-financial corporations	5 627
S 123	- Other fin.intermediaries-Not FISIM prod.	0
S124	- Financial auxiliaries	2
S125	- Insurance corporations and pension funds	173
S13	- General Government	511
S14	- Households	15 805
	<i>as individuals</i>	15 643

	<i>as individuals</i>	0
	<i>as owners of unincorporated enterprises</i>	162
S15	- Non-profit institutions serving households	198
TOTAL		22 316

Internal reference rates (IRR)

3,49%

FISIM calculations		2002
<u>LOANS = ASSETS S122/S123</u>		
S11	- Non-financial corporations	4 173
S.123	- Other fin.intermediaries-Not FISIM prod.	0
S124	- Financial auxiliaries	1
S125	- Insurance corporations and pension funds	10
S13	- General Government	126
S14	- Households	9 503
	<i>as consumers</i>	9 295
	<i>as owners of dwellings</i>	159
	<i>as owners of unincorporated enterprises</i>	50
S15	- Non-profit institutions serving households	89
TOTAL		13 902
<u>DEPOSITS = LIABILITIES S122/S123</u>		
S11	- Non-financial corporations	7 711
S.123	- Other fin.intermediaries-Not FISIM prod.	0
S124	- Financial auxiliaries	4
S125	- Insurance corporations and pension funds	60
S13	- General Government	280
S14	- Households	8 177
	<i>as individuals</i>	8 062
	<i>as individuals</i>	0
	<i>as owners of unincorporated enterprises</i>	115
S15	- Non-profit institutions serving households	157
TOTAL		16 390

TOTAL FISIM (Loans plus Deposits)	30 292
S11 - Non-financial corporations	11 885
S123 - Other fin.intermediaries-Not FISIM prod.	0
S124 - Financial auxiliaries	5
S125 - Insurance corporations and pension funds	71
S13 - General Government	406
S14 - Households	17 681
<i>as consumers</i>	17 357
<i>as owners of dwellings</i>	158
<i>as owners of unincorporated enterprises</i>	165
S15 - Non-profit institutions serving households	245

Table 9.8 Calculation of exported DEV FISIM

TABLE 3 - FISIM output of S122+S123 : Exports

in million HUF

		2002
Stocks		
<u>LOANS</u>		
Non-resident non-FIs		321 361
Non-resident FIs		64 777
TOTAL Exported FISIM on loans		386 137
	-	
	-	
<u>DEPOSITS</u>		
Non-resident non-FIs		546 486
Non-resident FIs		202 774
TOTAL Exported FISIM on deposits		749 260

		2002
Accrued Interest		
<u>LOANS</u>		
Non-resident non-FIs		12 105
Non-resident FIs		2 086
TOTAL Exported FISIM on loans		14 191
	-	
	-	
<u>DEPOSITS</u>		
Non-resident non-FIs		14 438
Non-resident FIs		6 514
TOTAL Exported FISIM on deposits		20 952

External reference rates

3,33%

		2002
Export of FISIM calculations		
<u>LOANS</u>		
Non-resident non FIs		1 413
Non-resident FIs		-69
TOTAL Exported FISIM on loans		1 344
<u>DEPOSITS</u>		
Non-resident non FIs		3 743
Non-resident FIs		233
TOTAL Exported FISIM on deposits		3 976
TOTAL Export of FISIM		5 321

Table 9.9 Calculation of imported DEV FISIM

TABLE 4 - Imports of FISIM by domestic sector

		2002
<i>in million HUF</i>		
Stocks		2002
<u>LOANS = ASSETS S2</u>		
S11	- Non-financial corporations	643 829
S124	- Financial auxiliaries	0
S125	- Insurance corporations and pension funds	0
	- Non-FISIM producers S.122-S.123 (investment funds, money market funds)	0
S13	- General Government	374 725
S14	- Households	0
	<i>as consumers</i>	
	<i>as owners of dwellings</i>	
	<i>as owners of unincorporated enterprises</i>	
S15	- Non-profit institutions serving households	
TOTAL		1 018 553
<u>DEPOSITS = LIABILITIES S2</u>		
S11	- Non-financial corporations	187 308
S124	- Financial auxiliaries	0
S125	- Insurance corporations and pension funds	0
	- Non-FISIM producers S.122-S.123 (investment funds, money market funds)	53 838
S13	- General Government	272
S14	- Households	0
	<i>as individuals</i>	
	<i>as individuals</i>	
	<i>as owners of unincorporated enterprises</i>	
S15	- Non-profit institutions serving households	
TOTAL		241 419
Accrued interest		2002
<u>LOANS = ASSETS S2</u>		
S11	- Non-financial corporations	23 865
S124	- Financial auxiliaries	0
S125	- Insurance corporations and pension funds	0
	- Non-FISIM producers S.122-S.123 (investment funds, money market funds)	0
S13	- General Government	18 222
S14	- Households	0
	<i>as consumers</i>	
	<i>as owners of dwellings</i>	
	<i>as owners of unincorporated enterprises</i>	
S15	- Non-profit institutions serving households	
TOTAL		42 087
<u>DEPOSITS = LIABILITIES S2</u>		
S11	- Non-financial corporations	5 022

S124	- Financial auxiliaries	0
S125	- Insurance corporations and pension funds	0
	- Non-FISIM producers S.122-S.123 (investment funds, money market funds)	881
S13	- General Government	6
S14	- Households	0
	<i>as individuals</i>	
	<i>as individuals</i>	
	<i>as owners of unincorporated enterprises</i>	
S15	- Non-profit institutions serving households	
TOTAL		5 910

External reference rates

3,33%

Imports of FISIM calculations		2002
<u>LOANS = ASSETS S2</u>		
S11	- Non-financial corporations	2 445
S124	- Financial auxiliaries	0
S125	- Insurance corporations and pension funds	0
	- Non-FISIM producers S.122-S.123 (investment funds, money market funds)	0
S13	- General Government	5 755
S14	- Households	0
	<i>as consumers</i>	0
	<i>as owners of dwellings</i>	0
	<i>as owners of unincorporated enterprises</i>	0
S15	- Non-profit institutions serving households	0
TOTAL imported FISIM		8 200
<u>DEPOSITS = LIABILITIES S2</u>		
S11	- Non-financial corporations	1 210
S124	- Financial auxiliaries	0
S125	- Insurance corporations and pension funds	0
	- Non-FISIM producers S.122-S.123 (investment funds, money market funds)	910
S13	- General Government	3
S14	- Households	0
	<i>as individuals</i>	0
	<i>as individuals</i>	0
	<i>as owners of unincorporated enterprises</i>	0
S15	- Non-profit institutions serving households	0
TOTAL imported FISIM		2 122
TOTAL Import of FISIM		10 322

34. Total FISIM is calculated as a total of HUF and DEV FISIM at current prices.

35. The FISIM calculation has been revised in the case of Households sector for 2002. In their output we accounted loans attributed to owners of dwellings. In their intermediate consumption we took in account loans as owners of dwellings and loans and deposits as owners of unincorporated enterprises. All other deposits were treated as deposits of individuals. Other loans of households and deposits of individuals were treated as final consumption. This change has no impact on GDP and on GNI on the level of FISIM accounted in the Households sector, only the level of output and as intermediate consumption decreased by 3,6 billion HUF.

36. The next table illustrates FISIM allocated to various industries, 2002

Table 9.10. FISIM allocation to industries (million HUF)

NACE code	Industries	GVA FISIM excluded	FISIM allocated to industries	GVA FISIM included
A	Agriculture, hunting, forestry	693 851	- 7 174	686 677
B	Fishing	3 285	- 42	3 243
C	Mining and quarrying	34 881	- 384	34 497
D	Manufacturing	3 208 148	- 27 799	3 180 349
E	Electricity, gas and water supply	437 407	- 3 584	433 823
F	Construction	785 298	- 10 949	774 349
G	Wholesale and retail trade etc.	1 742 952	- 27 702	1 715 250
H	Hotels and restaurants	262 243	- 2 290	259 953
I	Transport, storage and communication	1 194 186	-9 728	1 184 458
J	Financial intermediation	565 067	- 5 964	559 103
K	Real estate, renting and business activities	2 619 715	-30 649	2 589 066
L	Public administration, and defense, compulsory social security	1 326 663	0	1 326 663
M	Education	779 576	-588	778 988
N	Health	666 935	-876	666 059
O	Other community, social and personal services activities	651 773	-2 962	648 811
	National economy total (at basic prices)	14 971 980	-130 691	14 841 289
	Net taxes and subsidies			2 307 160
	National economy total (at market prices)			17 148 449

CHAPTER 10. MAIN CLASSIFICATION USED

10.1. Classifications used for the production approach

In the case of the classification of economic activities, the HCSO envisaged in 1990 to meet the UN classification. The HCSO introduced the „Integrated Industrial Classification System of the Economic Activities” (TEÁOR) in 1992, which adopted the breakdown of ISIC Rev. 3 and NACE Rev. 1 at two-digit level. However, it differs at three- and four-digit levels from the classifications mentioned above, where the particular domestic combinations of the activities and the specialties of the Hungarian enterprises make it necessary. In 1998, NACE Rev. 1 was fully adopted by HCSO.⁷

Table 10.1 Classification by industries

NACE Rev. 1	TEÁOR 1998	Tevékenységek Egységes Ágazati Osztályozási Rendszere	Classification by industries
0111	0111	Gabonafélék, egyéb, máshova nem sorolt növény termelése	Growing of cereals and other crops n.e.c.
0112	0112	Zöldség, virág kertészeti termék termelése	Growing of vegetables, horticultural specialities and nursery products
0113	0113	Gyümölcs, fűszernövény termelése	Growing of fruit, nuts, beverage and spice crops
0121	0121	Szarvasmarha-tenyésztés	Farming of cattle, dairy farming
0122	0122	Juh-, kecske-, ló-, szamár, bivaly-, öszvértenyésztés	Farming of sheep, goats, horses, asses, mules and hinnies
0123	0123	Sertésenyésztés	Farming of swine
0124	0124	Baromfitenyésztés	Farming of poultry
0125	0125	Egyéb állatok tenyésztése	Other farming of animals
0130	0130	Vegyes gazdálkodás	Growing of crops combined with farming of animals (mixed farming)
0141	0141	Növénytermelési szolgáltatás	Agricultural service activities; landscape gardening
0142	0142	Állattenyésztési szolgáltatás	ANIMAL HUSBANDRY SERVICE ACTIVITIES, EXCEPT VETERINARY ACTIVITIES
0150	0150	Vadgazdálkodás	Hunting, trapping and game propagation, including related service activities
0201	0201	Erdőgazdálkodási termék előállítás	Forestry and logging
0202	0202	Erdőgazdálkodási szolgáltatás	Forestry and logging related service activities
0501	0501	Halászat	Fishing
0502	0502	Halgazdálkodás	Operation of fish hatcheries and fish farms
1010	1010	Feketeszén-bányászat	Mining and agglomeration of hard coal
1020	1020	Barnaszén, lignit bányászata	Mining and agglomeration of lignite
1030	1030	Tőzegkitermelés	Extraction and agglomeration of peat
1110	1110	Kőolaj-, földgázkitermelés	Extraction of crude petroleum and natural gas
1120	1120	Kőolaj-, földgáz-kitermelési szolgáltatás	Service activities incidental to oil and gas extraction, excluding surveying
1200	1200	Urán-, tóriumérc-bányászat	Mining of uranium and thorium ores
1310	1310	Vasércbányászat	Mining of iron ores

⁷ In 2003 NACE Rev. 1.1 was fully adopted by HCSO.

1320	1320	Színes fémérc bányászata	Mining of non-ferrous metal ores, except uranium and thorium ores
1411	1411	Építési célú kő fejtése	Quarrying of stone for construction
1412	1412	Mész, gipsz, kréta bányászata	Quarrying of limestone, gypsum and chalk
1413	1413	Pala bányászata	Quarrying of slate
1421	1421	Kavics-, homokbányászat	Operation of gravel and sand pits
1422	1422	Agyag-, kaolinbányászat	Mining of clays and kaolin
1430	1430	Vegyíásvány bányászata	Mining of chemical and fertilizer minerals
1440	1440	Sótermelés	Production of salt
1450	1450	Máshova nem sorolt egyéb bányászat	Other mining and quarrying n.e.c.
1511	1511	Húsfeldolgozás, -tartósítás	Production and preserving of meat
1512	1512	Baromfi hús feldolgozása, tartósítása	Production and preserving of poultrymeat
1513	1513	Hús-, baromfi hús-készítmény gyártása	Production of meat and poultrymeat products
1520	1520	Halfeldolgozás	Processing and preserving of fish and fish products
1531	1531	Burgonyafeldolgozás	Processing and preserving of potatoes
1532	1532	Gyümölcs-, zöldséglé gyártása	Manufacture of fruit and vegetable juice
1533	1533	Egyéb gyümölcs- és zöldségfeldolgozás	Processing and preserving of fruit and vegetables n.e.c.
1541	1541	Nyers olaj gyártása	Manufacture of crude oils and fats
1542	1542	Finomított olaj gyártása	Manufacture of refined oils and fats
1543	1543	Margarin gyártása	Manufacture of margarine and similar edible fats
1551	1551	Tejtermék gyártása	Operation of dairies and cheese making
1552	1552	Jégkrém gyártása	Manufacture of ice cream
1561	1561	Malomipari termék gyártása	Manufacture of grain mill products
1562	1562	Keményítő gyártása	Manufacture of starches and starch products
1571	1571	Haszonállat-eledelel gyártása	Manufacture of prepared feeds for farm animals
1572	1572	Hobbiállat-eledelel gyártása	Manufacture of prepared pet foods
1581	1581	Kenyér, friss tésztafélék gyártása	Manufacture of bread; manufacture of fresh pastry goods and cakes
1582	1582	Tartósított lisztes áru gyártása	Manufacture of rusks and biscuits; manufacture of preserved pastry goods and cakes
1583	1583	Cukorgyártás	Manufacture of sugar
1584	1584	Édesség gyártása	Manufacture of cocoa; chocolate and sugar confectionery
1585	1585	Tésztafélék gyártása	Manufacture of macaroni, noodles, couscous and similar farinaceous products
1586	1586	Tea, kávé feldolgozása	Processing of tea and coffee
1587	1587	Fűszer, ételízesítő gyártása	Manufacture of condiments and seasonings
1588	1588	Homogenizált és diétás étel gyártása	Manufacture of homogenized food preparations and dietetic food
1589	1589	Máshova nem sorolt egyéb élelmiszer gyártása	Manufacture of other food products n.e.c.
1591	1591	Desztillált szeszes ital gyártása	Manufacture of distilled potable alcoholic beverages
1592	1592	Etilalkohol gyártása	Production of ethyl alcohol from fermented materials
1593	1593	Bortermelés	Manufacture of wines
1594	1594	Gyümölcsbor termelése	Manufacture of cider and other fruit wines

1595	1595	Egyéb nem desztillált, erjesztett ital gyártása	Manufacture of other non-distilled fermented beverages
1596	1596	Sörgyártás	Manufacture of beer
1597	1597	Malátagyártás	Manufacture of malt
1598	1598	Üdítőital gyártása	Production of mineral waters and soft drinks
1600	1600	Dohánytermék gyártása	Manufacture of tobacco products
1711	1711	Pamutfonás	Preparation and spinning of cotton-type fibres
1712	1712	Gyapjúfonás	Preparation and spinning of woollen-type fibres
1713	1713	Fésűsgyapjúfonás	Preparation and spinning of worsted-type fibres
1714	1714	Lenfonás	Preparation and spinning of flax-type fibres
1715	1715	Selyemfonás	Throwing and preparation of silk, including from noils, and throwing and texturing of synthetic or artificial filament yarns
1716	1716	Varrócérna gyártása	Manufacture of sewing threads
1717	1717	Egyéb textilszálak fonása	Preparation and spinning of other textile fibres
1721	1721	Pamutszövés	Cotton-type weaving
1722	1722	Gyapjuszövés	Woollen-type weaving
1723	1723	Fésűsgyapjuszövés	Worsted-type weaving
1724	1724	Selyemszövés	Silk-type weaving
1725	1725	Egyéb textilszövés	Other textile weaving
1730	1730	Textilkikészítés	Finishing of textiles
1740	1740	Konfekcionált textilárúk gyártása (kivéve: ruházat)	Manufacture of made-up textile articles, except apparel
1751	1751	Szőnyeggyártás	Manufacture of carpets and rugs
1752	1752	Kötéláru gyártása	Manufacture of cordage, rope, twine and netting
1753	1753	Nem szőtt textíliák, termékek gyártása (kivéve: ruházat)	Manufacture of non-wovens and articles made from non-wovens, except apparel
1754	1754	Máshova nem sorolt egyéb textiltermék gyártása	Manufacture of other textiles n.e.c.
1760	1760	Kötött, hurkolt kelme gyártása	Manufacture of knitted and crocheted fabrics
1771	1771	Kötött, hurkolt harisnyafélék gyártása	Manufacture of knitted and crocheted hosiery
1772	1772	Kötött, hurkolt pulóverfélék gyártása	Manufacture of knitted and crocheted pullovers, cardigans and similar articles
1810	1810	Bőrruházat gyártása	Manufacture of leather clothes
1821	1821	Munkaruházat gyártása	Manufacture of workwear
1822	1822	Felsőruházat gyártása	Manufacture of other outerwear
1823	1823	Alsóruházat gyártása	Manufacture of underwear
1824	1824	Egyéb ruházat, kiegészítők gyártása	Manufacture of other wearing apparel and accessories n.e.c.
1830	1830	Szőrmekikészítés, szőrmecikk gyártása	Dressing and dyeing of fur; manufacture of articles of fur
1910	1910	Bőrkikészítés	Tanning and dressing of leather
1920	1920	Táskafélék, szíjzat gyártása	Manufacture of luggage, handbags and the like, saddlery and harness
1930	1930	Lábbeligyártás	Manufacture of footwear
2010	2010	Fűrészárugyártás	Sawmilling and planing of wood; impregnation of wood

2020	2020	Falemezgyártás	Manufacture of veneer sheets; manufacture of plywood, laminboard, particle board, fibre board and other panels and boards
2030	2030	Épületasztalos-ipari termék gyártása	Manufacture of builders' carpentry and joinery
2040	2040	Tároló fatermék gyártása	Manufacture of wooden containers
2051	2051	Fatömegcikk gyártása	Manufacture of other products of wood
2052	2052	Parafa-, fonottáru gyártása	Manufacture of articles of cork, straw and plaiting materials
2111	2111	Papíripari rostanyag gyártása	Manufacture of pulp
2112	2112	Papírgyártás	Manufacture of paper and paperboard
2121	2121	Papír csomagolóeszköz gyártása	Manufacture of corrugated paper and paperboard and of containers of paper and paperboard
2122	2122	Háztartási, egészségügyi papírtermék gyártása	Manufacture of household and sanitary goods and of toilet requisites
2123	2123	Irodai papíráru gyártása	Manufacture of paper stationery
2124	2124	Tapétagyártás	Manufacture of wallpaper
2125	2125	Egyéb papírtermék gyártása	Manufacture of other articles of paper and paperboard n.e.c.
2211	2211	Könyvkiadás	Publishing of books
2212	2212	Napilapkiadás	Publishing of newspapers
2213	2213	Időszaki kiadvány kiadása	Publishing of journals and periodicals
2214	2214	Hangfelvétel-kiadás	Publishing of sound recordings
2215	2215	Egyéb kiadás	Other publishing
2221	2221	Napilapnyomás	Printing of newspapers
2222	2222	Máshova nem sorolt nyomás	Printing n.e.c.
2223	2223	Könyvkötés, befejező műveletek	Bookbinding and finishing
2224	2224	Betűszedés, nyomólemez-készítés	Composition and plate-making
2225	2225	Egyéb nyomdai tevékenység	Other activities related to printing
2231	2231	Hangfelvétel-sokszorosítás	Reproduction of sound recording
2232	2232	Videófelvétel-sokszorosítás	Reproduction of video recording
2233	2233	Számítógépes adathordozó sokszorosítása	Reproduction of computer media
2310	2310	Kokszgyártás	Manufacture of coke oven products
2320	2320	Kőolaj-feldolgozás	Manufacture of refined petroleum products
2330	2330	Nukleáris fűtőanyag gyártása	Processing of nuclear fuel
2411	2411	Ipari gáz gyártása	Manufacture of industrial gases
2412	2412	Színezék, pigment gyártása	Manufacture of dyes and pigments
2413	2413	Egyéb szerves vegyi alapanyag gyártása	Manufacture of other inorganic basic chemicals
2414	2414	Egyéb szerves vegyi alapanyag gyártása	Manufacture of other organic basic chemicals
2415	2415	Műtrágya, nitrogénvegyület gyártása	Manufacture of fertilizers and nitrogen compounds
2416	2416	Műanyag-alapanyag gyártása	Manufacture of plastics in primary forms
2417	2417	Szintetikus kaucsuk gyártása	Manufacture of synthetic rubber in primary forms
2420	2420	Mezőgazdasági vegyi termék gyártása	Manufacture of pesticides and other agro-chemical products
2430	2430	Festék, bevonóanyag gyártása	Manufacture of paints, varnishes and similar coatings, printing ink and mastics
2441	2441	Gyógyszeralapanyag-gyártás	Manufacture of basic pharmaceutical products
2442	2442	Gyógyszerkészítmény gyártása	Manufacture of pharmaceutical preparations

2451	2451	Tisztítószer gyártása	Manufacture of basic pharmaceutical products
2452	2452	Testápolási cikk gyártása	Manufacture of pharmaceutical preparations
2461	2461	Robbanóanyag gyártása	Manufacture of explosives
2462	2462	Ragasztógyártás	Manufacture of glues and gelatines
2463	2463	Illóolajgyártás	Manufacture of essential oils
2464	2464	Fényképészeti vegyi anyag gyártása	Manufacture of photographic chemical material
2465	2465	Felvétel nélküli hang-, kép-, adathordozó gyártása	Manufacture of prepared unrecorded media
2466	2466	Máshova nem sorolt egyéb vegyi termék gyártása	Manufacture of other chemical products n.e.c.
2470	2470	Vegyí szál gyártása	Manufacture of man-made fibres
2511	2511	Gumiabroncs, gumitömlő gyártása	Manufacture of rubber tyres and tubes
2512	2512	Gumiabroncs újrafutóztása, felújítása	Retreading and rebuilding of rubber tyres
2513	2513	Egyéb gumitermék gyártása	Manufacture of other rubber products
2521	2521	Műanyag fólia, cső gyártása	Manufacture of plastic plates, sheets, tubes and profiles
2522	2522	Műanyag csomagolóeszköz gyártása	Manufacture of plastic packing goods
2523	2523	Műanyag építőanyag gyártása	Manufacture of builders' ware of plastic
2524	2524	Egyéb műanyag termék gyártása	Manufacture of other plastic products
2611	2611	Síküvegyártás	Manufacture of flat glass
2612	2612	Síküveg továbbfeldolgozása	Shaping and processing of flat glass
2613	2613	Öblösüvegyártás	Manufacture of hollow glass
2614	2614	Üvegszálgyártás	Manufacture of glass fibres
2615	2615	Műszaki, egyéb üvegtermék gyártása	Manufacture and processing of other glass, including technical glassware
2621	2621	Háztartási kerámia gyártása	Manufacture of ceramic household and ornamental articles
2622	2622	Egészségügyi kerámia gyártása	Manufacture of ceramic sanitary fixtures
2623	2623	Kerámiaszigetelő gyártása	Manufacture of ceramic insulators and insulating fittings
2624	2624	Műszaki kerámia gyártása	Manufacture of other technical ceramic products
2625	2625	Egyéb kerámiatermék gyártása	Manufacture of other ceramic products
2626	2626	Tűzálló kerámiatermék gyártása	Manufacture of refractory ceramic products
2630	2630	Kerámiaacsempe, lap gyártása	Manufacture of ceramic tiles and flags
2640	2640	Égetett agyag építőanyag gyártása	Manufacture of bricks, tiles and construction products, in baked clay
2651	2651	Cementgyártás	Manufacture of cement
2652	2652	Mészgyártás	Manufacture of lime
2653	2653	Gipszgyártás	Manufacture of plaster
2661	2661	Építési betontermék gyártása	Manufacture of concrete products for construction purposes
2662	2662	Építési gipsztermék gyártása	Manufacture of plaster products for construction purposes
2663	2663	Előre kevert beton gyártása	Manufacture of ready-mixed concrete
2664	2664	Habarcsgyártás	Manufacture of mortars
2665	2665	Szálerezítésű cement gyártása	Manufacture of fibre cement
2666	2666	Egyéb beton-, gipsz-, cementtermék gyártása	Manufacture of other articles of concrete, plaster and cement
2670	2670	Építőkö, díszítőkö megmunkálása	Cutting, shaping and finishing of ornamental and building stone
2681	2681	Csiszolótermék gyártása	Production of abrasive products

2682	2682	Máshova nem sorolt egyéb nemfém ásványi termék gyártása	Manufacture of other non-metallic mineral products n.e.c.
2710	2710	Vas, acél, vasötvtözet-alapanyag Gyártása (ECSC)*	Manufacture of basic iron and steel and of ferro-alloys
2721	2721	Öntöttvas cső gyártása	Manufacture of cast iron tubes
2722	2722	Acélsőgyártás	Manufacture of steel tubes
2731	2731	Hidegen húzott vas-, acéltermék gyártása	Cold drawing
2732	2732	Hidegen hengerelt keskeny acélszalag gyártása	Cold rolling of narrow strip
2733	2733	Hidegen alakított acélidom gyártása	Cold forming or folding
2734	2734	Acélhuzalgyártás	Wire drawing
2735	2735	Vas, acél egyéb, máshová nem sorolt feldolgozása, nem ECSC-vasötvtözet gyártása	Other first processing of iron and steel n.e.c.; production of non-ECSC* ferro alloys
2741	2741	Nemesfémgyártás	Precious metals production
2742	2742	Alumíniumgyártás	Aluminium production
2743	2743	Ólom, cink, ón gyártása	Lead, zinc and tin production
2744	2744	Réz gyártása	Copper production
2745	2745	Egyéb nemvas fém gyártása	Other non-ferrous metal production
2751	2751	Vasöntés	Casting of iron
2752	2752	Acélöntés	Casting of steel
2753	2753	Könnyűfémöntés	Casting of light metals
2754	2754	Egyéb nemvas fém öntése	Casting of other non-ferrous metals
2811	2811	Fémszerkezet gyártása	Manufacture of metal structures and parts of structures
2812	2812	Fém épületelem gyártása	Manufacture of builders' carpentry and joinery of metal
2821	2821	Fém tartály gyártása	Manufacture of tanks, reservoirs and containers of metal
2822	2822	Fűtési kazán, radiátor gyártása	Manufacture of central heating radiators and boilers
2830	2830	Gőzkazán gyártása	Manufacture of steam generators, except central heating hot water boilers
2840	2840	Fémalakítás, porkohászat	Forging, pressing, stamping and roll forming of metal; powder metallurgy
2851	2851	Fémfelület-kezelés	Treatment and coating of metals
2852	2852	Fémmegmunkálás	General mechanical engineering
2861	2861	Évőeszköz, késáru gyártása	Manufacture of cutlery
2862	2862	Szerszámgyártás	Manufacture of tools
2863	2863	Lakat-, zárgyártás	Manufacture of locks and hinges
2871	2871	Vas, acél tárolóeszköz gyártása	Manufacture of steel drums and similar containers
2872	2872	Könnyűfém csomagolóeszköz gyártása	Manufacture of light metal packaging
2873	2873	Huzal termék gyártása	Manufacture of wire products
2874	2874	Kötőelem, csavar gyártása	Manufacture of fasteners, screw machine products, chain and springs
2875	2875	Máshova nem sorolt egyéb fémfeldolgozási termék gyártása	Manufacture of other fabricated metal products n.e.c.
2911	2911	Motor, turbina gyártása (kivéve légi, közúti járműmotor)	Manufacture of engines and turbines, except aircraft, vehicle and cycle engines
2912	2912	Szivattyú, kompresszor gyártása	Manufacture of pumps and compressors
2913	2913	Csap, szelep gyártása	Manufacture of taps and valves
2914	2914	Csapágy, erőátviteli elem gyártása	Manufacture of bearings, gears, gearing and driving elements
2921	2921	Kemence gyártása	Manufacture of furnaces and furnace burners

* ECSC: European Coal and Steel Community

2922	2922	Emelő-, anyagmozgató gép gyártása	Manufacture of lifting and handling equipment
2923	2923	Nem háztartási hűtő, légállapot-szabályozó gyártása	Manufacture of non-domestic cooling and ventilation equipment
2924	2924	Máshova nem sorolt egyéb általános gép gyártása	Manufacture of other general purpose machinery n.e.c.
2931	2931	Mezőgazdasági traktor gyártása	Manufacture of agricultural tractors
2932	2932	Egyéb mezőgazdasági gép gyártása	Manufacture of other agricultural and forestry machinery
2940	2940	Szerszámgyártás	Manufacture of machine-tools
2951	2951	Kohászati gép gyártása	Manufacture of machinery for metallurgy
2952	2952	Bányászati, építőipari gép gyártása	Manufacture of machinery for mining, quarrying and construction
2953	2953	Élelmiszer-, dohányipari gép gyártása	Manufacture of machinery for food, beverage and tobacco processing
2954	2954	Textil-, ruházati, bőripari gép gyártása	Manufacture of machinery for textile, apparel and leather production
2955	2955	Papíripari gép gyártása	Manufacture of machinery for paper and paperboard production
2956	2956	Máshova nem sorolt egyéb speciális gép gyártása	Manufacture of other special purpose machinery n.e.c.
2960	2960	Fegyver-, lőszergyártás	Manufacture of weapons and ammunition
2971	2971	Háztartási villamos készülék gyártása	Manufacture of electric domestic appliances
2972	2972	Nem villamos háztartási készülék gyártása	Manufacture of non-electric domestic appliances
3001	3001	Irodagépgyártás	Manufacture of office machinery
3002	3002	Számítógép, készülék gyártása	Manufacture of computers and other information processing equipment
3110	3110	Villamos motor, áramfejlesztő gyártása	Manufacture of electric motors, generators and transformers
3120	3120	Áramelosztó, -szabályozó készülék gyártása	Manufacture of electricity distribution and control apparatus
3130	3130	Szigetelt vezeték, kábel gyártása	Manufacture of insulated wire and cable
3140	3140	Akkumulátor, szárazelem gyártása	Manufacture of accumulators, primary cells and primary batteries
3150	3150	Világítóeszköz gyártása	Manufacture of lighting equipment and electric lamps
3161	3161	Máshova nem sorolt motor-, járművillamosági cikk gyártása	Manufacture of electrical equipment for engines and vehicles n.e.c.
3162	3162	Máshova nem sorolt egyéb villamos termék gyártása	Manufacture of other electrical equipment n.e.c.
3210	3210	Elektronikai alkatrész gyártása	Manufacture of electronic valves and tubes and other electronic components
3220	3220	Ipari híradástechnikai termék gyártása	Manufacture of television and radio transmitters and apparatus for line telephony and line telegraphy
3230	3230	Híradástechnikai fogyasztási cikk gyártása	Manufacture of television and radio receivers, sound or video recording or reproducing apparatus and associated goods
3310	3310	Orvosi műszer gyártása	Manufacture of medical and surgical equipment and orthopaedic appliances
3320	3320	Mérőműszer gyártása	Manufacture of instruments and appliances for measuring, checking, testing, navigating and other purposes, except industrial process control equipment

3330	3330	Ipari folyamatirányító rendszer gyártása	Manufacture of industrial process control equipment
3340	3340	Optikai, fényképezési eszköz gyártása	Manufacture of optical instruments and photographic equipment
3350	3350	Óragyártás	Manufacture of watches and clocks
3410	3410	Közúti gépjármű gyártása	Manufacture of motor vehicles
3420	3420	Gépjármű-karosszéria, pótkocsi gyártása	Manufacture of bodies (coachwork) for motor vehicles; manufacture of trailers and semi-trailers
3430	3430	Közúti járműmotor, -alkatrész gyártása	Manufacture of parts and accessories for motor vehicles and their engines
3511	3511	Hajógyártás, -javítás	Building and repairing of ships
3512	3512	Szabadidő-, sporthajó gyártása, javítása	Building and repairing of pleasure and sporting boats
3520	3520	Vasúti, kötöttpályás jármű gyártása	Manufacture of railway and tramway locomotives and rolling stock
3530	3530	Légi-, űrjármű gyártása, javítása	Manufacture of aircraft and spacecraft
3541	3541	Motorkerékpár gyártása	Manufacture of motorcycles
3542	3542	Kerékpár gyártása	Manufacture of bicycles
3543	3543	Mozgássérültek kocsijának gyártása	Manufacture of invalid carriages
3550	3550	Máshova nem sorolt egyéb jármű gyártása	Manufacture of other transport equipment n.e.c.
3611	3611	Ülőbútor gyártása	Manufacture of chairs and seats
3612	3612	Irodabútor gyártása	Manufacture of other office and shop furniture
3613	3613	Konyhabútor gyártása	Manufacture of other kitchen furniture
3614	3614	Egyéb bútor gyártása	Manufacture of other furniture
3615	3615	Ágybetét gyártása	Manufacture of mattresses
3621	3621	Pénzérme, érem gyártása	Striking of coins
3622	3622	Ékszergyártás	Manufacture of jewellery and related articles n.e.c.
3630	3630	Hangszergyártás	Manufacture of musical instruments
3640	3640	Sportszergyártás	Manufacture of sports goods
3650	3650	Játékgyártás	Manufacture of games and toys
3661	3661	Divatékszergyártás	Manufacture of imitation jewellery
3662	3662	Seprű- és kefégyártás	Manufacture of brooms and brushes
3663	3663	Egyéb máshova nem sorolt feldolgozóipar	Other manufacturing n.e.c.
3710	3710	Fém visszanyerése hulladékból	Recycling of metal waste and scrap
3720	3720	Nemfém visszanyerése hulladékból	Recycling of non-metal waste and scrap
4010	4010	Villamosenergia-termelés, -elosztás	Production and distribution of electricity
4020	4020	Gázgyártás, -elosztás	Manufacture of gas; distribution of gaseous fuels through mains
4030	4030	Gőz-, melegvízellátás	Steam and hot water supply
4100	4100	Víztermelés, -kezelés, -elosztás	Collection, purification and distribution of water
4511	4511	Épületbontás, földmunka	Demolition and wrecking of buildings; earth moving
4512	4512	Talajmintavétel, próbafúrás	Test drilling and boring
4521	4521	Épület, híd, alagút, közmű, vezeték építése	General construction of buildings and civil engineering works
4522	4522	Tetőszerkezet-építés, tetőfedés, vízszigetelés	Erection of roof covering and frames
4523	4523	Autópálya, út, repülőtér, sport játéktér építése	Construction of motorways, roads, airfields and sport facilities
4524	4524	Vízi létesítmény építése	Construction of water projects
4525	4525	Egyéb speciális szaképítés	Other construction work involving special trades
4531	4531	Villanoszerelés	Installation of electrical wiring and fittings
4532	4532	Szigetelés	Insulation work activities

4533	4533	Víz-, gáz-, fűtésszerelés	Plumbing
4534	4534	Egyéb épületgépészeti szerelés	Other building installation
4541	4541	Vakolás	Plastering
4542	4542	Épületesztalos-szerkezet szerelés	Joinery installation
4543	4543	Padló-, falburkolás	Floor and wall covering
4544	4544	Festés, üvegezés	Painting and glazing
4545	4545	Egyéb befejező építés	Other building completion
4550	4550	Építési eszköz kölcsönzése személyzettel	Renting of construction or demolition equipment with operator
5010	5010	Gépjármű-kereskedelem	Sale of motor vehicles
5020	5020	Gépjárműjavítás	Maintenance and repair of motor vehicles
5030	5030	Gépjárműalkatrész-kereskedelem	Sale of motor vehicle parts and accessories
5040	5040	Motorkerékpár, -alkatrész kereskedelme, javítása	Sale, maintenance and repair of motorcycles and related parts and accessories
5050	5050	Üzemanyag-kiskereskedelem	Retail sale of automotive fuel
5111	5111	Mezőgazdasági termék ügynöki nagykereskedelme	Agents involved in the sale of agricultural raw materials, live animals, textile raw materials and semi-finished goods
5112	5112	Alapanyag, üzemanyag ügynöki nagykereskedelme	Agents involved in the sale of fuels, ores, metals and industrial chemicals
5113	5113	Fa-, építési anyag ügynöki nagykereskedelme	Agents involved in the sale of timber and building materials
5114	5114	Gép, berendezés, hajó, repülőgép ügynöki nagykereskedelme	Agents involved in the sale of machinery, industrial equipment, ships and aircraft
5115	5115	Bútor, háztartási áru, vasáru ügynöki nagykereskedelme	Agents involved in the sale of furniture, household goods, hardware and ironmongery
5116	5116	Ruházat, lábbeli, bőráru ügynöki nagykereskedelme	Agents involved in the sale of textiles, clothing, footwear and leather goods
5117	5117	Élelmiszer, ital, dohányáru ügynöki nagykereskedelme	Agents involved in the sale of food, beverages and tobacco
5118	5118	Máshova nem sorolt termék ügynöki nagykereskedelme	Agents specializing in the sale of particular products or ranges of products n.e.c.
5119	5119	Vegyes termékkörű ügynöki nagykereskedelem	Agents involved in the sale of a variety of goods
5121	5121	Gabona-, vetőmag-, takarmány-nagykereskedelem	Wholesale of grain, seeds and animal feeds
5122	5122	Virág-, dísznövény-nagykereskedelem	Wholesale of flowers and plants
5123	5123	Élőállat-nagykereskedelem	Wholesale of live animals
5124	5124	Nyers-, félkész bőr nagykereskedelme	Wholesale of hides, skins and leather
5125	5125	Feldolgozatlan dohány nagykereskedelme	Wholesale of unmanufactured tobacco
5131	5131	Zöldség-, gyümölcs-nagykereskedelem	Wholesale of fruit and vegetables
5132	5132	Hús-, húskészítmény-nagykereskedelem	Wholesale of meat and meat products
5133	5133	Tejtermék, tojás-, -készítmény, zsiradék nagykereskedelme	Wholesale of dairy produce, eggs and edible oils and fats
5134	5134	Ital nagykereskedelme	Wholesale of alcoholic and other beverages
5135	5135	Dohányáru-nagykereskedelem	Wholesale of tobacco products
5136	5136	Cukor-, édesség-nagykereskedelem	Wholesale of sugar and chocolate and sugar confectionery
5137	5137	Kávét-, tea-, kakaó-, fűszer-nagykereskedelem	Wholesale of coffee, tea, cocoa and spices
5138	5138	Egyéb élelmiszer-nagykereskedelem	Wholesale of other food, including fish, crustaceans and molluscs

5139	5139	Élelmiszer, ital, dohányáru vegyes nagykereskedelme	Non-specialized wholesale of food, beverages and tobacco
5141	5141	Textil-nagykereskedelem	Wholesale of textiles
5142	5142	Ruha-, lábbeli-nagykereskedelem	Wholesale of clothing and footwear
5143	5143	Elektromos háztartási cikk nagykereskedelme	Wholesale of electrical household appliances and radio and television goods
5144	5144	Porcelán-, üvegáru-, tapéta-, tisztítószer-nagykereskedelem	Wholesale of china and glassware, wallpaper and cleaning materials
5145	5145	Illatszer-nagykereskedelem	Wholesale of perfume and cosmetics
5146	5146	Gyógyszer, gyógyászati termék nagykereskedelme	Wholesale of pharmaceutical goods
5147	5147	Egyéb fogyasztási cikk nagykereskedelme	Wholesale of other household goods
5151	5151	Energiahordozó-nagykereskedelem	Wholesale of solid, liquid and gaseous fuels and related products
5152	5152	Fém-, érc-nagykereskedelem	Wholesale of metals and metal ores
5153	5153	Fa-, építőanyag-, szaniteráru-nagykereskedelem	Wholesale of wood, construction materials and sanitary equipment
5154	5154	Vasáru-, szerelvény-nagykereskedelem	Wholesale of hardware, plumbing and heating equipment and supplies
5155	5155	Vegyí áru nagykereskedelme	Wholesale of chemical products
5156	5156	Egyéb termelési célú termék nagykereskedelme	Wholesale of other intermediate products
5157	5157	Hulladék-nagykereskedelem	Wholesale of waste and scrap
5161	5161	Szerszámgép-nagykereskedelem	Wholesale of machine tools
5162	5162	Építőipari gép nagykereskedelme	Wholesale of construction machinery
5163	5163	Textilipari gép, varró-, kötőgép nagykereskedelme	Wholesale of machinery for the textile industry, and of sewing and knitting machines
5164	5164	Irodagép, -berendezés nagykereskedelme	Wholesale of office machinery and equipment
5165	5165	Egyéb gép, szállítóeszköz nagykereskedelme	Wholesale of other machinery for use in industry, trade and navigation
5166	5166	Mezőgazdasági gép nagykereskedelme	Wholesale of agricultural machinery and accessories and implements, including tractors
5170	5170	Egyéb nagykereskedelem	Other wholesale
5211	5211	Élelmiszer jellegű vegyes kiskereskedelem	Retail sale in non-specialized stores with food, beverages or tobacco predominating
5212	5212	Iparcikk jellegű vegyes kiskereskedelem	Other retail sale in non-specialized stores
5221	5221	Zöldség-, gyümölcs-kiskereskedelem	Retail sale of fruit and vegetables
5222	5222	Hús-, húskészítmény-kiskereskedelem	Retail sale of meat and meat products
5223	5223	Hal-, rák-kiskereskedelem	Retail sale of fish, crustaceans and molluscs
5224	5224	Kenyér-, pékáru-kiskereskedelem	Retail sale of bread, cakes, flour confectionery and sugar confectionery
5225	5225	Ital-kiskereskedelem	Retail sale of alcoholic and other beverages
5226	5226	Dohányáru-kiskereskedelem	Retail sale of tobacco products
5227	5227	Egyéb élelmiszer kiskereskedelem	Other retail sale of food, beverages and tobacco in specialized stores
5231	5231	Gyógyszer-kiskereskedelem	Dispensing chemists
5232	5232	Gyógyászati termék kiskereskedelme	Retail sale of medical and orthopaedic goods
5233	5233	Illatszer-kiskereskedelem	Retail sale of cosmetic and toilet articles
5241	5241	Textil-kiskereskedelem	Retail sale of textiles
5242	5242	Ruházati kiskereskedelem	Retail sale of clothing
5243	5243	Lábbeli-, bőráru-kiskereskedelem	Retail sale of footwear and leather goods

5244	5244	Bútor, háztartási cikk kiskereskedelme	Retail sale of furniture, lighting equipment and household articles n.e.c.
5245	5245	Elektromos háztartási cikk kiskereskedelme	Retail sale of electrical household appliances and radio and television goods
5246	5246	Vasáru-, festék-, üveg-kiskereskedelem	Retail sale of hardware, paints and glass
5247	5247	Könyv-, újság-, papíráru-kiskereskedelem	Retail sale of books, newspapers and stationery
5248	5248	Egyéb máshová nem sorolt iparcikk-kiskereskedelem	Other retail sale in specialized stores
5250	5250	Használtcikk-kiskereskedelem	Retail sale of second-hand goods in stores
5261	5261	Csomagküldő kiskereskedelem	Retail sale via mail order houses
5262	5262	Piaci kiskereskedelem	Retail sale via stalls and markets
5263	5263	Egyéb nem bolti kiskereskedelem	Other non-store retail sale
5271	5271	Lábbeli, bőráru javítása	Repair of boots, shoes and other articles of leather
5272	5272	Elektromos háztartási cikk javítása	Repair of electrical household goods
5273	5273	Óra-, ékszerjavítás	Repair of watches, clocks and jewellery
5274	5274	Egyéb fogyasztási cikk javítása	Repair n.e.c.
5511	5511	Szállodai szolgáltatás, étteremmel	Hotels and motels, with restaurant
5512	5512	Szállodai szolgáltatás, étterem nélkül	Hotels and motels, without restaurants
5521	5521	Ifjúsági, turistaszállás-szolgáltatás	Youth hostels and mountain refuges
5522	5522	Kempingszolgáltatás	Camping sites, including caravan sites
5523	5523	Egyéb kereskedelmi szálláshely-szolgáltatás	Other provision of lodgings n.e.c.
5530	5530	Éttermi, cukrászdai vendéglátás	Restaurants
5540	5540	Egyéb, nyílt árusítású vendéglátás	Bars
5551	5551	Munkahelyi étkeztetés	Canteens
5552	5552	Közétkeztetés	Catering
6010	6010	Vasúti szállítás	Transport via railways
6021	6021	Menetrendszerű egyéb szárazföldi személyszállítás	Other scheduled passenger land transport
6022	6022	Taxi személyszállítás	Taxi operation
6023	6023	Egyéb szárazföldi személyszállítás	Other land passenger transport
6024	6024	Közúti teherszállítás	Freight transport by road
6030	6030	Csővezetékes szállítás	Transport via pipelines
6110	6110	Tengeri szállítás	Sea and coastal water transport
6120	6120	Belvízi szállítás	Inland water transport
6210	6210	Menetrendszerű légi szállítás	Scheduled air transport
6220	6220	Nem menetrendszerű légi szállítás	Non-scheduled air transport
6230	6230	Űrszállítás	Space transport
6311	6311	Rakománykezelés	Cargo handling
6312	6312	Tárolás, raktározás	Storage and warehousing
6321	6321	Szárazföldi szállítást segítő tevékenység	Other supporting land transport activities
6322	6322	Vízi szállítást segítő tevékenység	Other supporting water transport activities
6323	6323	Légi szállítást segítő tevékenység	Other supporting air transport activities
6330	6330	Utazásszervezés	Activities of travel agencies and tour operators; tourist assistance activities n.e.c.
6340	6340	Szállítási ügynöki tevékenység	Activities of other transport agencies
6411	6411	Nemzeti postai tevékenység	National post activities
6412	6412	Futárpostai tevékenység	Courier activities other than national post activities
6420	6420	Távközlés	Telecommunications
6511	6511	Jegybanki tevékenység	Central banking
6512	6512	Egyéb monetáris közvetítés	Other monetary intermediation
6521	6521	Pénzügyi lízing	Financial leasing

6522	6522	Egyéb hitelnyújtás	Other credit granting
6523	6523	Máshova nem sorolt egyéb pénzügyi közvetítés	Other financial intermediation n.e.c.
6601	6601	Életbiztosítás	Life insurance
6602	6602	Csoportos nyugdíjbiztosítás	Pension funding
6603	6603	Nem életbiztosítás	Non-life insurance
6711	6711	Pénz-, tőkepiaci szabályozás	Administration of financial markets
6712	6712	Értékpapír-ügynöki tevékenység, alapkezelés	Security broking and fund management
6713	6713	Egyéb pénzügyi kiegészítő tevékenység	Activities auxiliary to financial intermediation n.e.c.
6720	6720	Biztosítást kiegészítő tevékenység	Activities auxiliary to insurance and pension funding
7011	7011	Ingtatlanberuházás, -eladás	Development and selling of real estate
7012	7012	Ingtatlanforgalmazás	Buying and selling of own real estate
7020	7020	Ingtatlan bérbeadása, üzemeltetése	Letting of own property
7031	7031	Ingtalanügynöki tevékenység	Real estate agencies
7032	7032	Ingtatlankezelés	Management of real estate on a fee or contract basis
7110	7110	Géjáromkölszönzés	Renting of automobiles
7121	7121	Egyéb szárazföldi jármű kölcsönzése	Renting of other land transport equipment
7122	7122	Vízi jármű kölcsönzése	Renting of water transport equipment
7123	7123	Légi jármű kölcsönzése	Renting of air transport equipment
7131	7131	Mezőgazdasági gép kölcsönzése	Renting of agricultural machinery and equipment
7132	7132	Építőipari gép, berendezés kölcsönzése	Renting of construction and civil engineering machinery and equipment
7133	7133	Irodagép, számítógép kölcsönzése	Renting of office machinery and equipment, including computers
7134	7134	Máshova nem sorolt egyéb gép kölcsönzése	Renting of other machinery and equipment n.e.c.
7140	7140	Fogyasztási cikk kölcsönzése	Renting of personal and household goods n.e.c.
7210	7210	Hardver-szaktanácsadás	Hardware consultancy
7220	7220	Szoftver-készítés, -szaktanácsadás	Software consultancy and supply
7230	7230	Adatfeldolgozás	Data processing
7240	7240	Adatbanki tevékenység	Data base activities
7250	7250	Iroda-, számítógép-javítás	Maintenance and repair of office, accounting and computing machinery
7260	7260	Egyéb számítástechnikai tevékenység	Other computer related activities
7310	7310	Természettudományi műszaki kutatás, fejlesztés	Research and experimental development on natural sciences and engineering
7320	7320	Társadalomtudományi, humán kutatás, fejlesztés	Research and experimental development on social sciences and humanities
7411	7411	Jogi tevékenység	Legal activities
7412	7412	Számviteli, könyvvizsgálói adószakértői tevékenység	Accounting, book-keeping and auditing activities; tax consultancy
7413	7413	Piac-és közvélemény-kutatás	Market research and public opinion polling
7414	7414	Üzletviteli tanácsadás	Business and management consultancy activities
7415	7415	Vagyonkezelés	Management activities of holding companies
7420	7420	Mérnöki tevékenység, tanácsadás	Architectural and engineering activities and related technical consultancy
7430	7430	Műszaki vizsgálat, elemzés	Technical testing and analysis
7440	7440	Hirdetés	Advertising
7450	7450	Munkaerő-toborzás, -közvetítés	Labour recruitment and provision of personnel
7460	7460	Nyomozási, biztonsági tevékenység	Investigation and security activities

7470	7470	Takarítás, tisztítás	Industrial cleaning
7481	7481	Fényképészet	Photographic activities
7482	7482	Csomagolás	Packaging activities
7483	7483	Titkári, fordítói tevékenység	Secretarial and translation activities
7484	7484	Máshova nem sorolt, egyéb gazdasági tevékenységet segítő szolgáltatás	Other business activities n.e.c.
7511	7511	Általános közigazgatás	General (overall) public service activities
7512	7512	Társadalmi szolgáltatások igazgatása	Regulation of the activities of agencies that provide health care, education, cultural services and other social services, excluding social security
7513	7513	Üzleti élet szabályozása	Regulation of and contribution to more efficient operation of business
7514	7514	Közigazgatást kiegészítő szolgáltatás	Supporting service activities for the government as a whole
7521	7521	Külügyek	Foreign affairs
7522	7522	Honvédelem	Defence activities
7523	7523	Igazságügy	Justice and judicial activities
7524	7524	Közbiztonság, közrend	Public security, law and order activities
7525	7525	Tűzvédelem	Fire service activities
7530	7530	Kötelező társadalombiztosítás	Compulsory social security activities
8010	8010	Alapfokú oktatás	Primary education
8021	8021	Általános középfokú oktatás	General secondary education
8022	8022	Szakmai középfokú oktatás	Technical and vocational secondary education
8030	8030	Felsőoktatás	Higher education
8041	8041	Járművezető-oktatás	Driving school activities
8042	8042	Felnőtt- és egyéb oktatás	Adult and other education n.e.c.
8511	8511	Fekvőbeteg-ellátás	Hospital activities
8512	8512	Járóbeteg-ellátás	Medical practice activities
8513	8513	Fogorvosi szakellátás	Dental practice activities
8514	8514	Egyéb humán-egészségügyi ellátás	Other human health activities
8520	8520	Állat-egészségügyi ellátás	Veterinary activities
8531	8531	Szociális ellátás elhelyezéssel	Social work activities with accommodation
8532	8532	Szociális ellátás elhelyezés nélkül	Social work activities without accommodation
9000	9000	Szennyvíz-, hulladékkezelés, településtisztasági szolgáltatás	Sewage and refuse disposal, sanitation and similar activities
9111	9111	Vállalkozói érdekképviselet	Activities of business and employers' organizations
9112	9112	Szakmai érdekképviselet	Activities of professional organizations
9120	9120	Szakszervezeti tevékenység	Activities of trade unions
9131	9131	Egyházi tevékenység	Activities of religious organizations
9132	9132	Politikai tevékenység	Activities of political organizations
9133	9133	Máshova nem sorolt egyéb közösségi, társadalmi tevékenység	Activities of other membership organizations n.e.c.
9211	9211	Film-, videgyártás	Motion picture and video production
9212	9212	Film-, video terjesztés	Motion picture and video distribution
9213	9213	Filmvetítés	Motion picture projection
9220	9220	Rádió-televízió műsorszolgáltatás	Radio and television activities
9231	9231	Alkotó és előadóművészet	Artistic and literary creation and interpretation
9232	9232	Művészeti kiegészítő tevékenység	Operation of arts facilities
9233	9233	Vidámparki szórakoztatás	Fair and amusement park activities
9234	9234	Máshova nem sorolható egyéb szórakoztatás	Other entertainment activities n.e.c.
9240	9240	Hírügynökségi tevékenység	News agency activities
9251	9251	Könyvtári, levéltári tevékenység	Library and archives activities

9252	9252	Múzeumi tevékenység, kulturális örökség védelme	Museums activities and preservation of historical sites and buildings
9253	9253	Növény-, állatkerti bemutató (természetvédelem)	Botanical and zoological gardens and nature reserves activities
9261	9261	Sportpályák, stadionok működtetése	Operation of sports arenas and stadiums
9262	9262	Egyéb sport tevékenység	Other sporting activities
9271	9271	Szerencsejáték, fogadás	Gambling and betting activities
9272	9272	Máshova nem sorolható egyéb szabadidős tevékenység	Other recreational activities n.e.c.
9301	9301	Mosás, tisztítás	Washing and dry-cleaning of textile and fur products
9302	9302	Fodrászat, szépségápolás	Hairdressing and other beauty treatment
9303	9303	Temetkezés	Funeral and related activities
9304	9304	Fizikai közérzetet javító szolgáltatás	Physical well-being activities
9305	9305	Máshova nem sorolt egyéb szolgáltatás	Other service activities n.e.c.
9500	9500	Alkalmazottat foglalkoztató magánháztartás	Private households with employed persons
9900	9900	Területen kívüli szervezet	Extra-territorial organizations and bodies

10.2. Classifications used for the expenditure approach

10.2.1. Classification used for household final consumption expenditure

The COICOP (Classification of Individual Consumption by Purposes) nomenclature is used for the estimation of household final consumption expenditure.

Table 10.2 Classification of Individual Consumption by Purposes

	Hungarian title	English title
01.	Élelmiszerek és alkoholmentes italok	Food and non-alcoholic beverages
<i>01.1</i>	<i>Élelmiszerek</i>	<i>Food</i>
	01.1.1 Kenyér és cereáliák	Bread and cereals
	01.1.2 Hús	Meat
	01.1.3 Hal és tengeri állat	Fish and seafood
	01.1.4 Tej, sajt és tojás	Milk, cheese and eggs
	01.1.5 Olaj és zsiradék	Oils and fats
	01.1.6 Gyümölcs	Fruit
	01.1.7 Zöldségfélék	Vegetables
	01.1.8 Cukor, lekvár, méz, csokoládé és cukorka	Sugar, jam, honey, chocolate and confectionery
	01.1.9 Egyéb máshova nem sorolt élelmiszerek	Food products n.e.c.
<i>01.2</i>	<i>Alkoholmentes italok</i>	<i>Non-alcoholic beverages</i>
	01.2.1 Kávé, tea és kakaó	Coffee, tea and cocoa
	01.2.2 Ásványvíz, üdítőital, gyümölcs és zöldség ivólé	Mineral waters, soft drinks, fruit and vegetable juices
02.	Szeszes italok, dohányárúk és kábítószerek	Alcoholic beverages, tobacco and narcotics
<i>02.1</i>	<i>Szeszes italok</i>	<i>Alcoholic beverages</i>
	02.1.1 Égetett szeszes italok	Spirits
	02.1.2 Bor	Wine
	02.1.3 Sör	Beer
<i>02.2</i>	<i>Dohányárúk</i>	<i>Tobacco</i>
	02.2.0 Dohányárúk	Tobacco

02.3	<i>Kábítószerek</i>	<i>Narcotics</i>
	02.3.0 Kábítószerek	Narcotics
03.	Ruházat és lábbeli	Clothing and footwear
03.1	<i>Ruházat</i>	<i>Clothing</i>
	03.1.1 Ruházati méteráru	Clothing materials
	03.1.2 Felső- és alsóruházat	Garments
	03.1.3 Egyéb ruházati cikkek és kiegészítők	Other articles of clothing and clothing accessories
	03.1.4 Ruházat javítása, tisztítása, kölcsönzése	Cleaning, repair and hire of clothing
03.2	<i>Lábbeli</i>	<i>Footwear</i>
	03.2.1 Cipő és egyéb lábbeli	Shoes and other footwear
	03.2.2 Lábbeli javítása, tisztítása és kölcsönzése	Repair and hire of footwear
04.	Lakásszolgáltatás, víz, villamosenergia, gáz és egyéb tüzelőanyag	Housing, water, electricity, gas and other fuels
04.1	<i>Tényleges lakbér</i>	<i>Actual rentals for housing</i>
	04.1.1 Állandó lakásért fizetett bérleti díjak	Actual rentals paid by tenants
	04.1.2 Második lakásért fizetett bérleti díjak	Other actual rentals
04.2	<i>Imputált lakbér</i>	<i>Imputed rentals for housing</i>
	04.2.1 Saját tulajdonú állandó lakások imputált bére	Imputed rentals of owner-occupiers
	04.2.2 Egyéb imputált lakbér	Other imputed rentals
04.3	<i>Lakáskarbantartás és -javítás</i>	<i>Maintenance and repair of the dwelling</i>
	04.3.1 Lakáskarbantartáshoz és -javításhoz vásárolt anyagok	Materials for the maintenance and repair of the dwelling
	04.3.2 Lakáskarbantartási és -javítási szolgáltatások	Services for the maintenance and repair of the dwelling
04.4	<i>Vízellátás és egyéb lakásszolgáltatás</i>	<i>Water supply and miscellaneous services relating to the dwelling</i>
	04.4.1 Vízellátás	Water supply
	04.4.2 Hulladékelszállítás	Refuse collection
	04.4.3 Szennyvízelvezetés	Sewerage collection
	04.4.4 Egyéb máshova nem sorolt lakásszolgáltatás	Other services relating to the dwelling n.e.c.
04.5	<i>Villamosenergia, gáz és egyéb tüzelőanyagok</i>	<i>Electricity, gas and other fuels</i>
	04.5.1 Villamosenergia	Electricity
	04.5.2 Gáz	Gas
	04.5.3 Folyékony tüzelőanyagok	Liquid fuels
	04.5.4 Szilárd tüzelőanyagok	Solid fuels
	04.5.5 Melegvíz- és hőszolgáltatás	Heat energy
05.	Lakberendezés, lakásfelszerelés, rendszeres lakáskarbantartás	Furnishings, household equipment and routine household maintenance
05.1	<i>Bútorok és lakberendezési cikkek, szőnyegek és más padlóburkoló anyagok</i>	<i>Furniture and furnishings, carpets and other floor coverings</i>
	05.1.1 Bútorok és lakberendezési cikkek	Furniture and furnishings

	05.1.2 Szőnyegek és más padlóburkoló anyagok	Carpets and other floor coverings
	05.1.3 Bútorok, lakberendezési cikkek, szőnyegek és padlóburkoló anyagok javítása	Repair of furniture, furnishings and floor coverings
05.2	<i>Lakástextiliák</i>	<i>Household textiles</i>
	05.2.0 Lakástextiliák	Household textiles
05.3	<i>Háztartási gépek és készülékek</i>	<i>Household appliances</i>
	05.3.1 Tartós háztartási gépek és készülékek	Major household appliances whether electric or not
	05.3.2 Elektromos háztartási kisgépek	Small electric household appliances
	05.3.3 Háztartási gépek és készülékek javítása	Repair of household appliances
05.4	<i>Háztartási üvegáruk, edények és konyhafelszerelés</i>	<i>Glassware, tableware and household utensils</i>
	05.4.0 Háztartási üvegáruk, edények és konyhafelszerelés	Glassware, tableware and household utensils
05.5	<i>Barkács- és kerti szerszámok, eszközök</i>	<i>Tools and equipment for house and garden</i>
	05.5.1 Nagyobb barkács- és kerti szerszámok, eszközök	Major tools and equipment
	05.5.2 Kisebb barkács- és kerti szerszámok, eszközök, különféle tartozékok	Small tools and miscellaneous accessories
05.6	<i>Rendszeres lakáskarbantartáshoz igénybevett termékek és szolgáltatások</i>	<i>Goods and services for routine household maintenance</i>
	05.6.1 Háztartási fogyóanyagok	Non-durable household goods
	05.6.2 Háztartási alkalmazottak szolgáltatásai és egyéb háztartási szolgáltatások	Domestic services and household services
06.	Egészségügy	Health
06.1	<i>Gyógyszerek, egészségügyi termékek, gyógyászati segédeszközök</i>	<i>Medical products, appliances and equipment</i>
	06.1.1 Gyógyszerek	Pharmaceutical products
	06.1.2 Egyéb egészségügyi termékek	Other medical products
	06.1.3 Gyógyászati segédeszközök és készülékek	Therapeutic appliances and equipment
06.2	<i>Járóbetegellátás</i>	<i>Outpatient services</i>
	06.2.1 Orvosi ellátás	Medical services
	06.2.2 Fogászati ellátás	Dental services
	06.2.3 Egyéb járóbetegellátás	Paramedical services
06.3	<i>Kórházi szolgáltatások</i>	<i>Hospital services</i>
	06.3.0 Kórházi szolgáltatások	Hospital services
07.	Közlekedés és szállítás	Transport
07.1	<i>Járművásárlás</i>	<i>Purchase of vehicles</i>
	07.1.1 Személygépkocsi	Motor cars
	07.1.2 Motorkerékpár	Motor cycles
	07.1.3 Kerékpár	Bicycles
	07.1.4 Állati erővel vontatott járművek	Animal drawn vehicles

07.2	<i>Személyszállító járművek üzemeltetése</i>	<i>Operation of personal transport equipment</i>
	07.2.1 Személyszállító járművek alkatrészei és tartozékai	Spare parts and accessories for personal transport equipment
	07.2.2 Üzemanyag és kenőanyagok személyszállító járművekhez	Fuels and lubricants for personal transport equipment
	07.2.3 Személyszállító járművek karbantartása és javítása	Maintenance and repair of personal transport equipment
	07.2.4 Személyszállító járművekkel kapcsolatos egyéb szolgáltatások	Other services in respect of personal transport equipment
07.3	<i>Közlekedési és szállítási szolgáltatások</i>	<i>Transport services</i>
	07.3.1 Kötöttpályás személyszállítás	Passenger transport by railway
	07.3.2 Közúti személyszállítás	Passenger transport by road
	07.3.3 Légi személyszállítás	Passenger transport by air
	07.3.4 Vízi személyszállítás	Passenger transport by sea and inland
	07.3.5 Kombinált személyszállítás	Combined passenger transport
	07.3.6 Egyéb közlekedési, szállítási szolgáltatások	Other purchased transport services
08.	Hírközlés	Communication
08.1	<i>Postai szolgáltatás</i>	<i>Postal services</i>
	08.1.0 Postai szolgáltatás	Postal services
08.2	<i>Telefon és egyéb hírközlő berendezés</i>	<i>Telephone and telefax equipment</i>
	08.2.0 Telefon és egyéb hírközlő berendezés	Telephone and telefax equipment
08.3	<i>Telefonálás és egyéb hírközlési szolgáltatás</i>	<i>Telephone and telefax services</i>
	08.3.0 Telefonálás és egyéb hírközlési szolgáltatások	Telephone and telefax services
09.	Szabadidő és kultúra	Recreation and culture
09.1	<i>Audiovizuális, foto-optikai és információ-feldolgozó berendezések</i>	<i>Audio-visual, photographic and information processing equipment</i>
	09.1.1 Hang és kép felvételére, rögzítésére és visszajátszására alkalmas készülékek	Equipment for the reception, recording and reproduction of sound and pictures
	09.1.2 Fényképeszeti, filmfelvevő berendezések, optikai eszközök	Photographic and cinematographic equipment and optical instruments
	09.1.3 Információ-feldolgozó berendezések	Information processing equipment
	09.1.4 Kép-, hang- és adathordozók	Recording media
	09.1.5 Audiovizuális, foto-optikai és információ-feldolgozó berendezések javítása	Repair of audio-visual, photographic and information processing equipment
09.2	<i>Egyéb szabadidős és kulturális tevékenységet szolgáló tartós javak</i>	<i>Other major durables for recreation and culture</i>
	09.2.1 Házon kívüli szabadidős tevékenységet szolgáló tartós javak	Major durables for outdoor recreation
	09.2.2 Hangszerek, és más beltéri szabadidős tevékenységet szolgáló tartós javak	Musical instruments and major durables for indoor recreation

	09.2.3 Egyéb szabadidős és kulturális tev-t szolgáló tartós javak karbantartása és javítása	Maintenance and repair of other major durables for recreation and culture
09.3	<i>Játékok, hobbi- és sportcikkek, kertészkedés, hobbiállat</i>	<i>Other recreational items and equipment, gardens and pets</i>
	09.3.1 Játékok és hobbicikkek	Games, toys and hobbies
	09.3.2 Sporteszközök, kempingcikkek és más felszer. házon kívüli szabadidős tevhhez	Equipment for sport, camping and open-air recreation
	09.3.3 Kertészkedési cikkek, növények, virágok	Gardens, plants and flowers
	09.3.4 Hobbiállatok és tartásukkal kapcsolatos termékek	Pets and related products
	09.3.5 Állatorvosi és egyéb szolgáltatások hobbiállatoknak	Veterinary and other services for pets
09.4	<i>Szabadidős és kulturális tevékenységekkel kapcsolatos szolgáltatások</i>	<i>Recreational and cultural services</i>
	09.4.1 Sport- és szabadidős tevékenységekkel kapcsolatos szolgáltatások	Recreational and sporting services
	09.4.2 Kulturális szolgáltatások	Cultural services
	09.4.3 Szerencsejátékok	Games of chance
09.5	<i>Újság, könyv, papír és írószér</i>	<i>Newspapers, books and stationery</i>
	09.5.1 Könyv	Books
	09.5.2 Újság, folyóirat	Newspapers and periodicals
	09.5.3 Egyéb nyomdai termékek	Miscellaneous printed matter
	09.5.4 Papír és írószér, rajzeszköz	Stationery and drawing materials
09.6	<i>Szervezett társasutazás</i>	<i>Package holidays</i>
	09.6.0 Szervezett társasutazás	Package holidays
10.	Oktatás	Education
10.1	<i>Iskolaelőkészítő és alapfokú oktatás</i>	<i>Pre-primary and primary education</i>
	10.1.0 Iskolaelőkészítő és alapfokú oktatás	Pre-primary and primary education
10.2	<i>Középfokú oktatás</i>	<i>Secondary education</i>
	10.2.0 Középfokú oktatás	Secondary education
10.3	<i>Középfokot meghaladó, de nem felsőfokú oktatás</i>	<i>Post-secondary non- tertiary education</i>
	10.3.0 Középfokot meghaladó, de nem felsőfokú oktatás	Post-secondary non- tertiary education
10.4	<i>Felsőfokú oktatás</i>	<i>Tertiary education</i>
	10.4.0 Felsőfokú oktatás	Tertiary education
10.5	<i>Nem besorolható szintű oktatás</i>	<i>Education not definable by level</i>
	10.5.0 Nem besorolható szintű oktatás	Education not definable by level
11.	Vendéglátás és szálláshelyszolgáltatás	Restaurants and hotels
11.1	<i>Vendéglátás</i>	<i>Catering services</i>
	11.1.1 Kereskedelmi vendéglátás	Restaurants, cafés and the like
	11.1.2 Munkahelyi- és diákétkeztetés	Canteens
11.2	<i>Szálláshelyszolgáltatás</i>	<i>Accommodation services</i>
	11.2.0 Szálláshelyszolgáltatás	Accommodation services

12.	Egyéb termékek és szolgáltatások	Miscellaneous goods and services
<i>12.1</i>	<i>Testápolás</i>	<i>Personal care</i>
	12.1.1 Fodrász-szalonok és más testápolással foglalkozó létesítmények	Hairdressing salons and personal grooming establishments
	12.1.2 Elektromos testápolási készülékek	Electric appliances for personal care
	12.1.3 Egyéb testápolási eszközök és termékek	Other appliances, articles and products for personal care
<i>12.2</i>	<i>Prostitúció</i>	<i>Prostitution</i>
	12.2.0 Prostitúció	Prostitution
<i>12.3</i>	<i>Máshova nem sorolt személyes ingóság</i>	<i>Personal effects n.e.c.</i>
	12.3.1 Óra, ékszer	Jewellery, clocks and watches
	12.3.2 Egyéb személyes ingóság	Other personal effects
<i>12.4</i>	<i>Szociális ellátás</i>	<i>Social protection</i>
	12.4.0 Szociális ellátás	Social protection
<i>12.5</i>	<i>Biztosítás</i>	<i>Insurance</i>
	12.5.1 Életbiztosítás	Life insurance
	12.5.2 Ingatlanbiztosítás	Insurance connected with the dwelling
	12.5.3 Egészségbiztosítás	Insurance connected with health
	12.5.4 Jármű- és közlekedési biztosítás	Insurance connected with transport
	12.5.5 Egyéb biztosítás	Other insurance
<i>12.6</i>	<i>Máshova nem sorolt pénzügyi szolgáltatások</i>	<i>Financial services n.e.c.</i>
	12.6.1 FISIM	FISIM
	12.6.2 Egyéb máshova nem sorolt pénzügyi szolgáltatások	Other financial services n.e.c.
<i>12.7</i>	<i>Máshova nem sorolt egyéb szolgáltatások</i>	<i>Other services n.e.c.</i>
	12.7.0 Máshova nem sorolt egyéb szolgáltatások	Other services n.e.c.

10.2.2. Classification used for government final consumption expenditure

Two classifications are used: COFOG and national classification:

Table 10.3 National classification

Hungarian title	English title	Type of consumption:	
		Individual	Collective
Mezőgazdaság, vadgazdálkodás	Agriculture, hunting and related service activities		X
Erdőgazdálkodás	Forestry, logging and related service activities		X
Kiadói és nyomdai tevékenység, egyéb sokszorosítás	Publishing, printing and reproduction of recorded media		X
Építőipar	Construction		X
Kiskereskedelem	Retail trade, except of motor-veh. etc.; repair of personal & hh. goods		X
Munkahelyi étkeztetés	Canteens	X	
Szárazföldi, csővezetékű szállítás	Land transport, transport via pipelines		X
Vízi szállítás	Water transport		X
Szállítás kiegészítő tevékenység, utazásszervezés	Supporting and auxiliary transport activities; activities of travel agencies		X
Posta, távközlés	Post and telecommunications		X
Ingatlanberuházás, -eladás, ingatlanforgalmazás	Development and selling of real estate, buying and selling of own real estate		X
Ingatlan bérbeadása, üzemeltetése	Letting of own property	X	
Számítástechnikai tevékenység	Renting of machinery & equipment without operator		X
Kutatás, fejlesztés	Research and development		X
Gazdasági tevékenységeket segítő szolgáltatás	Other business activities	X	X
Közigazgatás, védelem, kötelező társadalombiztosítás	Public administration and defence; compulsory social security		X
Oktatás	Education	X	
Egészségügy	Human health activities	X	
Állategészségügy	Veterinary activities		X
Szociális ellátás	Social work	X	
Szennyvíz- hulladékkezelés, köztisztasági szolgáltatás	Sewage and refuse disposal, sanitation and similar activities		X
Hírügynökségi tevékenység	News agency activities		X
Sport	Sporting activities	X	
Kultúra	Culture activities	X	
Temetkezés	Funeral and related activities		X
Máshova nem sorolt egyéb szolgáltatás	Other service activities n.e.c.	X	

Table 10.4 COFOG

01. Általános közszolgáltatások	01 General public services
01.1 Végrehajtó és törvényhozó szervek, pénzügyi és költségvetési tevékenységek, külügyek	01.1 Executive and legislative organs, financial and fiscal affairs, external affairs
01.2 Külföldi gazdasági segélyek	01.2 Foreign economic aid
01.3 Általános szolgáltatások	01.3 General services
01.4 Alap kutatás	01.4 Basic research
01.5 Általános közszolgáltatásokkal kapcsolatos kutatás és fejlesztés	01.5 R&D General public services
01.6 Máshova nem sorolt általános közszolgáltatások	01.6 General public services n.e.c.
01.7 Államadósság-kezelés	01.7 Public debt transactions
01.8 Külön funkcióként nem meghatározható tevékenységek (az államháztartás különböző szintjei közötti általános jellegű műveletek)	01.8 Transfers of a general character between different levels of government
02. Védelem	02 Defence
02.1 Katonai védelem	02.1 Military defence
02.2 Polgári védelem	02.2 Civil defence
02.3 Külföldi katonai segítségnyújtás	02.3 Foreign military aid
02.4 Védelmi tevékenységekkel kapcsolatos kutatás és fejlesztés	02.4 R&D Defence
02.5 Máshova nem sorolt, védelemmel kapcsolatos ügyek	02.5 Defence n.e.c.
03. Közrend és közbiztonság	03 Public order and safety
03.1 Rendőrségi tevékenységek	03.1 Police services
03.2 Tűzvédelemmel kapcsolatos tevékenységek	03.2 Fire-protection services
03.3 Bíróságok tevékenysége	03.3 Law courts
03.4 Büntetésvégrehajtási tevékenységek	03.4 Prisons
03.5 Közrenddel és a közbiztonsággal kapcsolatos kutatás és fejlesztés	03.5 R&D Public order and safety
03.6 Máshova nem sorolt, közrenddel és közbiztonsággal kapcsolatos ügyek	03.6 Public order and safety n.e.c.
04. Gazdasági ügyek	04 Economic affairs
04.1 Általános gazdasági, kereskedelmi ügyek és munkaügyi tevékenységek	04.1 General economic, commercial and labour affairs
04.2 Mezőgazdasági, erdőgazdálkodási, halászati és vadgazdálkodási ügyek	04.2 Agriculture, forestry, fishing and hunting
04.3 Üzemanyag és energiaellátással kapcsolatos ügyek	04.3 Fuel and energy
04.4 Bányászati, feldolgozóipari és építőipari ügyek	04.4 Mining, manufacturing and construction
04.5 Szállítási ügyek	04.5 Transport
04.6 Távközlési ügyek	04.6 Communication
04.7 Egyéb ágazatokkal kapcsolatos ügyek	04.7 Other industries
04.8 Gazdasági ügyekkel kapcsolatos kutatás és fejlesztés	04.8 R&D Economic affairs
04.9 Máshova nem sorolt gazdasági ügyek	04.9 Economic affairs n.e.c.
05. Környezetvédelem	05 Environmental protection
05.1 Hulladékkezelés igazgatása	05.1 Waste management
05.2 Szennyvízkezelés igazgatása	05.2 Waste water management

05.3 Környezetszennyezés csökkentésének igazgatása	05.3 Pollution abatement
05.4 Az élővilág védelme és a tájvédelem igazgatása	05.4 Protection of biodiversity and landscape
05.5 Környezetvédelemmel kapcsolatos kutatás és fejlesztés	05.5 R&D Environmental protection
05.6 Máshova nem sorolt környezetvédelmi ügyek	05.6 Environmental protection n.e.c.
06. Lakás és közműellátás	06 Housing and community amenities
06.1 Lakásellátási ügyek	06.1 Housing development
06.2 Településfejlesztés	06.2 Community development
06.3 Vízellátás	06.3 Water supply
06.4 Közvilágítás	06.4 Street lighting
06.5 Lakás és közműellátással kapcsolatos kutatás és fejlesztés	06.5 R&D Housing and community amenities
06.6 Máshova nem sorolt lakás és közműellátási ügyek	06.6 Housing and community amenities n.e.c.
07. Egészségügy	07 Health
07.1 Gyógyászati termékek, eszközök és készülékek	07.1 Medical products, appliances and equipment
07.2 Járóbeteg-ellátás	07.2 Outpatient services
07.3 Fekvőbeteg-ellátás	07.3 Hospital services
07.4 Közegészségügyi szolgáltatások	07.4 Public health services
07.5 Egészségüggyel kapcsolatos kutatás és fejlesztés	07.5 R&D Health
07.6 Máshova nem sorolt egészségügyi tevékenységek	07.6 Health n.e.c.
08. Szabadidő, kultúra és vallás	08 Recreation, culture and religion
08.1 Szabadidős és sporttevékenységekkel kapcsolatos szolgáltatások	08.1 Recreational and sporting services
08.2 Kulturális szolgáltatások	08.2 Cultural services
08.3 Műsorszórással és kiadói tevékenységgel kapcsolatos szolgáltatások	08.3 Broadcasting and publishing services
08.4 Vallási és egyéb közösségi szolgáltatások	08.4 Religious and other community services
08.5 Szabadidős tevékenységekkel, kultúrával és vallással kapcsolatos kutatás és fejlesztés	08.5 R&D Recreation, culture and religion
08.6 Máshova nem sorolt szabadidős tevékenységekkel, kultúrával és vallással kapcsolatos ügyek	08.6 Recreation, culture and religion n.e.c.
09. Oktatás	09 Education
09.1 Iskola előtti és alapfokú oktatás	09.1 Pre-primary and primary education
09.2 Középfokú oktatás	09.2 Secondary education
09.3 Középfokot meghaladó, de nem felsőfokú oktatás	09.3 Post-secondary non-tertiary education
09.4 Felsőfokú oktatás	09.4 Tertiary education
09.5 Oktatási szinthez nem kapcsolható oktatás	09.5 Education not definable by level
09.6 Az oktatáshoz kapcsolódó kiegészítő szolgáltatások	09.6 Subsidiary services to education
09.7 Oktatással kapcsolatos kutatás és fejlesztés	09.7 R&D Education
09.8 Máshova nem sorolt oktatási ügyek	09.8 Education n.e.c.
10. Szociális biztonság	10 Social protection
10.1 Betegséggel és rokkantsággal kapcsolatos tevékenységek	10.1 Sickness and disability
10.2 Idősek ellátásával kapcsolatos tevékenységek	10.2 Old age
10.3 Elhunyt személyek hátramaradottainak ellátásával	10.3 Survivors

kapcsolatos tevékenységek	
10.4 Családi és gyermekeknek járó juttatásokkal kapcsolatos tevékenységek	10.4 Family and children
10.5 Munkanélküli-ellátással kapcsolatos tevékenységek	10.5 Unemployment
10.6 Lakás célú szociális ellátás	10.6 Housing
10.7 A szociálisan hátrányos helyzetű személyekkel kapcsolatos, máshová nem sorolt tevékenységek (természetbeni juttatás)	10.7 Social exclusion n.e.c.
10.8 Szociális biztonsággal kapcsolatos kutatás és fejlesztés	10.8 R&D Social protection
10.9 Máshova nem sorolt, szociális biztonsággal összefüggő tevékenységek (közösségi fogyasztás)	10.9 Social protection n.e.c.

10.2.3. Classification used for NPISHs

The classification applied for the NPISHs' consumption expenditure is the following:

Table 10.5 Classification used for NPISHs

Hungarian title	English title	Type of consumption:
		Individual
Oktatás	Education	X
Egészségügy	Human health activities	X
Szociális ellátás	Social work	X
Érdekképviseleti tevékenység	Activities of membership organisations	X
Szórakoztatás, kultúra, sport	Recreational, cultural and sporting activities	X

10.2.4. Classification used for gross fixed capital formation

The types of asset acquisitions considered separately in order to estimate the annual GFCF are as follows:

- purchases of new tangible and intangible fixed assets
- major improvements to fixed assets and to land
- own-account productions of fixed assets
- purchases of existing tangible and intangible fixed assets
- acquisitions of tangible assets as apported goods
- acquisitions of tangible assets as capital transfers in kind
- cost of ownership transfers related to transactions on land

37. The types of asset disposals considered as negative entries are:

- sales of tangible and intangible fixed assets
- apports of tangible fixed assets to other units
- transfers of tangible fixed assets to other units as capital transfers in kind

10.2.5. Classification used for inventories**10.2.6. Classification used for external trade statistics**

In external merchandise trade statistics Hungarian Combined Nomenclature conforms with the Combined Nomenclature except 4407 99 94, 4811 49 51, 4811 49 59 codes, which are not in the CN 2002. In imports tariff codes including CN codes (8 digit) and 2 national codes are used. Data are processed and published by the Standard International Trade Classification (Revision 3).

The classification used for the external trade of services is based on the EBOPS classification, the same as used for the balance of payments.

Table 10.6 Classification used for external trade statistics

MNB/KSH	Denomination	EBOPS	Denomination
050	Repair	001	Repair with the movement of goods
060	Transport, passenger	205	"Transport" = 206 + 210 + 214
070	Transport fee for goods owing to Hungarian export	206	"Sea transport" = 207 + 208 + 209
080	Transport fee for goods owing to Hungarian import	207	Sea transport, passenger
090	Transport fee for foreign goods	208	Sea transport, freight
100	Transporters' international settlements/accounts	209	Sea transport, other
110	Other transport fee for goods owing to Hungarian export	210	"Air transport" = 211 + 212 + 213
120	Other transport fee for goods owing to Hungarian import	211	Air transport, passenger
130	Other transport fee for foreign goods	212	Air transport, freight
140	Transporters' allowance in service	213	Air transport, other
		214	"Other transport" = 218 + 219 + 223 + 227 + 231 + 232
		215	"Other transport, passenger" = 220 + 224 + 228
		216	"Other transport, freight" = 221 + 225 + 229
		217	"Other non-listed transport" = 222 + 226 + 230
		218	Space transport
		219	"Rail transport" = 220 + 221 + 222
		220	Rail transport, passenger
		221	Rail transport, freight
		222	Rail transport, other
		223	"Road transport" = 224 + 225 + 226
		224	Road transport, passenger
		225	Road transport, freight
		226	Road transport, other
		227	"Inland waterway transport" = 228 + 229 + 230
		228	Inland waterway transport, passenger
		229	Inland waterway transport, freight
		230	Inland waterway transport, other
		231	Pipeline transport and electricity transmission

		232	Other supporting and auxiliary transport services
170	Communications services	245 246 247	"Communications services" = 246 + 247 Postal and courier services Telecommunications services
180	Construction services	249 250 251	"Construction" = 250 + 251 Construction abroad Construction in the compiling economy
210 190/200	Income and expenditure of resident insurance entrepreneur Insurance fee owing to Hungarian export/import goods	253 254 255 256 257 258 259	"Insurance" = 254 + 255 + 256 + 257 + 258 + 259 Life insurance and pension funding Freight insurance Other direct insurance Passive reinsurance Insurance services, auxiliary services Active reinsurance
220	Financial services	260	Financial services
230	Computer and information services	262 263 264 889 890	"Computer and information services" = 263 + 264 Computer services "Information services" (889+890) News agency services Other information provision services
240	Royalties and licence fees	266 891 892	"Royalties and licence fees" = 891 + 892 Franchises and similar rights Other royalties and license fees
250 260 270	Reexport and other trade related services Operational leasing services Other business, professional and technical services	268 269 270 271 272 273 274	"Other business services" = 269 + 272 + 273 "Reexport and other trade related services" = 270 + 271 Reexport Other trade related services Operational leasing services "Other business, professional and technical services" = 274 + 278 + 279 + 280 + 281 + 284 + 285 "Legal, accounting, business and management consulting and PR services" = 275 + 276 + 277

			275 Legal services 276 Accounting, auditing, bookkeeping and tax consulting services 277 Business and management consulting and public relations services 278 Advertising, market research, and public opinion polling 279 Research and development 280 Architectural, engineering, and other technical services 281 "Agricultural, mining and other services" = 282 + 283 282 Waste treatment and depollution 283 Agricultural and mining services 284 Other business services, included repairs of goods (without movement of goods) 285 Services between affiliated enterprises
280	Audiovisual and related services	287	"Personal, cultural, and recreational services " = 288 + 289
290	Other cultural, and recreational services	288 Audiovisual and related services 289 "Other personal, cultural, and recreational services " = 895 + 896 + 897 895 Education services 896 Health services 897 Other personal, cultural, and recreational services	
300	Government services	291	"Government services" = 292 + 293 + 294
		292 Embassies and consulates 293 Military unites and agencies 294 Other government services	
150	Business travel	236	Travel
160	Private travel		Expenditure by seasonal and border workers Other business travel Health related expenditure on travel Education related expenditure on travel Other private travel
015	Outward processing	002	Outward processing
			Illegal activity
			FISIM (Financial intermediation services indirectly measured)

CHAPTER 11. MAIN DATA SOURCES USED

11.1. The JAVA Database System

Besides the Business Register, compilation of the accounts of the Non-financial corporations sector is mainly based on an own-developed enterprise database system called JAVA. The database system is built essentially on the corporate profit tax returns, but it integrates data coming from other data sources (e.g. statistical surveys, budgetary data and other tax declarations) in a determined way (it will be detailed in the followings).

Data sources

A/ Administrative data sources

The administrative data sources are the individual data on tax return forms received electronically from the Tax and Financial Control Administration. Enterprises using double-entry bookkeeping or single-entry bookkeeping which are registered under the Act LXXXI of 1996 on Corporate Tax and Dividend Tax, have to send tax returns to the authorised governmental tax office. The enterprises keep their accounts and reports in compliance with the Act C of 2000 on Accounting. For this reason, the enterprises' data on their profit and loss statements and on their tax returns meet the requirements of the accounting law.

According to the Hungarian laws, the following units had the obligation to submit corporate profit tax declaration in 2002:

- business associations and professional associations,
- co-operatives, with the exception of housing co-operatives,
- state-owned enterprises, trusts, other state-owned business organisations, companies of certain legal entities, subsidiaries,
- lawyer's offices, patent attorney's offices, incorporated working groups of private persons with legal entity, forestry associations,
- organisations of the Employees' Stock Ownership Programme (ESOP),
- public benefit non-profit institution, water management associations,
- foundations, public foundations, social organisations, public bodies, churches, housing co-operatives and voluntary mutual insurance funds,
- risk capital funds,
- foreign entrepreneurs, if they carry out business operations at their branches in Hungary.

Organisations not qualified as subject to corporate profit tax:

- the National Bank of Hungary,
- economic organisations created for the statutory employment of prisoners under the supervision of the Ministry of Justice,

- public service companies established exclusively for the purpose of the employment of prisoners,
- the Reserve Managing Non-profit Company,
- the Transportation, Communications and Water Reserve Management Non-profit Company,
- the Hungarian Privatisation and State Holding Company,
- public service broadcasters as specified by law,
- units, which are subject to liquidation proceedings, as of the initial date of liquidation,
- political parties,
- the Hungarian News Agency Inc.
- joint stock companies engaged exclusively in providing joint and several surety ship under the conditions specified in a separate act and in the legal regulation enacted under the authorisation of such act.

Accordingly to this, the tax returns received by the HCSO are including the data not only of the Non-financial corporations sector. Therefore, data of these outsider units are sorted out with an algorithm before loading data into the JAVA database system.

In Hungary, the tax and the accounting laws changed – more or less - every year. In parallel, the tax return forms – which constitute the basis of the national account's calculations –changed, both formally and in content. There are always new types of taxes and subsidies developed. For example, in 2003, the Simplified Corporation Tax was introduced: the 15% simplified corporation tax replaces – if certain conditions are met – the obligation of the returns and payments of VAT, corporate profit tax and some other taxes. Meanwhile, enterprises, which chose this form of tax payments for the year 2003, filled in already a simplified corporate profit tax return of their business activities for the year 2002, too.

In 2002, administrative data were received in the following tax return forms:

0228	Corporate profit tax return of enterprises using single-entry bookkeeping
0229	Corporate profit tax return of enterprises using double-entry bookkeeping
0229Ü	Corporate profit tax return of enterprises that changed to business year accounting differing from that of calendar year during 2002
0271EVA	Corporate profit tax return of enterprises registered for the Simplified Corporation Tax for the year 2003
0203	Declaration of the liabilities towards the budget
0211	Declaration of demanded subsidies from the budget

0228 Corporate profit tax return of enterprises using single-entry bookkeeping

Enterprises, which are allowed to take their accounts with single-entry bookkeeping:

- teaching co-operatives,
- incorporated working groups with legal entity,

- enterprises without legal entity

In the case if their net income does not exceed the limit of HUF 50 million in two subsequent years, independently of the number of their employees and the amount of their balance sheet.

Their tax returns include the data of:

- the simplified balance sheet,
- the partly aggregated items connected to the profit and loss statement,
- the number of employees,
- the authorized capital, and its breakdown by ownership,
- the amount of the approved dividends.

0229 Corporate profit tax return of enterprises using double-entry bookkeeping

Their tax returns include the most detailed data connected to the:

- balance sheet,
- profit and loss statement,
- number of employees,
- authorized capital and its breakdown by ownership,
- approved dividends.

0229Ü Corporate profit tax return of enterprises that changed to business year accounting differing from that of calendar year during 2002

According to the Accounting Act, enterprises with foreign owners and double-entry bookkeeping are authorised to choose business year accounting instead of the calendar year one, thus adapting their accounting to their parent-enterprise.

Their special tax returns are also detailed and similar to that of the enterprises, which make their tax returns according to the calendar year, but they contain data only for a part of the year.

0271EVA Corporate profit tax return of enterprises registered for the Simplified Corporation Tax for the year 2003

Enterprises, which chose this form of tax payments for the year 2003, filled in already a simplified corporate profit tax return of their business activities for the year 2002.

Their tax return includes:

- the dividend tax
- the approved dividends,

- the number of employees,
- certain data of the profit and loss statement,
- the main data connected to the balance sheet.⁸

0203 Declaration of the liabilities towards the budget (Taxes)

Every unit, which has any liability towards the budget, fills in this form. The obligation and the form have a sub-annual version, and in the case of sub-annual reports the annual aggregation is used.

The declarations include:

- the consumption tax of cars and other products,
- environmental protection product charge,
- gambling tax,
- national cultural contribution,
- contributions to be paid to the budget (paid by employee or by employer),
- health contribution.

0211 Declaration of the subsidies demanded from the budget

This form is used for the declaration and for the demand of the subsidies from the budget.

The main subsidies are the followings:

- agricultural subsidies,
- consumer's price supplement,
- other budgetary subsidies.

B/ Other data sources

Structural Business Statistics (SBS) incorporated into the Annual Business Statistics Survey

SBS is a HCSO survey, in accordance with the requirements of the EU Regulation on structural business statistics. This survey includes the main economic indicators of the enterprises.

⁸ *0343 The Simplified Corporation Tax return*

From January 1, 2003 certain corporations, whose annual gross turnover does not exceed the HUF 15 million limit, may pay the Simplified Corporation Tax. On January 1, 2004 this limit rose to HUF 25 million. These corporations are obligated to record only their incomes in the tax return and they don't have to account their costs. Their declaration is intended to define the amount of the Simplified Corporation Tax. For this reason it does not include other data, than the gross turnover and the tax.

Scope of the survey:

- full-scale for the enterprises with more than 19 employees
- sampling for the enterprises with employees between 5 and 19

Labour statistics survey (so-called institutional labour survey) incorporated into the Annual Business Statistics Survey

The scope of the statistical observation includes all enterprises with more than 19 employees, and enterprises with employees between 5-19 persons on a representative basis. Budgetary institutions are observed on full-scope basis and also some non-profit institutions supply data.

Labour Cost Survey

The scope of this observation covers all corporations with more than 49 employees, all public institutions, and also some non-profit institutions supply data.

The definitions of variables and the classification used are harmonized to the Implementing Council Regulation 530/1999 and to the Commission Regulation 1726/1999.

Government statistics data (taxes, subsidies)

Government statistics on taxes and subsidies on products have priority over the respective data collected by the previously discussed administrative data sources or other data sources.

In some cases, in other data sources there are no separate data declared by enterprises on some of the items referring to tax and subsidy on products. These are estimated on the basis of government data. Some differences may be between the sum of taxes, subsidies declared by enterprises in other data sources and the government data. We assume that government data are more reliable, therefore, the enterprises' accounts are adjusted with the sum of the difference. HCSO receives government statistics from the Ministry of Finance.

Types of enterprises

Several types of enterprises are separated in the JAVA database system considering their characteristics, the available information sources and the disposable individual data.

Table 11.1 Types of enterprises in the JAVA database

CC	Code	Term of validity	Name
0	1	1992–1997	Large company (no existing anymore)
200 947	2	1992–	Enterprise using double-entry bookkeeping
99 635	3	1992–	Enterprise using single-entry bookkeeping
685	4	2000–2006	Enterprise with off-shore status
59	5	2001–	Enterprise choosing business year accounting instead of the calendar year one during the reference year
656	6	2001–	Enterprise imputed from the SBS statistics
24 356	7	2002–	Enterprise registered for Simplified Corporation Tax ⁹

⁹ Code 8 2003– Enterprise paying Simplified Corporation Tax

*Detailed description of the enterprise types**Type 1: Large Company*

Joint stock companies and those enterprises with double-entry bookkeeping, which fulfilled or exceeded at least two of the following 3 criteria, in 2 subsequent years:

Amount of balance sheet:	HUF 150 million
Yearly net turnover:	HUF 300 million
Average number of employees:	100

In addition, those companies, which are connected to other corporations as a parent or affiliated company. These companies were obligated to fill in the statistical survey form OSAP 1120: Report of the yearly business activity of the enterprise, during 1992-1997.

Type 2: Enterprises using double-entry bookkeeping

Those enterprises, which use double-entry bookkeeping, and do not belong to any other enterprise type.

Type 3: Enterprises using single-entry bookkeeping

Those enterprises, which use single-entry bookkeeping.

Type 4: Enterprises with off-shore status

Limited liability companies and joint stock companies, which pursue their business activity abroad, but are registered inland, and have an inland address. The number of these enterprises got more and more significant in the past few years. Differently from other enterprises, we make cost-base estimation for their output. They have small production costs relative to their assets and their financial transactions.

Type 5: Enterprises choosing business year accounting instead of calendar year one during the reference year

Act on Accounting – from January 1, 2001 - allows for enterprises with foreign owners to choose business year accounting, adjusting to their parent enterprise. For the year of the change, they have a special tax return form, which includes their activities only for the part of the calendar year: from 1st January until the date they chose the business year accounting. The main indicators of their performance are estimated with a time-ratio multiplication method.

Type 6: Enterprises imputed from the SBS statistics

Those enterprises, whose tax returns were not received by HCSO for some reason, but they were involved in the sample of the SBS and supplied data to HCSO. Their main data are imputed from the SBS statistics.

Type 7: Enterprises registered for Simplified Corporation Tax

Those enterprises, which pay Simplified Corporation Tax from the year following the reference year.¹⁰

For detailed description of the data sources in the JAVA Database see Chapter 11.2

Indicators in the JAVA database

The indicators in the database are the following:

Basic indicators:

Data coming from the data sources directly, e.g. net sales, material costs.

Calculated indicators:

Calculated indicators derived from the basic indicators and from other sources of information using a certain algorithm. The most important ones are: output, intermediate consumption, value added, etc.

As variables are different in the tax returns in conformity with the different enterprise types, different computation algorithm is needed to calculate NA data.

Data relating to each theme are recorded on individual and on aggregated level in the different tables of the database. For example:

- balance sheet: assets (A table);
- balance sheet: liabilities (B table);
- profit and loss statement (C table), etc.

Checking, correction and substitution of the basic data loaded into the JAVA database*Checking with the help of the Business Register*

Before loading the data into the JAVA database, enterprise data from the Tax and Financial Control Administration are cross checked with the adequate business register of the HCSO. In the case of unmatched enterprises monthly BR register of the following year is used. Enterprises not matched with the monthly BR, are forwarded to the Register Section of HCSO for further investigation.

As mentioned before, the tax returns received by the HCSO are including not only the data of the Non-financial corporations sector. Therefore, data of these outsider units are sorted out with an algorithm before loading the data into the JAVA database system.

For checking the database, we compare it with the previous year's database. If an enterprise register number appears in the previous year's database, and it has not sent corporate profit tax return, we pair it with the file of "terminated and transformed" enterprises. If it does not appear either there, or it is an existing enterprise according to the register, we impute the data from the SBS statistics – if it was sent

¹⁰ *Code 8: Enterprises paying Simplified Corporation Tax*

Those enterprises, which are paying Simplified Corporation Tax in the current year.

by the enterprise. Otherwise, we treat the data as "missing" data, and estimate them according to the previous year's data.

Validation

- Matching with the previous year's data; checking the highest growths and decreases.
- Matching with the SBS statistics: checking the highest deviations individually with the help of the basic statistics departments (e.g. Industrial Statistics Department, Service Statistics Department). (See Annex 1)

Correction and substitution of the data

Correction and substitution of the number of employees, wages and social contributions according to the institutional labour data for the enterprises using double-entry bookkeeping and belonging to enterprise type 2 (N097=2)

If there are labour data:

- Number of employees equals, wage is missing:
 - Wage is imputed from the labour statistics
- Number of employees does not equal, wage is missing:
 - Wage is imputed from the labour statistics, there is a need for further examination of the number of employees
- Number of employees is missing, wages equal:
 - Number of employees is imputed from the labour statistics.
- Number of employees and wages are missing:
 - Number of employees and wages are imputed from the labour statistics.

If there are no data from the labour statistics:

- Number of employees is missing
 - Number of employees = wage costs divided by the average wage
- Wage is missing
 - Wage = number of employees multiplied by the average wage
- Both are missing
 - Number of employees = the lower limit of the „number of employees” category of the enterprise in the Business Register. Wages = number of employees * average wage

Substitution of the social contributions

30% of wages is imputed as estimation.

Correction of the indicators of the inventories

In the received corporate profit tax returns, the data referring to the own-produced, purchased and the total inventory are not consistent in many cases. This is corrected with the algorithm presented in the Annex 1.

11.2. Statistical surveys and other data sources used for the production approach**11.2.1. Administrative data sources****Identification**

Name of source: 0229 Corporation profit tax return of enterprises using double-entry book-keeping
Responsible institution: Tax and Financial Control Administration
Purpose of the data collection: compulsory tax returns pursuant to the Act LXXXI of 1996 on Corporate Tax and Dividend Tax
Basic characteristics of the source: -
Reporting units: enterprises, with double-entry bookkeeping which are legal entities and those listed in the Chapter 3.1.3.
Periodicity: annual
Variables collected: <i>Balance sheet</i> Assets Invested assets Intangible assets Tangible fixed assets Invested financial assets Current assets Inventories Receivables Securities, for sale Liquid assets Pre-paid expenses Liabilities Owners' equity Authorized capital Capital reserve Profit book value Provisions Liabilities Long term Short term Accrued expenses <i>Profit and loss statement</i> Net sales of which: Sales of exports

<p>Other revenues</p> <p>Own performance capitalised</p> <p>Material type expenditures, total</p> <p> Of which: Material costs</p> <p> Costs of contracted services</p> <p> Costs of other services</p> <p> Value of goods purchased for resale</p> <p> Value of services purchased for resale (intermediated services)</p> <p>Labour costs, total</p> <p> of which: Wages</p> <p> Other salaries</p> <p> Social security contribution</p> <p>Depreciation</p> <p>Other costs</p> <p>Other expenditures</p> <p>Trading profit</p> <p>Profit on financial transactions</p> <p>Entrepreneurial profit</p> <p>Extraordinary profit</p> <p>Profit before taxation</p> <p>Profit tax liability</p> <p>Profit after taxation</p> <p>Use of profit reserves for dividends</p> <p>Dividends and other withdrawals</p> <p><i>Other supplementary variables</i></p> <p>Number of employees</p> <p> of which: Number of employees inland</p> <p>Rents of agricultural land</p> <p>Assets of small value</p> <p>Authorized capital and its breakdown by ownership</p>
<p>Methods used to allow for missing data: the missing data are replaced from the annual labour survey (e.g. number of employees, wages and salaries, social security contribution). In the case of missing data for employment and wages and salaries (and the labour survey does not include the enterprise), missing data are estimated using the appropriate average of NACE 4 digit level.</p>
<p>Adjustments made for conceptual differences from the national accounts concepts: tax declarations contain the figures which are the sources for compiling National Accounts aggregates. These figures come directly from business accounting and are used for calculating the output, the intermediate consumption, gross value added, etc. only after the necessary adjustments. The detailed course of measuring the output and intermediate consumption and of switching the administrative aspect to ESA95 concept and valuation is described in Chapter 3.</p>
<p>Further adjustments made to the data: -</p>

Identification

Name of the source: 0229Ü Corporate profit tax return of enterprises which changed to business year accounting differing from that of calendar year during 2002
Responsible institution: tax and Financial Control Administration
Purpose of the data collection: compulsory tax returns pursuant to the Act LXXXI of 1996 on Corporate Tax and Dividend Tax
Basic characteristics of the source: -
Reporting units: according to the Act C of 2000 on Accounting, enterprises with foreign owners and double-entry book-keeping are authorised to choose different business year accounting differing from the calendar year thus adapting their accounting to their parent-enterprise. Their special tax returns contain data only for a part of the year.
Periodicity: annual
Variables collected:
<i>Balance sheet</i>
Assets
Invested assets
Intangible assets
Tangible fixed assets
Invested financial assets
Current assets
Inventories
Receivables
Securities, for sale
Liquid assets
Pre-paid expenses
Liabilities
Owners' equity
Authorized capital
Capital reserve
Profit book value
Provisions
Liabilities
Long term
Short term
Accrued expenses
<i>Profit and loss statement</i>
Net sales
of which: Sales of exports
Other revenues
Own-account GFCF
Material type expenditures, total
of which: Material costs
Costs of contracted services
Costs of other services
Value of goods purchased for resale
Value of services purchased for resale (intermediated services)
Labour costs, total
of which: Wages
Other salaries
Depreciation

<p>Other costs Other expenditures Trading profit Profit on financial transactions Entrepreneurial profit Extraordinary profit Profit before taxation Profit tax liability Profit after taxation Use of profit reserves for dividends Dividends and other withdrawals <i>Other supplementary variables</i> Number of employees of which: Number of employees inland Rents of agricultural land Assets of small value Authorized capital and its breakdown by ownership</p>
<p>Methods used to allow for missing data: the missing data are replaced from the annual labour survey (e.g. number of employees, wages and salaries, social security contribution). In the case of missing data for employment and wages and salaries (and the labour survey does not include the enterprise), missing data are estimated using the appropriate average of NACE 4 digit level.</p>
<p>Adjustments made for conceptual differences from the national accounts concepts: tax declarations contain the figures which are the sources for compiling National Accounts aggregates. These figures come directly from business accounting and are used for calculating the output, the intermediate consumption, gross value added, etc. only after the necessary adjustments. The detailed course of measuring the output and intermediate consumption and of switching the administrative aspect to ESA95 concept and valuation is described in Chapter 3.</p>
<p>Further adjustments made to the data: -</p>

Identification

Name of the source: 0228 Corporate profit tax return of enterprises using single-entry book-keeping
Responsible institution: Tax and Financial Control Administration
Purpose of the data collection: compulsory tax returns pursuant to the Act LXXXI of 1996 on Corporate Tax and Dividend Tax
Basic characteristics of the source: -
Reporting units: enterprises with single-entry book-keeping which are teachers' working teams, incorporated working groups with legal entity, enterprises without legal entity and those listed in Chapter 3.1.3, if annual net sales do not exceed HUF 50 million in two consecutive years, regardless of the number of employees and the total value of assets/liabilities in the balance sheets.
Periodicity: annual
<p><i>Simplified balance sheet</i></p> <p>Assets</p> <ul style="list-style-type: none"> Invested assets <ul style="list-style-type: none"> Intangible fixed assets Tangible fixed assets Invested financial assets Current assets <ul style="list-style-type: none"> of which: Inventories Receivables Securities, for sale Liquid assets <p>Liabilities</p> <ul style="list-style-type: none"> Owners' equity <ul style="list-style-type: none"> of which: Authorized capital Capital reserve Simplified profit book value Reserve Provisions Liabilities <ul style="list-style-type: none"> Long term Short term <p><i>Profit and loss statement</i></p> <p>Net sales</p> <p>Other revenues</p> <p>Purchase of materials and goods <ul style="list-style-type: none"> of which: Purchase of goods </p> <p>Labour costs, total <ul style="list-style-type: none"> of which: Social security contribution </p> <p>Depreciation</p> <p>Other production and operational costs and expenditures</p> <p>Profit before taxation</p> <p>Profit tax liability</p> <p>Profit after taxation</p> <p>Dividends and other withdrawals</p> <p><i>Other supplementary variables</i></p> <p>Number of employees</p> <p>Rents of agricultural land</p>

Authorized capital and its breakdown by ownership
Methods used to allow for missing data: -
Adjustments made for conceptual differences from the national accounts concepts: tax declarations contain the figures which are the sources for compiling National Accounts aggregates. These figures come directly from business accounting and are used for calculating the output, the intermediate consumption, gross value added, etc. only after the necessary adjustments. The detailed course of measuring the output and intermediate consumption and of switching over the administrative aspect to ESA95 concept and valuation is described in Chapter 3.
Further adjustments made to the data: -

Identification

Name of the source: 0203 Declaration of the liabilities towards the budget
Responsible institution: Tax and Financial Control Administration
Purpose of the data collection: Compulsory tax returns pursuant to the Act LXXXI of 1996 on Corporate Tax and Dividend Tax
Basic characteristics of the source:
Reporting units: every enterprise, which has any liability towards the budget, fills in form.
Periodicity: annual
Variables collected: <i>Budgetary connections</i> The consumption tax of cars and other products Environmental protection product charge Gambling tax National cultural contribution Contributions to be paid to the budget (paid by employee or by employer) Health contribution
Methods used to allow for missing data: -
Adjustments made for conceptual differences from the national accounts concepts: -
Further adjustments made to the data: -

Identification

Name of the source: 0211 Declaration of the subsidies demanded from the budget
Responsible institution: Tax and Financial Control Administration
Purpose of the data collection: Compulsory tax returns pursuant to the Act LXXXI of 1996 on Corporate Tax and Dividend Tax
Basic characteristics of the source:
Reporting units: all those enterprises, which have any allocations and subsidies from the budget, fill in this form.
Periodicity: annual
Variables collected: Agricultural subsidies Other budgetary subsidies Consumer's price supplement Distinctive subsidies Other enterprise subsidies Normative subsidies
Methods used to allow for missing data: -
Adjustments made for conceptual differences from the national accounts concepts:
Further adjustments made to the data: -

Identification

Name of source: 0271 Corporate profit tax return of enterprises registered for the Simplified Corporation Tax for the year 2003
Responsible institution: Tax and Financial Control Administration
Purpose of the data collection: compulsory tax returns pursuant to the Act LXXXI of 1996 on Corporate Tax and Dividend Tax
Basic characteristics of the source:
Reporting units: corporations, whose annual gross turnover does not exceed the limit of HUF 15 million and which choose the Simplified Corporation Tax for the year 2003.
Periodicity: Annual
Variables collected: Corporations with double entry book-keeping <i>Profit and loss statement</i> Net sales Own-account GFCF Other revenues Financial revenues Extraordinary revenues <i>Balance sheet</i> Assets Intangible fixed assets Tangible fixed assets Receivables Pre-paid expenses Liabilities Capital reserve Profit book value Provisions Liabilities

<ul style="list-style-type: none"> Long term Short term Accrued expenses <i>Other supplementary variables</i> <ul style="list-style-type: none"> Use of profit reserves for dividends Dividends and other withdrawals Number of employees
<p>Corporations with single entry book-keeping</p> <ul style="list-style-type: none"> <i>Profit and loss statement</i> <ul style="list-style-type: none"> Net sales Other revenues <i>Balance sheet</i> <ul style="list-style-type: none"> Assets <ul style="list-style-type: none"> Intangible fixed assets Tangible fixed assets Receivables Pre-paid expenses Liabilities <ul style="list-style-type: none"> Capital reserve Profit book value Provisions Liabilities <ul style="list-style-type: none"> Long term Short term Accrued expenses <i>Other supplementary variables</i> <ul style="list-style-type: none"> Use of profit reserves for dividends Dividends and other withdrawals Number of employees
<p>Methods used to allow for missing data: from January 1, 2003 certain corporations, whose annual gross turnover does not exceed HUF 15 million, may pay the Simplified Corporation Tax. (On January 1, 2004 this limit rose to HUF 25 million.) In the tax return, these corporations are obligated to record only their incomes (net sales, own-account GFCF, other revenues, financial revenues, extraordinary revenues) and they don't have to account their costs. For 2003 these corporations are obliged to define the amount of the Simplified Corporation Tax by the declaration No. 0343. This tax return form does not include other data than the total gross turnover and the simplified corporation tax. For 2002, we used the previous year's IC/output ratio to estimate the IC of enterprises concerned. From 2003, for missing IC data we use a proportional imputation method on the basis of data of double-entry book keeping corporations of similar limit.</p>
<p>Adjustments made for conceptual differences from the national accounts concepts: -</p>
<p>Further adjustments made to the data: -</p>

11.2.2. Statistical data sources

38. The main data sources used for agriculture are:

- a) balance sheets of agricultural products (non-financial enterprises and GG units)
- b) balance sheets of agricultural products (households)
- c) survey on agricultural services
- d) EU Farm Accountancy Data Network
- e) inputs of agricultural production (non-financial enterprises and GG sector)

Balance sheets of agricultural products (non-financial enterprises and GG units)

Name of the survey: Balance sheets of agricultural products
Link to surveys undertaken at European level (e.g. structural business statistics): Economic Accounts for Agriculture
Reporting units (e.g. enterprise/ local KAU/ household): enterprise
Periodicity (e.g. annual/quarterly/other- to be specified): annual (calendar year)
Time of availability of results (e.g. 18 months after the end of the survey period): 5 months after the calendar year
Sampling frame: (e.g. name of the business register used/ population census): Hungarian Business Register, Agricultural census 2000, Farm Structure Survey 2003
Is the survey compulsory or voluntary? Compulsory
Main features of the survey method (e.g. PPS sampling/ panel of respondents/ use of a size threshold for sampling/ postal questionnaire/ telephone interview): full coverage by postal questionnaire
Population size: around 10 000
Sample size: around 10 000
Survey response rate: 90%
Method used to impute for missing data: estimate at county (NUTS III) level by local experts
Variable used for grossing-up to the population (e.g. turnover/ employment): land area, animal stock etc.
Sample coverage, as a percentage of the variable used for grossing-up (e.g. the sample coverage of employment recorded on the sampling frame): full coverage
Main variables collected: stocks, production, losses, intra-unit consumption, own consumption, domestic sales, direct sales, exports in quantities etc.
Further adjustments made to the survey data: harmonization with the households' data at product level; harmonization with the monthly reports of enterprises on the quantities and values of agricultural products purchased for marketing or manufacturing

Balance sheets of agricultural products (households)

Name of the survey: Survey of agricultural households (Balance sheets of agricultural households)
Link to surveys undertaken at European level (e.g. structural business statistics): Economic Accounts for Agriculture
Reporting units (e.g. enterprise/ local KAU/ household): household
Periodicity (e.g. annual/quarterly/other- to be specified): annual (calendar year)
Time of availability of results (e.g. 18 months after the end of the survey period): 5 months after the calendar year
Sampling frame: (e.g. name of business register used/ population census): Agricultural census 2000, Farm Structure Survey 2003
Is the survey compulsory or voluntary? Compulsory
Main features of the survey method (e.g. PPS sampling/ panel of respondents/ use of a size threshold for sampling/ postal questionnaire/ telephone interview): sample stratified economic size and regions, data are collected personally by interviewers
Population size: 766 000
Sample size: 46 831 (2004); 364 000 (2003)
Survey response rate: 99%
Method used to impute for missing data: estimate at county (NUTS III) level by local experts
Variable used for grossing-up to the population (e.g. turnover/ employment): land area, animal stock etc.
Sample coverage, as a percentage of the variable used for grossing-up (e.g. the sample coverage of employment recorded on the sampling frame): the sample is representative for the total production of all units in the Households sector.
Main variables collected: stocks, production, losses, intra-unit consumption, own consumption, domestic sales, direct sales, exports in quantities etc.
Further adjustments made to the survey data: harmonization with the households' data at product level; harmonization with the monthly reports of enterprises on the quantities and values of agricultural products purchased for marketing or manufacturing

Survey on agricultural services

Name of the survey: Statistical survey on agricultural and forestry services
Link to surveys undertaken at European level (e.g. structural business statistics): Economic Accounts for Agriculture
Reporting units (e.g. enterprise/ local KAU/ household): enterprise
Periodicity (e.g. annual/quarterly/other- to be specified): annual (calendar year)
Time of availability of results (e.g. 18 months after the end of the survey period): 6 months after the calendar year
Sampling frame: (e.g. name of the business register used/ population census): providers of agricultural and forestry services (registered in the business register)
Is the survey compulsory or voluntary? Compulsory
Main features of the survey method (e.g. PPS sampling/ panel of respondents/ use of a size threshold for sampling/ postal questionnaire/ telephone interview): full coverage by postal questionnaire
Population size: around 9 000
Sample size: around 9 000
Survey response rate: 90%
Method used to impute for missing data: estimate based on input survey for agricultural enterprises and FADN data.
Variable used for grossing-up to the population (e.g. turnover/ employment):
Sample coverage, as a percentage of the variable used for grossing-up (e.g. the sample coverage of employment recorded on the sampling frame): full coverage
Main variables collected:
Further adjustments made to the survey data: annual sample survey for private farms, FADN, input survey for agricultural enterprises

EU Farm accountancy Data Network

Name of the survey: Farm Accountancy Data Network
Organisation collecting the data, and purposes for which they are collected: Ministry of Agriculture and Rural Development. Purpose: Common Agricultural Policy
Reporting units (e.g. enterprise/ local KAU/ household): LKAU (non agricultural activities are eliminated)
Periodicity (e.g. annual/quarterly/other- to be specified): annual (calendar year)
Time of availability of results (e.g. 18 months after the end of the survey period): 9 months after the calendar year
Sampling frame: (e.g. name of the business register used/ population census): Agricultural census 2000, Farm Structure Survey 2003
Is the survey compulsory or voluntary? Voluntary
Main features of the survey method (e.g. PPS sampling/ panel of respondents/ use of a size threshold for sampling/ postal questionnaire/ telephone interview): representative sample, optimal sampling method (Neynann allocation) stratified by and regions, institutional sectors, type of production and economic size. Data are collected directly by interviewers.
Population size: 92 512
Sample size: 1 900
Survey response rate: not known, 100% amongst volunteers
Method used to impute for missing data: not applied
Variable used for grossing-up to the population (e.g. turnover/ employment): number of farms by each strata
Sample coverage, as percentage of the variable used for grossing-up (e.g. the sample covers 60% of employment recorded on the sampling frame): covers 84% of Standard Gross Margin of total agricultural production
Main variables collected: very detailed business book-keeping (profit and loss statement etc.)
Further adjustments made to the survey data: imputation of data of small farms (below European Unit)

Inputs of agricultural production (non-financial enterprises and GG sector)

Name of the survey: Inputs of agricultural and forestry production
Link to surveys undertaken at European level (e.g. structural business statistics): EAA
Reporting units (e.g. enterprise/ local KAU/ household): enterprise
Periodicity (e.g. annual/quarterly/other- to be specified): annual
Time of availability of results (e.g. 18 months after the end of the survey period): 6 months after the calendar year
Sampling frame: (e.g. name of the business register used/ population census): Agricultural census 2000, Farm Structure Survey 2003, Hungarian Business Register
Is the survey compulsory or voluntary? Compulsory
Main features of the survey method (e.g. PPS sampling/ panel of respondents/ use of a size threshold for sampling/ postal questionnaire/ telephone interview): full coverage by postal questionnaire
Population size: 18 000
Sample size: 18 000
Survey response rate: 50%
Method used to impute for missing data: based on the production and input structure of the respondents broken down by crop and animal production.
Variable used for grossing-up to the population (e.g. turnover/ employment): turnover
Sample coverage, as a percentage of the variable used for grossing-up (e.g. the sample covers 60% of employment recorded on the sampling frame): the respondent units cover around 95% of the total agricultural IC of the NFC and GG sector.
Main variables collected: very detailed breakdown of inputs by activities (crop and animal production, agricultural services, forestry and other activities).
Further adjustments made to the survey data: -

Name of the survey: Annual Business Survey
Link to surveys undertaken at European level (e.g. structural business statistics): SBS
Reporting units (e.g. enterprise/local KAU/household): enterprises with tax number
Periodicity (e.g. annual/quarterly/other- to be specified): annual
Time of availability of results (e.g. 18 months after the end of the survey period): 18 months
Sampling frame (e.g. name of the business register used/population census): Hungarian Business Register
Is the survey compulsory or voluntary? Compulsory
Main features of the survey method (e.g. PPS sampling/panel of respondents/use of a size threshold for sampling/ postal questionnaire/ telephone interview): In Structural Business Statistics we used <ul style="list-style-type: none"> • full scope survey on those enterprises with tax number where the number of persons employed was more than 19 (In NACE section F, we used full scope survey for enterprises with tax number with more than 10 employees) • representative sample of enterprises with tax number where the number of persons employed was between 5- 19 (except for in NACE section F where the number of persons employees was 5-9) • administrative data were used for those enterprises with tax number where the number of persons employed was between 1 and 4 according to the Business Register and for those which have more than 5 employees but did not send us the questionnaire for any reasons.
The questionnaire used for SBS survey is sent by post to the respondents who have to send it

<p>back to the competent County Directorate of HSCO.</p> <p>The competent Directorate of HSCO records the data provided by the respondents and performs primary level data check, which includes a comparison with the previous year's data and with the monthly or quarterly data and an examination of internal coherence and relationship between different variables. The Directorates clarify the possible differences with the respondents.</p> <p>The recorded and checked data are sent to HSCO in June, where the data are processed in the way described below, and the aggregate data are checked.</p> <p>The next step of further data processing is the imputation for those respondents which are included in the full scope survey, and the grossing-up of respondents taking part in the representative survey. These methods are used only for determining preliminary data, as after receiving tax data arrived, we use these for imputing those enterprises which did not send us the questionnaire for any reasons. For more information, see imputation below.</p>
Population size: 688 000
Sample size: about 24 000
Survey response rate: 75%
<p>Method used to impute for missing data: the first imputation method is used for those enterprises with tax number which included in the full scope survey. Missing variables of non-respondents which are imputed according to the following priority list based on the opinion of the processing County Directorates:</p> <ul style="list-style-type: none"> • calculated data on the basis of monthly or quarterly data • data of the previous year • environmental average <p>When tax data are available, we use these data instead of the former imputed data.</p>
Variable used for grossing-up to the population (e.g. turnover/employment): grossing-up is used only for preliminary data.
Sample coverage, as percentage of the variable used for grossing-up (e.g. the sample covers 60% of employment recorded on the sampling frame): N/A
<p>Main variables collected:</p> <p>Since 2001, we have been using unified questionnaires for this survey. This questionnaire contains about 100 variables on performance (e.g. turnover, other income, expenses and stock data), 55 variables on investment (mainly on the structure of investment) and 70 on labour. Some of the reported variables are calculated from the basic data reported by the enterprises with tax number.</p>
Further adjustments made to the survey data: N/A

Name of the survey: Labour Cost Survey
Link to surveys undertaken at the European level (e.g. structural business statistics): Harmonised Labour Cost Survey (in every 4 year)
Reporting units (e.g. enterprise/local KAU/household): enterprises employing at least 50 persons
Periodicity (e.g. annual/quarterly/other- to be specified): annual
Time of availability of result (e.g. 18 months after the end of the survey period): 12 months
Sampling frame (e.g. name of the business register used/population census): full enumeration
Survey is compulsory or voluntary? Compulsory
Main features of survey methodology (e.g.) PPS sampling/panel of respondents/use of a size threshold for sampling/ / telephone interview): postal questionnaire, full scope in enterprises belonging to a given size limit
Population size: 7020
Survey response rate: 89%
Method used to impute for missing data: average in the industry
Variable used for grossing-up to the population (e.g. turnover/employment): No
Sample coverage, as a percentage of the variable used for grossing-up (e.g. the sample covers 60% of employment recorded on the sampling frame): 100% sample
Main variables collected: main elements of the labour costs
Further adjustments made to the survey data: no adjustments are made

11.3. Statistical surveys and other data sources used for the expenditure approach

11.3.1. Main data sources used for the compilation of household final consumption expenditure

Name of the survey: Household Budget Survey – annual survey
Link to surveys undertaken at European level (e.g. structural business statistics): -
Reporting units (e.g. enterprise/ local KAU/ household): households
Periodicity (e.g. annual/quarterly/other- to be specified): annual
Time of availability of results (e.g. 18 months after the end of the survey period): t + 11 months
Sampling frame: (e.g. name of the business register used/ population census): population census
Is the survey compulsory or voluntary? Voluntary
Main features of the survey method (e.g. PPS sampling/ panel of respondents/ use of a size threshold for sampling/ postal questionnaire/ telephone interview): stratified one or two-stage sampling / monthly diary-keeping , 2 personal and 1 initial interview after the reference year
Population size: Hungarian citizens living in private households in Hungary
Sample size: 11 806 households targeted (17 199 households called)
Survey response rate: 83.7% (57.4 %) of targeted (called) households
Method used to impute for missing data: imputation in general means substitution of missing data using available auxiliary information. There are various methods for imputation in the practice of statistical institutions. The Hungarian HBS applies imputation similarity method of substitution and proportional hot-deck imputation from the data-base itself. These mean: a) imputation of expenditures in case of partial non-responses; b) imputation of income in case of non-responses;
Variable used for grossing-up to the population (e.g. turnover/ employment): households differentiated by counties and size categories of settlements
Sample coverage, as a percentage of the variable used for grossing-up (e.g. the sample covers 60% of employment recorded on the sampling frame): sample covers about 0,31 % of Hungarian households
Main variables collected:

- Main characteristics of households: number of persons; activity of the members; data of housing: type of occupation; type of heating, number of room; stock of consumer durables.
- Monthly diary about incomes and expenditures of the households by categories:
- Incomes by main categories:
- Income from work: earnings from main activity; supplementary compensations; entrepreneurial income; agricultural income;
- Social income: pensions, pension supplements; unemployment benefits; child-care benefits; family allowance;
- child-care allowance;
- Other income: other income in cash and in kind;
- Gross income; social security contributions; personal income tax; net disposable income ;
- child tax allowance;
- Expenditures by main categories:
- Meat and meat products; Eggs; Milk, cheese, other dairy products; Fats and oils; Bread and rolls;
- Cereals; Sugar; Sweet products; Vegetables; Fruits; Other foods; Food consumption outside home;
- Coffee, tea; Soft drinks; Wine; Beer; Other alcoholic drinks; Tobacco; Men's clothing articles;
- Women's clothing articles; Children's clothing articles; Other clothing articles; Clothing services;
- Rent, tax on houses; Maintenance cost of dwelling; Other service of housing or real estate: water charge, sewerage fee, other; Insurance of real estate; Solid fuel and heating oil; District heating; Electricity; Piped gas; Bottled gas;
- Repair of dwelling; Furniture; Household durable goods; Household cleaning supplies, and other materials;
- Household textiles, Household tools and appliances; Household services; Pharmaceuticals, medical devices;
- Health services; Gratuities; Personal care; Passenger car new;
- Other vehicles; Spare parts for vehicles; Fuel for vehicles; Insurance fees for vehicles; Maintenance of vehicles; Local transportation; Long-distance transportation; Other purchased transport services; Telephone, fax, message receiver; Telephone charges; Postal charges; Electronic entertainment equipment; Personal computer; Instruments,
- other cultural durable goods; Newspapers, magazines, books; Schoolbooks;
- School fee; School supplies, stationery; Other cultural and sport equipment and their repair; Television subscription; Theatre, concert, cinema, other entertainment tickets, fee; Recreation domestic; Recreation abroad; Personal related insurances; Other personal expenditures; New construction, renovation, purchase of real estate

Further adjustments made to the survey data: demographical correction and correction by economic activity

39. HBS covers the resident private households with Hungarian head of household. This means that it does not cover the resident private households with non-resident head of household and the institutional households. This shortcoming is solved by using the population adjustment on HBS data, as describe in chapter 5.7. The adjustment may distort the structure of the consumption in the case of institutional households, and overestimates the level of it.

40. The HBS refers to the resident households' consumption on domestic territory or abroad, but the data are not separated according to the place of consumption.

41. The HBS uses market prices for valuation of the purchased goods and services, which make it enable for the estimation on household final consumption expenditure. The survey has a very detailed structure and uses the COICOP classification, so the data can be used without any price or structural adjustment to national accounts purposes. These are the main advantages of using the HBS. There are two main areas where further improvements are needed. Its scope should be extended to the households with non-residents head of household and further efforts has to be taken in order to increase the response rate among the households with high income. (This is a general problem with the HBS almost all countries.)

Name of the survey: OSAP 1045 Jelentés a kiskereskedelmi forgalomról (Monthly survey of retail sales)
Link to surveys undertaken at European level (e.g. structural business statistics): STS
Reporting units (e.g. enterprise/ local KAU/ household): enterprise/retail shops
Periodicity (e.g. annual/quarterly/other- to be specified): monthly
Time of availability of results (e.g. 18 months after the end of the survey period) :t+55-57 days
Sampling frame: Hungarian Retail Outlet Register (connected to Hungarian Business Register)
Is the survey compulsory or voluntary? Compulsory
Main features of the survey method (e.g. PPS sampling/ panel of respondents/ use of a size threshold for sampling/ postal questionnaire/ telephone interview): Activities covered: since January 1998 retail trade statistics has been covered all retail trade shops (52.1 - 52.5 excluding 52.31 of NACE Rev. 1.) with operating licence (included in the Hungarian Retail Outlet Register) as well as all pharmacies (52.31) and mail order houses (52.61). The observation does not concern the sales of markets, occasional street vendors (52.62 – 63). Geographical area covered Hungary Size classes covered All Data collection media Questionnaire by mail Timetable of data collection 1) Questionnaires are sent to the reporting units at the beginning of the first month of each quarter. 2) The deadline of replies is the 20 th after the reference month. 3) Data collection is normally closed with 10 working days after the deadline for replies. Sample or census Enterprises having 50 and more employees (and having at least two retail trade shops) or having at least ten retail trade shops are observed by full scope survey. The rest of shops is observed by sampling survey. The selection of the sample from the sampling frame occurs through random stratified sampling. Criteria for stratification Activity of the retail trade shops, regions Percentages sampled: Full scope – 100% of stores Sampling – 4% of stores Estimates for grossing-up The sample means are multiplied by the sample size of the population in the various strata.
Population size: 150 000 retail shops
Sample size: 16 500 retail shops

Survey response rate: The average response rate is 78% when the data collection is normally closed for first estimation, 85% when the data collection is closed for revised estimation.
Method used to impute for missing data: non-response data are imputed by the available data of the previous month of the unit, corrected by value index. If data for the previous month are not available the non-response data are imputed by the mean of the units belonging to the same activity type of retail trade shops.
Variable used for grossing-up to the population (e.g. turnover/ employment): Grossing up variable: sales - by type (NACE 4 digit level) of shops, population: number of shops (by NACE 4 digit level)
Sample coverage, as a percentage of the variable used for grossing-up (e.g. sample covers 60% of employment recorded on the sampling frame): sample covers about 40% of total retail sales
Main variables collected: A special questionnaire is used to collect total retail sales of the enterprise, number of retail trade shops, sales by retail trade shops, and number of working days by shops.
Further adjustments made to the survey data: none

Name of the survey: OSAP1646/02 Jelentés a kiskereskedelem és a vendéglátás eladási forgalmáról árucsoportonként (Report on the sales of retail- and catering trade by commodity groups)
Link to surveys undertaken at European level (e.g. structural business statistics):-
Reporting units (e.g. enterprise/ local KAU/ household): enterprise with tax number
Periodicity (e.g. annual/quarterly/other- to be specified): quarterly
Time of availability of results (e.g. 18 months after the end of the survey period): T+60
Sampling frame: (e.g. name of the business register used/ population census):Hungarian Business Register, Hungarian Retail Outlet register
Is the survey compulsory or voluntary? Compulsory
Main features of the survey method (e.g. PPS sampling/ panel of respondents/ use of a size threshold for sampling/ postal questionnaire/ telephone interview): Activities covered <ul style="list-style-type: none"> • The survey covers Divisions 50, 51, 52 and 55 of NACE Rev.1.1. • Additionally, enterprises with tax number which have registered retail trade outlets in the Hungarian Retail Outlet Register from other Divisions are also included in the coverage. • Geographical area covered • Hungary • Size classes covered • Enterprises with 5 and more employees are surveyed. • Time span covered by the data • Data refer to the turnover during the quarter
Data collection media Postal questionnaire and electronic data input.
Timetable of data collection <ol style="list-style-type: none"> 1) Questionnaires are sent to the reporting units in the middle of January of the reference year. 2) The deadline of replies is the 20th after the reference period. 3) Data collection is normally closed with 10-11 working days after the deadline for replies.
Sample or census Enterprises having 50 and more employees, classified in the industry are observed by full scope survey. Enterprises with 5-49 employees are observed by sampling survey. The

selection of the sample from the sampling frame occurs through random stratified sampling. Criteria for stratification Activity, number of employees, headquarters (capital and countryside).
Population size: 22446 (full scope part 1437, sample part 21009)
Sample size: 5145(full scope part 1437, sample part 3708)
Survey response rate: 74.3 (full scope part 81.4, sample part 71.5)
Method used to impute for missing data: data are imputed by data from the Monthly Retail Sales Survey, administrative (VAT) data, and by the average of the corresponding stratum
Variable used for grossing-up to the population (e.g. turnover/ employment): number of enterprises
Sample coverage, as a percentage of the variable used for grossing-up (e.g. the sample covers 60% of employment recorded on the sampling frame): 22.9% (full-scope part 100%, sample part 17.6%)
Main variables collected: <ul style="list-style-type: none"> • net sales, value added tax, gross sales, and gross sales by the following commodity groups (as a percentage of the total turnover): • Vehicles, Fuels and lubricants for personal equipment, Alcoholic beverages, Non-alcoholic beverages, Coffee and tobacco, Food, Medical products, appliances and equipment, Articles and products for personal care, Clothing, Household hardware, Household textiles, Non-durable household goods, Major electric household appliances, Small electric household appliances, Photographic and cinematographic equipment, Telecommunication equipment, Information processing equipment, Recording media, Books, newspapers and magazines, Major and small tools and equipment for the house and garden, Building materials, Painting materials, Bathroom equipment, Wallpapers and floor coverings, Liquid and solid fuels, Households cleaning supplies, • Second hand goods, Other goods
Further adjustments made to the survey data: –

42. The RTS covers the resident retail trade shops, restaurants, cafes and bars, and the open air market shops as well if they belonged to an enterprise (incorporated or unincorporated), but does not cover the agricultural products direct sales of sole proprietors and most sales of street vendors.

43. The RTS refers to the domestic consumption, but the data can not be separated according to the buyers' residency.

44. The RTS uses the market prices for valuation of purchased goods and services, which make it enable for the estimation on household final consumption expenditure. The surveys cover the retail turnover of goods and some services, like restaurants and some repairing services in 45 commodity categories. The main advantage of the retail trade statistics is that it covers all domestic consumption, which occurs through the retail trade system. That is why it gives a good validation tool for checking the level of consumption data from the HBS. The main disadvantage is that it contains the purchase for business purposes and for the time being there is no systematic way to separate the business and private purchases in the national accounts.

11.3.2. Main data sources used for the compilation of NPISHs final consumption expenditure

Name of the survey: Statistical survey on social organisations, foundations, public utilities, churches having ancillary market activity and their institutions
Link to surveys undertaken at European level (e.g. structural business statistics): -
Reporting units (e.g. enterprise/ local KAU/ household): non-profit units by legal form; churches having ancillary market activity
Periodicity (e.g. annual/quarterly/other- to be specified): annual (calendar year)
Time of availability of results: 12 months
Sampling frame: Non-profit register of the Social Statistics Department of HCSO.
Is the survey compulsory or voluntary? Compulsory.
Main features of the survey methodology: - stratified by legal forms, regions, activity; - full coverage for units classified to the General government sector; - full coverage for the newly established units; - postal questionnaire
Population size: around 52 000
Sample size: 18 000
Survey response rate: 71%
Method used to impute for missing data: by the means of strata
Variable used for grossing-up to the population (e.g. turnover/ employment): number of organisations
Sample coverage, as a percentage of the variable used for grossing-up (e.g. the sample covers 60% of employment recorded on the sampling frame): 37 %
Main variables collected: the report fully covers the financial and non-financial transactions of the units and the selected items of the balance sheet
Further adjustments made to the survey data: reclassification of the transactions by ESA95; imputations according to the rules of ESA95; accrual adjustment etc.

11.3.3. Main data sources used for the compilation of government final consumption expenditure

Name of the survey: annual financial report of budgetary institutions
Link to surveys undertaken at European level (e.g. structural business statistics): -
Reporting units (e.g. enterprise/ local KAU/ household): central, local budgetary institutions and SS funds
Periodicity (e.g. annual/quarterly/other- to be specified): annual (calendar year)
Time of availability of results: 8 months
Sampling frame: Ministry of Finance official GG register
Is the survey compulsory or voluntary? Administrative data collection: compulsory.
Main features of the survey method: full coverage: the reports are collected by the Hungarian State Treasury. The individual reports are received by HCSO by electronic way.
Population size: Central budgetary institutions: around 700 Local budgetary institutions: around 15000 SS funds and their budgetary institutions: around 30
Sample size: -
Survey response rate: 100%
Method used to impute for missing data: -
Variable used for grossing-up to the population (e.g. turnover/ employment): -.
Sample coverage, as a percentage of the variable used for grossing-up (e.g. the sample covers 60% of employment recorded on the sampling frame): -
Main variables collected: the report fully covers the financial and non-financial transactions of the units and the balance sheet
Further adjustments made to the survey data: reclassification of the transactions by ESA95; imputations according to the rules of ESA95; accrual adjustment etc.

Name of the survey: report on the execution of the central budget
Link to surveys undertaken at European level (e.g. structural business statistics): -
Reporting units (e.g. enterprise/ local KAU/ household): Ministry of Finance
Periodicity (e.g. annual/quarterly/other- to be specified): annual (calendar year)
Time of availability of results: 8 months
Sampling frame: -
Is the survey compulsory or voluntary? Administrative data source: compulsory
Main features of the survey method: the report is submitted by the government in September of year (t+1), and approved by the parliament.
Population size: 1
Sample size: -
Survey response rate: 100%
Method used to impute for missing data: -
Variable used for grossing-up to the population (e.g. turnover/ employment): -
Sample coverage, as a percentage of the variable used for grossing-up (e.g. the sample covers 60% of employment recorded on the sampling frame): -
Main variables collected: the report fully covers the non-financial and partly the financial transactions of the central budget
Further adjustments made to the survey data: separation of the non-financial transactions from the financial ones; reclassification of the sub-sectors by ESA95, reclassification of the transactions by ESA95; accrual adjustment etc.

11.3.4. Main data sources used for compilation of the gross fixed capital formation

Statistical sources:

Name of the survey: Integrated Economic Survey
Links with other European surveys: -
Reporting units: corporations, sole proprietors, budgetary and social security institutions, non-profit institutions
Main variables: investment by asset category Transactions on second-hand assets by category Capital transfer of tangible assets Financial leasing of tangible assets Purchase and own-account production of intangible goods by category
Frequency: annual
Is the survey compulsory? Yes
Main characteristics of the survey method: combined survey: exhaustive for corporations and sole proprietors working with more than 19 employees in all the industries apart from Construction (45), where the threshold of the full scope observation is 10 employees. In the case of corporations and sole proprietors employing between 5 - 19 persons the survey is based on stratified sampling. Budgetary and social security institutions, as well as public utilities in water supply are all surveyed.
Population of the exhaustively surveyed scope: 23 597
Response rate: 75%
Population of the sampled scope: 46 376
Number of surveyed units from the sampled scope: 7 749
Response rate: 56%
How are the missing data estimated? -
Variables used for extrapolation: -
Other adjustments: -

Name of the survey: Housing Conditions
Links with other European surveys: -
Reporting units: households
Main variables: <ul style="list-style-type: none"> • Quality and conditions of dwellings, • Size, • Renovations, • Quality and conditions of buildings, • Moves and mobility, satisfaction, • Property value, • Utility costs, • Missing payments, • Subsidies
Frequency: 1999, 2003, the next one is planned for 2006
Is the survey compulsory? No
Main characteristics of the survey method: interview with the head of the household
Survey unit: dwelling
Sample/population: 16000 of which 8700 is filtered and surveyed
Response rate: 79%
How are the missing data estimated? Non-respondents are supplemented from the address register
Variables used for extrapolation: no extrapolation
Other adjustments: regression estimation on household income and property value

Name of the survey: Reporting on the real estate and dwelling management of the local governments
Links with other European surveys: -
Reporting units: Local governments
Main variables: <ul style="list-style-type: none"> • Annual rent incomes, • Expenditure on dwelling repairs, • Expenditures on dwelling related activities, • Managed buildings, • Managed dwellings, • Managed rented dwellings, • Renovated rented dwellings, • Number of rented dwellings sold, • Estimated market value of rented dwellings sold, • Realised selling price of rented dwellings sold, • Floor space of rented dwellings sold.
Frequency: annual
Is the survey compulsory? Yes.
Main characteristics of the survey method: full scope survey on local governments owning more than 10 dwellings
Survey unit: local government
Sample/population: 800 local governments
Response rate: 100%
How are the missing data estimated? -
Variables used for extrapolation: -
Other adjustments: -

Name of the survey: Detailed data on dwellings and holiday homes taken into permanent usage
Links with other European surveys: -
Reporting units: households
Main variables: <ul style="list-style-type: none"> • Location of the construction site, • Purpose of the construction, • Form of the construction, • Type of the construction, • Constructor of the dwelling, • Characteristics of the construction, • Size of the dwelling, • Equipment of the dwelling, • Heating type used in the dwelling
Frequency: sub-annual, continuous
Is the survey compulsory? yes
Main characteristics of the survey method: full scope survey
Survey unit: dwelling
Sample/population: 30 000 dwellings
Response rate: 100%
How are the missing data estimated? -
Variables used for extrapolation: -
Other adjustments: -

Name of the survey: Settlement summary on construction and cessation of dwellings and holiday homes
Links with other European surveys: -
Reporting units: local governments
Main variables: <ul style="list-style-type: none"> • New permissions issued for constructing dwellings or holiday homes, • Dwellings, holiday homes put into use, • Constructions of dwellings and holiday homes under way, • Constructions which have not started yet, • Number of aborted dwelling and holiday home constructions, • Number of dwellings and holiday homes ceased to exist
Frequency: annual
Is the survey compulsory? yes
Main characteristics of the survey method: full scope survey
Survey unit: settlement
Sample/population: 3 100
Response rate: 100%
How are the missing data estimated? -
Variables used for extrapolation: -
Other adjustments: -

Name of the survey: Production of grape and fruits, plantation, consumption, net income, 2002
Links with other European surveys: -
Main variables: quantity of production by species, size of cultivation area, size of plantation and felling, cost of plantation
Frequency: yearly.
Results available: -
Is the survey compulsory? Yes
Main characteristics of the survey method: full-scope survey was applied in case of the agricultural enterprises; on the other hand sample survey for private holdings was organized. Data are collected by enumerators on private farms and by mail from enterprises.
Sampling method: following the Agricultural Census 2000, a two-stage sampling method was developed. In the first stage every 8 th survey district was selected randomly stratified by counties and small agricultural districts (NUTS III and IV). In these selected districts 2 strata were determined. Stratum „A”: All holdings exceeding at least one of the following thresholds: 5 cows, 10 pigs, 26 sheep, 100 chickens, 100 ducks, 100 turkeys, 26 geese, 25 bee families, 5 ha arable land, 1 ha vineyard, 1 ha land with fruit trees. Sampling fraction in this stratum was 1/1. Stratum „B”: Holdings not exceeding the thresholds mentioned above. Sampling fraction in this stratum was 1/3.
Survey unit: enterprises/ private farms
Sample population: 5.000 agricultural enterprises / 65.000 private farms
Response rate: in case of agricultural enterprises 80-85% / private farms 95%
How are the missing data estimated? imputed by the data of the previous survey
Variables used for extrapolation: see in “Main characteristics of the survey method”
Other adjustments: -

Name of the survey : Livestock 2002
Links with other European surveys: -
Main variables: livestock by species, age, sex, weight
Frequency: 3 times per year
Results available: 50-55 days after the reference date
Is the survey compulsory? Yes
Main characteristics of the survey method: full-scope observation is applied for agricultural enterprises, sample survey for private holdings and households. Data are collected by enumerators on private farms and by mail from enterprises.
<p>Following the Agricultural Census, in 2000 a two-stage sampling method was developed. In the first stage every 8th survey district was selected randomly stratified by counties and small agricultural districts (NUTS III and IV). In these selected districts 3 strata were determined:</p> <p>Stratum "A": all holdings exceeding at least one of the following thresholds: 5 cows / 10 pigs / 26 sheep / 100 chickens / 100 ducks / 100 turkeys / 26 geese / 25 bee families / 5 ha arable land / 1 ha vineyard / 1 ha land with fruit trees. Sampling fraction in this stratum was 1/1.</p> <p>Stratum "B": holdings not exceeding the thresholds mentioned above. Sampling fraction in this stratum was 1/3.</p> <p>Stratum "C": those households of the selected survey district, which did not qualify as holdings regarding the threshold applied at the Agricultural Census 2000. (These may become however holdings in the future.) Sampling fraction in this stratum was 1/10.</p> <p>18 thousand holdings from the stratum "A", 35 thousand holdings from the stratum "B" and 14 thousand holdings from the stratum "C" were selected in the sample.</p> <p>Livestock not recorded by the survey is estimated on the basis of ratio estimations in strata A and B and of sample estimation of mean in stratum C.</p>
Survey unit: enterprises/ private farms
Sample/ population: 5.000 agricultural enterprises / 65.000 private farms
Response rate: in case of agricultural enterprises 80-85% / private farms 95%
How are the missing data estimated? imputed by the data of the previous survey
Variables used for extrapolation: see in "Main characteristics of the survey method"
Other adjustments: -

Name of the survey: Survey of Animal markets
Links with other European surveys: -
Main variables: number of sellers, number, species, weight, price of animals
Frequency: monthly
Results available: 30 days after the reference date
Is the survey compulsory? Yes
Main characteristics of the survey method: representative survey on 60 animal markets,
Survey unit: animal markets
Sample/population: 60 markets
Response rate: 100%
How are the missing data estimated? -
Variables used for extrapolation: -
Other adjustments: -

Administrative sources:

Name of the survey: registry of plantation
Organisation collecting the data: Ministry of Agriculture
Main variables: place of the plantation, size of the plantation, species
Frequency: continuous
Results available: continuous
Methods used to allow for missing data: -
Adjustments made for the conceptual differences from the national accounts concepts: -
Further adjustments made to the data: -

Name of the data source: Records of sold agricultural machineries
Organization collecting the data: Ministry of Agriculture
Main variables: asset type, Price of the asset, Technical details of the asset
Frequency: continuous
Results available: continuous
Reporting unit: traders of agricultural machinery
Methods used to allow for missing data: -
Adjustments made for conceptual differences from national accounts concepts: -
Further adjustments made to the data: -

Name of the data source: data supply to FISIM allocation to user sectors
Link to surveys undertaken at European level (e.g. structural business statistics):
Reporting units (e.g. enterprise/ local KAU/ household): National Bank of Hungary
Periodicity (e.g. annual/quarterly/other- to be specified): quarterly
Time of availability of results: t+1,5 month
Sampling frame: (e.g. name of business register used/ population census):
Survey is compulsory or voluntary? Compulsory
Main features of survey methodology (e.g. PPS sampling/ panel of respondents/ use of a size threshold for sampling/ postal questionnaire/ telephone interview):
Population size: approx. 1300
Sample size:
Survey response rate:
Method used to impute for missing data:
Variable used for grossing-up to the population (e.g. turnover/ employment):
Sample coverage, as percentage of the variable used for grossing-up (e.g. the sample covers 60% of employment recorded on the sampling frame)
Main variables collected: -
Further adjustments made to the survey data:

Name of data source: Accumulated Income Statement of Hungarian Central Bank
Link to surveys undertaken at the European level (e.g. structural business statistics): -
Reporting units (e.g. enterprise/ local KAU/ household):Hungarian Central Bank
Periodicity (e.g. annual/quarterly/other- to be specified):quarterly/annually
Time of availability of results: t+1,5 month
Sampling frame: (e.g. name of business register used/ population census):
Survey is compulsory or voluntary? compulsory
Main features of survey methodology (e.g. PPS sampling/ panel of respondents/ use of a size threshold for sampling/ postal questionnaire/ telephone interview):
Population size: 1
Sample size: -
Survey response rate: -
Method used to impute for missing data: -
Variable used for grossing-up to the population (e.g. turnover/ employment):
Sample coverage, as percentage of the variable used for grossing-up (e.g. the sample covers 60% of employment recorded on the sampling frame):
Main variables collected: -
Further adjustments made to the survey data: -

Name of data source: quarterly and annual reports of financial corporations
Link to surveys undertaken at the European level (e.g. structural business statistics):
Reporting units (e.g. enterprise/ local KAU/ household):Hungarian Financial Supervisory Authority
Periodicity (e.g. annual/quarterly/other- to be specified):quarterly/annually
Time of availability of results: t+1,5 month
Sampling frame: (e.g. name of business register used/ population census):
Survey is compulsory or voluntary? compulsory
Main features of survey methodology (e.g. PPS sampling/ panel of respondents/ use of a size threshold for sampling/ postal questionnaire/ telephone interview):
Population size: approx. 1300
Sample size: -
Survey response rate: -
Method used to impute for missing data: -
Variable used for grossing-up to the population (e.g. turnover/ employment):
Sample coverage, as % in terms of variable used for grossing-up (e.g. sample covers 60% of employment recorded on the sampling frame):
Main variables collected: -
Further adjustments made to the survey data: -

11.3.5. Main data sources used for compilation of changes in inventories

Name of the survey: monthly integrated economic statistical report, industry
Links with other European surveys: -
Survey unit: enterprises in the branch Industry, as well as enterprises supplying electricity, gas, steam and hot water
Main variables: <ul style="list-style-type: none"> • own-produced asset stock at the beginning and at the end of the month; • purchased asset stock in the reference quarter, at the beginning and at the end of the quarter
Frequency: monthly
Is the survey compulsory: yes
Main characteristics of the survey method: full scope observation is applied for industrial enterprises employing 50 or more persons and for those supplying electricity, gas, steam and hot water. Representative, stratified sample survey is used for enterprises with 5-49 employees.
Population of the exhaustively surveyed scope: 2 146
Response rate: 97%
Population of the sampled scope: 12 816
Number of the surveyed units from the sampled scope: 1 794
Response rate: 87%
How are the missing data estimated? In the case of not returned questionnaires of the exhaustively surveyed enterprises, data are imputed by the statistical data of the previous period, in the lack of these data by the VAT of the previous period. If they are not available either, the means of the given number of employees category and branch is used. The number of liquidated enterprises is 0 in the given period.
Variables used for extrapolation: -
Other adjustments: -

Name of the survey: monthly integrated economic statistical report, construction
Links with other European surveys: -
Survey unit: enterprises in the branch Construction
Main variables: own-produced asset stock at the beginning and at the end of the month; purchased asset stock in the reference quarter, at the beginning and at the end of the quarter
Frequency: monthly
Is the survey compulsory? Yes
Main characteristics of the survey method: full scope observation is applied for enterprises employing 50 or more persons. Representative, stratified sample survey is used for enterprises with 5-49 employees.
Population of the exhaustively surveyed scope: 362
Response rate: 94%
Population of the sampled scope: 9 933
Number of the surveyed units from the sampled scope: 1 283
Response rate: 83%
How are the missing data estimated? In the case of not returned questionnaires of the exhaustively surveyed enterprises, data are imputed by the statistical data of the previous period, in the lack of these data by the VAT of the previous period. If they are not available either, the means of the given number of employees category and branch is used. The number of liquidated enterprises is 0 in the given period.
Variables used for extrapolation: -
Other adjustments: -

Name of the survey: quarterly integrated economic statistical report, agriculture, trade and services
Links with other European surveys: -
Survey unit: enterprises in the branches Agriculture, Trade and Services
Main variables: own-produced asset stock at the beginning and at the end of the quarter; purchased asset stock in the reference quarter, at the beginning and at the end of the quarter
Frequency: quarterly
Is the survey compulsory? Yes
Main characteristics of the survey method: full scope observation is applied for enterprises employing 50 or more persons. Representative, stratified sample survey is used for enterprises with 5-49 employees.
Population of the exhaustively surveyed scope: 2 859
Response rate: 92%
Population of the sampled scope: 46 075
Number of the surveyed units from the sampled scope: 5 924
Response rate: 75%
How are the missing data estimated? In the case of not returned questionnaires of the exhaustively surveyed enterprises, data are imputed by the statistical data of the previous period, in the lack of these data by the VAT of the previous period. If they are not available either, the means of the given number of employees category and branch is used. The number of liquidated enterprises is 0 in the given period.
Variables used for extrapolation: -
Other adjustments: -

Administrative data sources: see detailed description in Chapter 11.1.1

11.3.6. Main data sources used for compilation of external trade

11.3.6.1. Exports and imports of goods

Name of the data source: external merchandise trade statistics
Organisation collecting the data, and purposes for which they are collected: Customs administration for purposes of administration and statistics
Reporting units: enterprises, private persons
Periodicity: monthly
Variables collected: the Hungarian version of SAD (Single Administrative Document). Main variables used: <ul style="list-style-type: none"> • variables for the identification of trade operators (name, tax number, address, etc), • code of customs procedure, nature of transaction, partner country code, • commodity code (Hungarian Combined Nomenclature code in export (8 digit, HCN is practically identical with Combined Nomenclature) and tariff code in import (ten digit=CN8+two national codes) are applied), mode of transport at Hungarian frontier and at departure, nationality of transport means, parity in Incoterms, gross and net mass (quantity in supplementary units if any), currency of invoiced value, invoice value in foreign currency, statistical value in HUF, currency exchange rate
Methods used to allow for missing data: -
Adjustments made for conceptual differences from national accounts concepts: <ol style="list-style-type: none"> 1. Fees for repairs are separately recorded in external merchandise trade statistics. 2. Cif/fob corrections of imports are calculated by fix coefficients and recorded in transport services. 3. Values of export after processing are adjusted for items where values of imported materials/values of exported goods ratio is less than 0.1. Export values of these items are calculated by mean ratio. 4. Bunkers and commodity exchange transactions are estimated from the data of the balance of payments statistics.
Further adjustments made to the data: fees for processing for certain goods are adjusted for balance of payments purposes on the-change- of-ownership basis. These goods are imported under inward processing customs procedure and are not re-exported after first processing, but they are sold by the non-resident owner to resident enterprises processing them further. Two cases are separated in external merchandise trade recording system: 1. goods are delivered from the resident enterprises located in free circulation area to premises located in industrial free zones, 2. movements of goods are performed between two industrial free zones. Fees for processing are estimated on the basis of direct information from the enterprises or from historical date.

11.3.6.2. Exports and imports of services

Name of data the source: services in trade statistics
Organisation collecting the data, and purposes for which they are collected: Magyar Nemzeti Bank (National Bank of Hungary); for compiling balance of payments
Reporting units: banks (information on settlements from the transaction system of banks) and other financial organisation, non-financial enterprises and other legal entities having account(s) in foreign bank(s) or netting transactions with their partners
Periodicity: monthly
Variables collected : variables for identification of transactors (name, tax number, sector code) legal title (type of services), partner country, currency of transaction value, transaction value
Methods used to allow for missing data: -
Adjustments made for conceptual differences from the national accounts concepts: the trade margins and values of other trade services are estimated from the gross values of reexports (exports and imports).
Further adjustments made to the data: exports and imports of travel services are adjusted with the amount estimated from the cash transactions affecting households' FX accounts. The estimation is based on a direct survey of account holders (2000) and natural indicators.

Annex**Correction of inventory indicators of JAVA database for corporations with double entry book-keeping****Inventory indicators:**

JAA0M026	Inventories
JAA0M027	Purchased inventories
JAA0M031	Own-produced inventories

Correction is made on individual level as follows:

- 1 If $JAA0M026 = 0$ and $JAA0M027 > 0$ and $JAA0M031 = 0$
correction then $JAA0M026 = JAA0M027$

- 2 If $JAA0M026 = 0$ and $JAA0M027 = 0$ and $JAA0M031 > 0$
correction then $JAA0M026 = JAA0M031$

- 2/a If $JAA0M026 = 0$ and $JAA0M027 > 0$ and $JAA0M031 > 0$
correction then $JAA0M026 = JAA0M027 + JAA0M031$

- 3 If $JAA0M026 > 0$ and $JAA0M027 = 0$ and $JAA0M031 = 0$
correction Then the value of $JAA0M026$ has to be distributed proportionally to previous year share of the two components in the corporation, if data are not available for the previous year, it has to be distributed according to the share of the two components in the total economy.

- 4 If $JAA0M026 > 0$ and $JAA0M027 > 0$ and $JAA0M031 > 0$
and $JAA0M026 \neq JAA0M027 + JAA0M031$
correction then $JAA0M031 = JAA0M026 - JAA0M027$
(JAA0M031 must be positive or zero!)

LIST OF ABBREVIATIONS

	Government Debt Management Agency Private Co.	ÁKK	Magyar Államadósságkezelő Központ
	Hungarian State Holding Company (earlier: Hungarian Privatisation and State Holding Company)	MNV Zrt. (ÁPV Rt.)	Magyar Nemzeti Vagyongazdálkodási Zrt. (korábban: Állami Privatizációs és Vagyongazdálkodási Részvénytársaság)
	Central Clearing House and Depository Ltd.	KELER	Központi Elszámolóház és Értéktár Rt
	Hungarian State Treasury	MÁK	Magyar Államkincstár
	Tax and Financial Control Administration (simply Tax Office)	APEH	Adó- és Pénzügyi Ellenőrzési Hivatal
	Simplified Corporate Tax	EVA	Egyszerűsített vállalkozási adó
	Hungarian Custom and Finance Guard	VPOP	Vám- és Pénzügyőrség
	Social Insurance	TB	Társadalombiztosítás
	Treasury Property Directorate	KVI	Kincstári Vagyoni Igazgatóság
	Agriculture Census	ÁMÖ	Általános Mezőgazdasági Összeírás
BOP	Balance of Payment		Fizetési mérleg
BR	Business Register		Vállalati regiszter
CFC	Consumption of Fixed Capital	ÉCS	Állóeszköz-felhasználás, értékcsökkenés
CN	Combined Nomenclature	KN	Kombinált nomenklatúra
COFOG	Classification of the Functions of Government		Államháztartási funkciók osztályozása
COICOP	Classification of Individual Consumption by purpose		Egyéni fogyasztás rendeltetés szerinti osztályozása
CPA	Classification of Products by Activity		Termékek tevékenység szerinti osztályozása
DEV	Foreign Currencies		Külföldi devizák
EAA	Economic Accounts for Agriculture	MSZR	Mezőgazdasági számlarendszer
EDP	Excessive Deficit Procedure		Túlzott hiány eljárás
ESA	European System of Accounts		Európai Számlák Rendszere
Extrastat	Extra-community trade statistics	Extrastat	EU Közösségen kívüli kereskedelem statisztikája

FADN	FARM ACCOUNTANCY DATA NETWORK		Tesztüzemi rendszer
FDI	Foreign Direct Investment		Közvetlen külföldi tőkebefektetés
FI's	Financial Institutes		Pénzüintézetek
FIFO/LIFO	First in first out / Last in first out	FIFO/LIFO	
FISIM	Financial intermediation services indirectly measured	FISIM	Pénzközvetítői szolgáltatások közvetett módon mért díja
GDP	Gross Domestic Product	BHT	Bruttó hazai termék
GFCF	Gross Fixed Capital Formation		Bruttó állóeszköz-felhalmozás
GG	General Government		Államháztartás
GIRO	Giro Ltd.	GIRO	Giro Elszámolásforgalmi Rt.
GNI	Gross National Income	BNJ	Bruttó nemzeti jövedelem
GO	Gross Output		Bruttó kibocsátás
GVA	Gross Value Added		Bruttó hozzáadott érték
HBS	Household Budget Survey		Háztartásstatisztika
HCSO	Hungarian Central Statistical Office	KSH	Központi Statisztikai Hivatal
HFC	Household Final Consumption		Háztartások végső fogyasztása
HFSA	Hungarian Financial Supervisory Authority	PSZÁF	Pénzügyi Szervezetek Állami Felügyelete
HH	Households sector		Háztartások szektora
HNA	Hungarian National Accounts	MNSZ	Magyar Nemzeti Számlák
HUF	Hungarian Forints		Magyar forint
IC	Intermediate Consumption	FT	Folyó termelő-felhasználás
IIP	International Investment Position		Nemzetközi befektetési pozíció
Intrastat	Intra-community trade statistics	Intrastat	EU Közösségen belüli kereskedelem statisztikája
IOT	Input output tables	ÁKM	Ágazati kapcsolatok mérlege
ITRS	International Transaction Reporting System		Nemzetközi tranzakciós jelentés
JAVA	Data base of non-financial corporations	JAVA	Jövedelmi Adatok Vállalati Adatbázisa
KAU	Kind of Activity Units		Szakosodott telephely
LCS	Labour Cost Survey	MKF	Munkaerőköltség felvétel

LFS	Labour Force Survey	MEF	Munkaerő-felvétel
MoF	Ministry of Finance	PM	Pénzügyminisztérium
NA	National Accounts	NSZ	Nemzeti számlák
NACE	Hungarian NACE	TEÁOR	Tevékenységek Egységes Ágazati Osztályozási Rendszere
NBH	National Bank of Hungary	MNB	Magyar Nemzeti Bank
NFC	Non-financial corporations sector		Nem pénzügyi vállalatok szektora
NOE	Non-observed economy		Nem megfigyelt gazdaság / szürke gazdaság
NPI	Non-profit Institutions		Nonprofit szervezetek
NPISH	Non-Profit Institutions Serving Households		Háztartásokat szolgáló nonprofit szervezetek
NSDCP	National Statistical Data Collection Programme	OSAP	Országos Statisztikai Adatgyűjtési Program
NUTS	Nomenclature of Territorial Units for Statistics		Statisztikai célú területi egységek nómenklatúrája
PIM	Perpetual Inventory Method		Folyamatos leltározás módszere
PIT	Personal Income Tax	SZJA	Személyi jövedelemadó
PRODCOM	Production Communautaire		Ipari termékjegyzék
ROW	Rest of the World		Külföld számla
RTS	Retail Trade Survey		Kiskereskedelmi felvétel
SBS	Structural Business Statistics		Vállalkozások éves szerkezeti statisztikája
SIOT	Symmetric input output tables		Szimmetrikus ÁKM táblák
SNA	System of National Accounts		Nemzeti számlák rendszere
SNA-NT	System of National Accounts – Norwegian Technology		
STS	Short Term Statistics		Rövid távú mutatók statisztikája
SUT	Supply and Use Tables		Forrás felhasználás táblák
TOR	Tax Office Register		Adóregiszter
VAT	Value Added Tax	ÁFA	Általános forgalmi adó

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