Hungarian Central Statistical Office

GNI INVENTORY

of

HUNGARY

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Made in

National accounts department and Sector accounts department

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.

Writing of the Inventory started already in 2004 within Phare project which was financially supported by Eurostat. The first version of the Inventory was finished in December 2006.

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 was done until 1 May 2009. The new version of the Inventory also takes into account the comments made by Eurostat during the "GNI Information visit", held in Budapest in January 2008, in January 2009 and in November 2010. The "Answers to the list of questions in view of the Eurostat information visit, Version 5." and answer to "GNI Inventory of Hungary – Version 2.0 of 15 September 2008 - List of questions in view of the Eurostat information visit" and further proposals discussed by HCSO and Eurostat, were also used for compiling this new version of GNI Inventory.

The structure of the Inventory follows the common structure as adopted by the 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 where exhaustiveness adjustments are also presented using so-called tabular approach. 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 description of main classifications and main data sources used.

Budapest, June 2011

CONTENT

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 nation-wide authority operating under the supervision of the Government. The Act was amended in 1999 in the following areas:

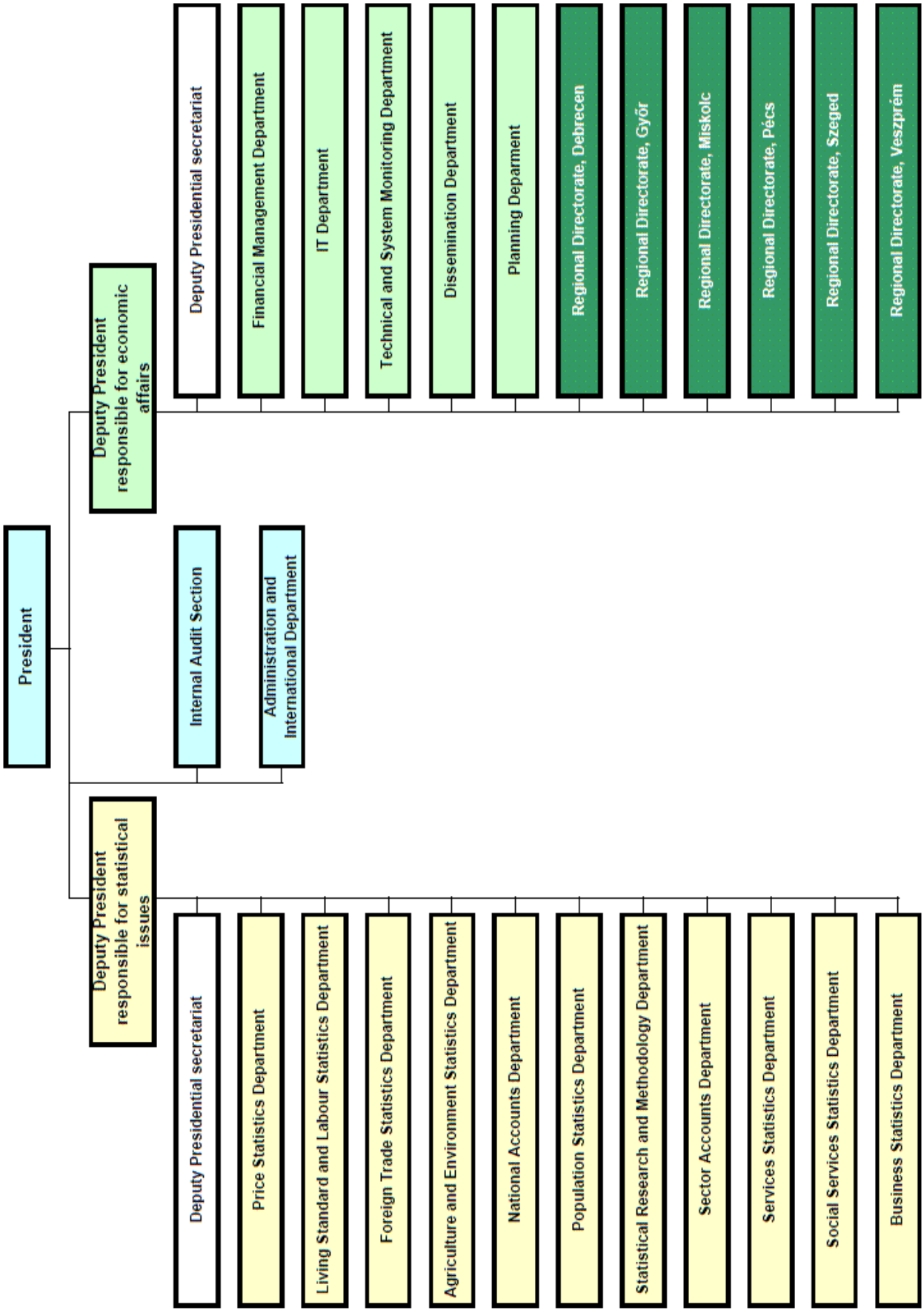
- there was a need for the establishment of a professional background in which the impartiality and professional independence are ensured for all participants of the official statistical service;
- a satisfactory legal background shall be established for the management and transmission of the individual 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:

- National Accounts Department
- Sector Accounts Department
- Foreign Trade Statistics Department
- 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.

10. 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.

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

Informatics documents store (DOKTÁR):

12. 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.

13. 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.

14. **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.

15. **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.

16. **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.

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

18. **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).

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

19. 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.

20. 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.

21. 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.

22. 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.

23. 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.

24. 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

25. In line with the CMFB document No. 08/07/A.6.1, the following types of revisions are distinguished: current (routine) revisions, major occasional revisions and major regular (benchmarking) revisions.

1.3.1. Current revisions – routine revisions

26. Current (routine) revisions reflect the need to incorporate new available regular information that gradually completes the basic set of statistics on which the compilation of national accounts is based. Current revisions include also the correction of possible computation errors that may occur in the course of the processing of basic data.

27. Current revisions due to new annual basic statistics normally affect the previous 2-3 years. Corrections of computation errors may affect one single year, a period of few years or even the entire time series.

1.3.2. Major occasional revisions

28. Major occasional revisions derive from major methodological changes in national accounts and the basic set of statistics, like changes in concepts and definitions and/or in the classifications used.

29. The Hungarian national accounts do not apply a general benchmark year. Most of the estimates are made directly every year on the basis of regular data sources. The benchmarks that are used relate to different benchmark years depending on the availability of basic data sources in the different domains of national accounts. Methodological improvements have been introduced almost every year in the past twenty years and likely to be introduced in the coming years. These methodological improvements are a part of major occasional revisions.

30. Major 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.

1.3.3. Major regular revisions – benchmark revisions

31. In theory, benchmark revisions take place every five to ten years to incorporate results of changes in surveys and/or in estimation procedures, of new data sources and of new estimation methods. Benchmark revisions rely on a deeper and detailed analysis, include fundamental methodological changes that affect the entire system of national accounts, or changes in the general technique of compiling the accounts (like integration of SUT etc.). Benchmark revision may also be a combination of mayor changes in basic data, methodology, techniques and classifications applied.

32. In the current practice of the Hungarian national accounts, a classical type of benchmark revision does not exists. This situation will start changing gradually with the introduction Supply and Use Table based compilation of the production account in 2011. Currently, benchmark revisions are introduced on an ad-hoc basis, when the number, the magnitude and the combination of different improvements and changes require.

33. Taking into account the EU requirements and domestic needs, the next major benchmark revision will be 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 and other development needs can be implemented in 2014 or 2015, depending on future events.

1.3.4. Timetable for revising and finalizing the accounts

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

Table 1.2 Revision calendar of the Hungarian national accounts

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

1.4. Outline of the production approach

35. 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 subsides on products	+ 2.307.160
B.1.*g	Gross domestic product at market prices	+17.148.449

1.4.1. Reference framework

36. In Hungary, the production approach is considered to be the main estimation method for compiling GDP; as the estimation of production is supported by the most reliable sources. The discrepancy between production and expenditure approach is shown explicitly in the annual publications as part of the changes in inventories. The discrepancy is usually between 0.0-3.6% of GDP without large fluctuations from one year to another The balancing procedure is made on an aggregated level. At the moment there is no detailed reconciliation procedure, using 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 is about to finish in 2011 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.

37. Enterprises are the main statistical units in the NA. Breakdown of output and GVA by kind of activity therefore refer to the institutional units except for local government. The compilation of production account is linked to the institutional sectors rather than activities/branches.

38. The aggregates are calculated in accordance with the regulation of ESA95. The output (P.1) consists of the goods and services produced during the accounting period. The intermediate consumption (P.2) includes products and services, which are 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 output and as intermediate 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

39. 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.

40. 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 Databese see Chapter 11) Since the

reference year of 2007, NFC sector calculations are based mainly on KABtár, the common database of SBS and corporate income tax data.

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

41. 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 corporations and pension funds and institutions providing auxiliary activities 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 instutional 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.

42. 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, some non-independent units belonging to central or local government can be market producers. They are considered as local KAUs of the central, of local government or of 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. For corporations classified into this sector, the data is calculated form 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.

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. 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 additional information is collected from the corporate profit tax return 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 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

43. Various valuation procedures are used to calculate gross value added from production side, depending on whether the statistical units under examination are market producers, producing for own final use or non-market producers.

a) **Market producers** are units whose production is chiefly marketable, their products or services are sold in the market or is intended for sale in the market. In this case, gross value added is calculated by deducting the value of intermediate consumption from that of output. When it comes to valuing output, various calculation methods may be distinguished:

   - General sales method: The output is the sum of sales (including drawings for own final use), changes in stocks of products from own production and own-account fixed capital formation. This is the procedure that market producers normally work.

   - Differential method may be used to describe special arrangements adopted by financial corporations (monetary financial institutions and insurance companies), because in these cases the value of output is calculated as the difference between particular revenue and expenditure positions.

   - Applying the volume X price method, the value of output is calculated by assessing data relating to volume (the 'price/volume process'). This valuation procedure is only used in exceptional cases, for example in the domains of agriculture.

b) Economic units **producing for own final use**, i.e. **whose** production is wholly or primarily intended for final consumption, are a special case. Typical examples are agriculture and construction. As in the case of market production, output is valued at basic prices (including a mark-up for operating surplus), and gross value added is formally calculated by subtracting the value of intermediate consumption. In this context, it goes without saying that production for the producer's own final use, i.e. goods and services consumed by the household of the producer unit or plant constructed for its use, can also occur as a secondary activity of a market producer or of a non-market producer whose output is intended primarily for external users. Output of market producers and of producers for own final use is valued at basic prices. The basic price does not include any taxes on products but contains product-specific subsidies.

44. c) In the case of other **non-market producers**, the bulk of production is made available as a rule to other units, either free of charge or at economically insignificant prices. Examples of such producers are public administrative bodies and non-profit institutions serving households. Since no market prices are available for the services rendered free of charge, the figures for gross value added and output are calculated in these cases by adding costs of them. Gross value added is equal to the sum of compensation of employees, consumption of fixed capital and other taxes on production (minus other production-related subsidies). The output is the sum of the gross value added and intermediate Output is measured, starting from general business accounting, as net sales, plus changes in inventories of own-produced products and own account GFCF. The sources used to estimate output derive mainly from sources compiled according to general accounting rules. General accounting rules should be followed by all kinds of units engaged in productive activities. In the case of government units some additional rules are applied (e.g. cash accounting). As several data derive from tax declarations, the tax regulations also affect the content of the data sources.

45. The intermediate consumption includes the consumption of goods and services as inputs by production processes. For the calculation of the intermediate consumption, adjustments are made for the use of non-life insurance services (allocated as a ratio of the premiums paid), for the goods and services purchased and provided to employees, for the value of the passenger cars used for personal

purposes and for the cost reimbursement paid to employees. No correction is necessary in case payments made by employers for life insurance of employees, as they are included in the compensation of employees in 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 HUF 50 000– about EUR 200) and it adjusted to the ESA threshold of EUR 50. For details see Chapter 3, para 117.

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

48. Output 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.

49. 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 Chapter 3.3.4.

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

51. 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)

52. In case of the Non-financial corporations sector mainly corporate profit tax returns and the Structural Business Survey (SBS) contain the figures, which are 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 bussiness accounting to national accounts concept.

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

54. 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. .

1.4.4.2. Financial corporations sector (S.12)

55. 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.

56. 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)

57. 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.

58. 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)

59. 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.

60. 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.

61. 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)

62. 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.

63. Because of the unreliable data of income tax declaration, the estimation is based on the assumption that the sole proprietors have to produce the expected gross value added per employee. So the gross value added is resulted as the multiplication of labour input and expected gross value added per employee. The estimation is made at four digit level of NACE Rev. 1.1 and counties (NUTS III.)

64. The number of tax declarations is used for the estimation of labour input, because this data is available for activities and counties. The aggregated number of employees of sole proprietors comes

from the Labour Force Survey and this number is broken down for activities and counties in share of sole proprietors. The labour input is the sum of sole proprietors and their estimated employees.

65. Considering 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 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.

66. The estimation method of the 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.

67. 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)

68. 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

69. 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.

70. 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.

71. 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.

72. Nevertheless, the estimation of non-observed economy by production approach needs to be improved. 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.. 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. 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. .

1.5. Outline of the income approach

1.5.0. Introduction

73. 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**

74. 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

75. 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.

76. 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

77. 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.

78. 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.

79. 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

80. 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.

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

82. 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.

They include:

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

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

1.5.4. Gross operating surplus

84. 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.

85. 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

86. 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

87. 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.

88. 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 corporate profit tax return 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.

89. 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

90. 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.

91. These categories are estimated form 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	1.3
P.53	Acquisitions less disposals of valuables	..	…
	Statistical discrepancy	193 007	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**

1.6.2. The reference framework

1.6.2.1. Household final consumption expenditure

92. 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.

93. 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. Government final consumption expenditure

94. 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;

- Goods and services purchased by General government of from 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 the market producers.

- Government units are registered by the Hungarian State Treasury. The coverage of this register is complete.

- The estimates for the compilation of the government sector are based on annual reports of government institutions and on the report of the execution of the budget. Each government institution has to submit an annual report, and all their activities are included in the government budget. Therefore, the common data sets derived form the two sources are identical.

1.6.2.3. NPISHs final consumption expenditure

95. For NPISHs the final consumption expenditure 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

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

97. The main sources to estimate annual GFCF are the Structural Business Statistics, 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 put into operation are available .

1.6.2.5. Changes in inventories

98. 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

99. 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

100. In 2002, the source of export data was the external trade statistics and data for services came from the balance of payments statistics. The statistical recording of external trade was based on customs documentation. Until 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. Since that time

HCSO 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

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

102. The household final consumption expenditure was calculated form 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 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 corporate profit tax return 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.

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

104. 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 Structural Business Statistics.

105. There were two different data sources to calculate changes in inventories. One of them was the database containing the data of corporate profit tax return 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. For the national economy, exports and imports data were estimated independently, also. The two main data sources were the the custom data and the Balance of Payments.

1.6.4. Valuation

106. In most cases the relevant data sources give sufficient information to conform to ESA95 prices. only in few 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 the HCSO; are described in the relevant chapters (e.g.: to move form "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

107. Adjustments, of administrative or private accounting data to meet the ESA 95 concepts, are explained in detail as part of the methodology concerning the expenditure components.

1.6.6. The roles of direct and indirect

108. As a general rule, estimation of **household final consumption** expenditure is based on annual or sub-annual direct statistical surveys and administrative sources. But because of the different

reliability of the sources direct and indirect (benchmarking and extrapolation) estimation methods and modeling (imputed rent) are used in combination.(see 5.5 and 5.7).

109. **Estimations for the final consumption expenditure of NPISHs and government** are based on the annual survey on NPISHs conducted by HCSO and on the annual reports of government institutions and on the government budget, therefore, a direct method is applied for calculation.

110. The calculation of the annual **Gross Fixed Capital Formation** data is mainly survey based. The survey does not provide direct information on units with less than five employees. The estimation for the non-observed units is based on supplementary information. Dwelling investments are estimated from data in physical units by applying a detailed dwelling construction cost model. 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 1.6 Estimation methods of capital formation by categories 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

111. In 2002 reference year value of **exports and imports of goods and services** were estimated from administrative (custom) and balance of payments sources. .

1.6.7. Roles of benchmarks and extrapolation

112. As for the reference year, direct methods are used in most cases for estimating, e.g. final consumption expenditure of NPISHs, final consumption expenditure of government, gross capital formation and exports and imports of goods and services. In around 50 per cent benchmarking and extrapolation technique were used for estimating 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.

113. Benchmark data are applied for the indirect estimation of investments carried out by corporations and sole proprietors with less than five employees. These indirect estimates are based on the benchmark data of the Capital Stock surveys 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

114. 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.

115. 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.

116. 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.

117. Giving tips is a widespread phenomenon in Hungary. Probably the most important type of tip is the gratitude payment in health care services (money is given directly from household to doctors and nurses unofficially without any invoice). The value of tips was estimated using the Household Budget Survey and the personal income tax declaration data. The calculation 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. Based on this survey's data a detailed model was established for estimating tips (gratitude money) on health services. The model operated with the estimated amounts of gratitude money by types of treatment. The results of the model were used for the final calculation of 2001 data and the revised data of 2000. Concerning tips in other service fields (catering, passenger transport and hairdressing), an estimation was introduced in the final calculations of year 2001. These calculations are based on a special survey conducted in 1997 as a supplementary module of HBS survey on hidden. 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.

118. 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.

119. 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)

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

121. All producers are considered to be the subject of **GFCF** estimation. The data collection system currently provides direct data on enterprises working with 5 or more employees, the non-observed part is taken into account by applying supplementary information available. The data collection covers the transaction in all the required tangible asset categories. Units and transactions directly non-observed,

like transactions in second-hand assets within Households sector, and intangible fixed assets are carried out by the units with less than 5 employees it is assumed their values are insignificant.

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

1.7. Balancing procedures

123. 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

124. 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.

125. 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.

126. 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.

127. 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.

128. 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.

129. 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

130. According 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.

131. 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.

132. 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.

133. 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).

134. 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.

135. 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.

136. 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

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

Welfare services

138. 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.

139. 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

140. 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).

141. 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

142. 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.

143. 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

144. 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.

145. 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

146. 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.

147. 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.

148. 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.

149. 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.

150. 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.

151. 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

152. 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).

153. HCSO is responsible for compiling and publishing GNI figures. There is a close connection between HCSO and NBH, because a tight cooperation in GNI calculation and BoP compilation is necessary.

1.10. FISIM allocation with two types of reference rates

154. 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.

155. 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.

156. Internal and external reference rates were defined based on local currency and foreign currency transactions. We assumed 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.

157. 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.

158. 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.

159. 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 calculate total FISIM used by different user sectors.

Table 1.7 FISIM impact on GDP by applying different reference rates (at current prices, million HUF)

Year	GDP impact using single reference rates	GDP impact using two-type reference rates	Difference between the two methods
2000	125 220	155 198	29 978
2001	158 065	197 086	39 021
2002	188 676	248 667	59 991
2003	232 561	296 192	63 631
2004	170 051	285 645	115 594
2005	278 583	348 076	69 493

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. In line with the CMFB document No. 08/07/A.6.1, the following types of revisions are distinguished: current (routine) revisions, major occasional revisions and major regular (benchmarking) revisions.

2.1.1. Current revisions – routine revisions

3. Current (routine) revisions reflect the need to incorporate new available regular information that gradually completes the basic set of statistics on which the compilation of national accounts is based. Current revisions include also the correction of possible computation errors and mistakes that may occur in the course of the processing of basic data.

4. Current revisions due to new annual basic statistics normally affect the previous 2-3 years. Corrections of computation errors may affect one single year, a period of few years or even the entire time series.

2.1.1.1. Main data sources of the successive stages of publication

The first preliminary annual estimates are compiled as the sum of the 4 quarters (t+3 months).

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

5. *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
  Survey on agricultural services
  Survey on input for agricultural output
  Annual business survey
  Latest data from (present position of) the business register
  Data transmissions from the customs office and the NBH
  Labour Cost Survey
  From the internet: information from the websites of major (large) corporations and supervisory bodies

- Financial corporations sector:
  Data from the tax office (APEH): corporate profit tax returns, government accounting
  Labour Cost Survey
  Latest data from the business register
  Annual report of the Hungarian Financial Supervisory Authority (PSZÁF)

- Government sector:
  preliminary report on the execution of the budget

- 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 actual data are available for the year (t-1)

- Net taxes on products:
  Preliminary report on execution of the budget

6. *Data sources of expenditure approach:*

- Household consumption:
  Preliminary annual HBS
  Preliminary retail trade data
  Preliminary report on the execution of the budget
  Reports of banks and insurance companies submitted to the NBH , preliminary

- Collective consumption:
  Preliminary report on the execution of the budget

- Gross fixed capital formation:
  Investment data from the quarterly business survey and preliminary annual investment statistics

- Changes in stocks of inventories:
  Stock data from the quarterly business survey
  Corporate tax returns (preliminary)

- External trade:
  External trade surveys on goods and services, customs declarations, survey on international tourism

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

7. *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 survey
  Present position of the business register

- Government sector:
  Final reports on the execution of the budget (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 profit tax return data for small enterprises; employment data (for the given year) of the annual business survey

- Non-profit institutions sector:
  Survey on non-profit institutions
  Survey on churches

- Net taxes on products:
  Report on the execution of the budget
  Report of the tax office (APEH)

8. *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 fixed capital formation:
  Revised set of annual investment statistics and revised data of corporate profit tax returns

- Stock of inventories:
  Revisions of quarterly inventory survey and corporate profit tax data

- External trade:
  Revised set of external trade surveys

2.1.1.1.2. Last regular revision based on SUT (t+ 33 months)

9. Harmonisation based SUT compiled in the meantime.

2.1.2. Major occasional revisions

10. Major occasional revisions derive from major methodological changes in national accounts and the basic set of statistics, like changes in concepts and definitions and/or in the classifications used.

11. The Hungarian national accounts do not apply a general benchmark year. Most of the estimates are made directly every year on the basis of regular data sources. The benchmarks that are used relate to different benchmark years depending on the availability of basic data sources in the different domains of national accounts. Methodological improvements have been introduced almost every year in the past twenty years and likely to be introduced in the coming years.

12. Major occasional revisions are not conducted 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 maintain the consistency of the series.

2.1.3. Major regular revisions – benchmark revisions

13. In theory, benchmark revisions take place every five to ten years to incorporate results of changes in surveys and/or in estimation procedures, of new data sources and of new estimation methods. Benchmark revisions rely on a deeper and detailed analysis, include fundamental methodological changes that affect the entire system of national accounts, or changes in the general technique of compiling the accounts (like integration of SUT etc.). Benchmark revision may also be a combination of mayor changes in basic data, methodology, techniques and classifications applied.

14. In the current practice of the Hungarian national accounts, a classical type of benchmark revision does not exist. This situation will start changing gradually with the introduction Supply and Use Table based compilation of the production account in 2011. Currently, benchmark revisions are introduced on an ad-hoc basis, when the number, the magnitude and the combination of different improvements and changes require so.

15. 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)
- NACE revision: September 2011
- Data collection and methodological tasks arising from GNI Inventory reservations (2009–2012)
- ESA revision: 2014

16. Taking into account the above, the next major benchmark revision will be 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 and other development needs can be implemented in 2014 or 2015, depending on future events.

2.2. Timetable for revising and finalizing the accounts

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

Table 2.1 Revision calendar of the Hungarian national accounts

Subject	Deadline (months)	Notes
Quarterly and annual flash estimates (GDP index)	t+45 days	
First preliminary estimates 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 estimates	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
Third 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

18. 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 the SUT-based final data will come into effect in 2011. Currently SUT is published at T+36 months.

2.3. Impact of revisions on the level of GDP/GNI

19. Table 2.2 below shows the changes of GDP data and their relative size for the year 2002 from the first publication until May 2009. These changes reflect both corrections of errors of input data as well as methodological improvements. The magnitude of the revisions in this period were relatively small in comparison to GDP.

Table 2.2 Impact of revisions on the level of GDP, 2002

Date of publication	at current prices	change*	Change, in % of GDP
	million HUF		
(2009 May)	17 148 449	39	0,0
(2009 March)	17 148 410	0	0,0
(2008 Sept)	17 148 410	-32 194	-0,2
(2008 May)	17 180 604	0	0,0
(2008 March)	17 180 604	0	0,0
(2007 Sept)	17 180 604	0	0,0
(2007 May)	17 180 604	-23 126	-0,1
(2007 March)	17 203 730	0	0,0
(2006 Sept)	17 203 730	288 471	1,7
(2006 May)	16 915 259	0	0,0
(2006 March)	16 915 259	0	0,0
(2005 Sept)	16 915 259	174 844	1,0
(2005 May)	16 740 415	-6	0,0
(2005 March)	16 740 421	0	0,0
(2004 Sept)	16 740 421	0	0,0
(2004 March)	16 740 421	0	0,0
(2004 March)	16 740 421	-3 267	0,0
(2003 Sept)	16 743 688	-236 378	-1,4
(2003 March)	16 980 066		

*: Compared to the previous release

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 compiling GDP; as the estimation of production is supported by the most reliable sources. The discrepancy between production and expenditure approach is shown explicitly in the annual publications as part of the changes in inventories. The discrepancy is usually between 0.0-3.6% of GDP without large fluctuations from one year to another. The balancing procedure is made on an aggregated level. At the moment there is no detailed reconciliation procedure, using 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 is about to finish in the framework of a project of development based on the Norwegian SNA-NT software. (See Chapter 6).

1. Enterprises are the main statistical units in the NA. Breakdown of output and GVA by kind of activity therefore refer to the institutional units except for local government. 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 value added by NACE 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	0
Q	0	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**

2. The aggregates are calculated in accordance with the regulation of ESA95. The output (P.1) consists of the goods and services produced during the accounting period. The intermediate

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

consumption (P.2) includes products and services, which are 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 output and as intermediate consumption.

3.1. The reference framework

3.1.1. Registers

3.1.1.1. The characteristics of Business Register

3. The Business Register (BR) is one of the basic database of HCSO. It contains data on resident enterprises. There is no entry threshold (seize of activity, revenue or number of employees). The main functions of the BR are the following:

- recording and updating the characteristics of economic units;
- supporting the data collection and processing;
- providing a sampling frame for statistical surveys;
- supplying information about economic units to users.

4. Since 1998 the BR is maintained in ORACLE database with historical data storage. Registration number of an enterprise, which is fixed during the whole life time of the economic unit, is used as the identifier. The 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.

3.1.1.2. Statistical sources of the Business Register

5. The enterprise registration numbers as common identifiers make possible to link together various **administrative** registers maintained by government authorities. In the frame of cooperation within government, the BR – through an on-line, one-window system – continuously receives data modifications from registry court. The BR is updated weekly by regular datasets of the Tax Office, and monthly datasets arrive from the Hungarian State Treasury that keeps records of budgetary units.

6. In the frame of the "one-window" system about 100 000 new enterprises 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, about 400 000 changes are recorded.

7. In case of enterprises covered by statistical data collections, the BR is also updated by results of the survey. The statistical sources primarily modify the activity codes and the characteristics used for stratification. There are special data collections to update the register regularly. All new enterprises, which are obliged to be registered at the registry court, provide information to the BR on the basic information questionnaire (OSAP 1032). Enterprises registered by Tax Office report on the basic information supplementary Tax Office sheet (OSAP 1710). It is the interim register-updating questionnaire (OSAP 1764) that updates the register. The sources of register variables are several statistical questionnaires, especially SBS. Data of government units are updated on yearly basis.

3.1.1.3. Coverage of the Business Register

8. The BR covers all institutional units with tax number which provide information to be identified and contracted. In the BR distinction is made between main activity in administrative and in statistical sense.

9. The administrative main activity is the activity recorded in administrative sources (such as by the registry court, the registration office, the Tax Office and the Hungarian State Treasury). It is the second component of the statistical code (9th-12th digits). It follows the relevant Standard Industrial Classification of All Economic Activities (TEÁOR), which is the Hungarian version of NACE.

10. The Statistical main activity is a classification established for statistical purposes only. It is based on the dominant sales revenue of the enterprise. In certain cases it differs from the administrative main activity. HCSO uses statistical main activities to specify the coverage of statistical data collections. It is updated once a year. Further updates are only allowed in exceptional cases (e.g. change of profile, correction of improper classifications). If the administrative main activity might be changed, the statistical main activity will be also corrected at the beginning of the subsequent yea. 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**

11. Since 2008 HCSO may optionally record the secondary activities of economic units in the BR. If the register-updating questionnaire or the SBS provide relevant data on secondary activities, they are recorded in the BS.

12. Since 2001 the data on local units are continuously updated. Enterprises with more than 20 employees – more than 10 employees in case of construction companies – are asked about their local units every year. In addition the BR takes data on local units from the Hungarian Outlet Register, as well. It will be used as a basis for LKAUs introduction in the national accounts.

13. 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

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

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

16. By applying the RNPI, HCSO can provide statistics about the most important indicators of every non profit organization.

3.1.1.5. Data quality, and quality reports

17. In order to improve data quality of the registers 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 Security Fund.

3.1.1.6. Non-financial corporations (S11), units and data sources

18. In 2002, the Non-financial corporations sector contributed with 55.4% to total GVA at basic prices. Concerning 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)

19. For sector classification of public corporations the 50 percent criterion of market production is applied. 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

20. The compilation of the accounts of the Non-financial corporations sector is mainly based on the enterprise database called JAVA. It is compiled from corporate profit tax returns, but it integrates data coming from other data sources (e.g. statistical surveys, budgetary data and other tax declarations). The development of the JAVA database system has started in the early nineties. Since then several improvements have been done. The safeguarding of the JAVA database follows the general data security principles of HCSO:

- the data in the database are protected from unauthorized use,
- the data in the database can be modified by the people who have the authority to do this,
- the data in the database are periodically saved and their integrity is regularly checked.

21. The JAVA database contains individual enterprise data. The database serves different purposes, but it is especially used in national accounts: Since 1992, the database continuously follows the changes in the available data sources.

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

Common SBS-National accounts database

23. A flexible informatics application that is a basis for producing annual structural business statistics (SBS), and for compiling national accounts. It combines SBS and corporate income tax data at individual (enterprise etc.) level. Data are crosschecked and stored by keeping internal coherence at individual level. From the reference year of 2007 National accounts are compiled on the basis of this Common database. Its functions: data production, data checking, corrections, operation.

3.1.2. Financial corporations sector (S12), units and data sources

24. In 2002, the gross value added of the Financial corporations sector represented 3.3 percent in the total value added at basic prices. The sector includes the Central Bank, other monetary institutions, other financial intermediaries, insurance corporations, pension funds and institutions providing auxiliary activities to financial intermediation. The main data sources are reports collected by the Hungarian Financial Supervisory Authority from other monetary institutions, insurance companies and pension funds and tax declarations of all institutional units classified to S12. 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 government subsidies.

25. Other data sources are balance sheets and profit and loss accounts of the National Bank of Hungary, of credit institutions, of savings cooperatives and credit cooperatives, of building societies, of insurance corporations and associations, of pension and guarantee funds. From HCSO data collections the structural business statistics, the labour statistics and the labour cost survey are the most important sources. In addition, we also use data from reports of central and local government units.

3.1.3. Government sector (S13), units and data sources

26. In 2002, the General government sector provided 18% of the total GVA at basic prices. The General government sector (S.13) covers 3 types of entities:

- the complete 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 entities:

Central government;

Extra-budgetary funds;

Local governments;

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

27. Every general government unit in legal terms is a non-market producer and is classified in the GG sector in NA. However, some non-independent units belonging to central or local government can be market producers. They are considered as local KAUs of the central, of local government or of 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.

28. The data sources for budget units in legal terms are the annual financial reports of the institutions. This report is designed for administrative purposes (report on the execution of the budget compiled by the Ministry of Finance is based on this data source); so the coverage is complete. The annual financial reports are collected by the Treasury and are sent to HCSO. Data are processed at individual level and aggregated to class level by HCSO.

29. 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 fulfilled 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.

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

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

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

- Units reclassified in the GG sector (public corporations and public non-profit institutions) are classified by activity at institutional unit level;

- Government institutional units *may* be split more industries: it depends on the range of activity they perform. The classification by activity is based on the annual financial report. 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.

33. Summarized, the output in the GG sector is 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 and to the relevant industries: ESA95 sector-sectors classified by activity are compiled.

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

3.1.4. Households sector (S14), units and data sources

34. In 2002, the Households sector provided 22.2% of total GVA at basic prices. The Households sector, in line with ESA95, covers the households both as consumers and as producers.

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

a) Sole proprietors as producers with licence and other permission

Personal income tax declaration is one of the data sources for calculating the production of sole proprietors. 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 additional information is collected from the corporate profit tax return 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) Private individuals with tax number and unregistered production activities of households:

These are:

- Small agricultural 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 itselves for own final use. Data sources are surveys carried out by the Dwellings Statistics Section of HCSO;
- owner-occupied dwellings services: these 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), units and data sources

36. In 2002, the Non-profit institutions serving households sector contributed with 1% (1.046%) to 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.

37. As for 2002, the statistical survey on the non-profit institutions was an annual sample survey. Since 2001 the non-profit organisations are completely observed in every third year only (in 2000 and in 2003 the coverage was complete). In the intermediate years a sample survey is conducted. In 2002, the coverage of the survey on churches was complete. (Since 2004 only the largest 30 churches are surveyed.)

38. 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.

39. The resident institutional units are classified in a four-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 public non-market units are classified in the GG sector, if the general government is financing more than 50% of their total revenue;

- 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

40. Various valuation procedures are used to calculate gross value added from production side, depending on whether the statistical units under examination are market producers, producing for own final use or non-market producers.

c) **Market producers** are units whose production is chiefly marketable, their products or services are sold in the market or is intended for sale in the market. In this case, gross value added is calculated by deducting the value of intermediate consumption from that of output. When it comes to valuing output, various calculation methods may be distinguished:

   - General sales method: The output is the sum of sales (including drawings for own final use), changes in stocks of products from own production and own-account fixed capital formation. This is the procedure that market producers normally work.

   - Differential method may be used to describe special arrangements adopted by financial corporations (monetary financial institutions and insurance companies), because in these cases the value of output is calculated as the difference between particular revenue and expenditure positions.

   - Applying the volume X price method, the value of output is calculated by assessing data relating to volume (the 'price/volume process'). This valuation procedure is only used in exceptional cases, for example in the domains of agriculture.

d) Economic units **producing for own final use**, i.e. **whose** production is wholly or primarily intended for final consumption, are a special case. Typical examples are agriculture and construction. As in the case of market production, output is valued at basic prices (including a mark-up for operating surplus), and gross value added is formally calculated by subtracting the value of intermediate consumption. In this context, it goes without saying that production for the producer's own final use, i.e. goods and services consumed by the household of the producer unit or plant constructed for its use, can also occur as a secondary activity of a market producer or of a non-market producer whose output is intended primarily for external users. Output of market producers and of producers for owns final use is valued at basic prices. The basic price does not include any taxes on products but contains product-specific subsidies.

e) In the case of other **non-market producers**, the bulk of production is made available as a rule to other units, either free of charge or at economically insignificant prices. Examples of such producers are public administrative bodies and non-profit institutions serving households. Since no market prices are available for the services rendered free of charge, the figures for gross value added and output are calculated in these cases by adding costs of them. Gross value added is equal to the sum of compensation of employees, consumption of fixed capital and other taxes on production (minus other production-related subsidies). The output is the sum of the gross value added and intermediate consumption.

3.2.1. Valuation of output [P.1]

41. Output is measured, starting from general business accounting, as net sales, plus changes in inventories of own-produced products and own account GFCF. The sources used to estimate output derive mainly from sources compiled according to general accounting rules. General accounting rules should be followed by all kinds of units engaged in productive activities. In the case of government units some additional rules are applied (e.g. cash accounting). As several data derive from tax declarations, the tax regulations also affect the content of the data sources.

For the calculation of the output, adjustments are made with own produced 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 winnings from lottery or gambling.

3.2.2. Valuation of intermediate consumption [P.2]

42. The intermediate consumption includes the consumption of goods and services as inputs by production processes. For the calculation of the intermediate consumption, adjustments are made for the use of non-life insurance services (allocated as a ratio of the premiums paid), for the goods and services purchased and provided to employees, for the value of the passenger cars used for personal purposes and for the cost reimbursement paid to employees. No correction is necessary in case payments made by employers for life insurance of employees, as they are included in the compensation of employees in the Hungarian business accounting rules.

43. The borderline between IC and GFCF is clearly defined in the Hungarian Accounting law. The borderline is as follows: GFCF are assets used at least one year and the value of them is more than 50 000 HUF – about 200 EURO. In the national accounts is adjusted to the ESA threshold of EUR 500. For details see chapter 3, para 117.

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

45. IC is valued at purchaser's prices.

46. When calculating intermediate consumption, the actual costs according to the bookkeeping rules are recorded. When goods are consumed shortly after purchasing, then there is no significant difference between the recorded cost and the purchasers' price at time of the use. A significant difference may result in case of long storage of intermediate products before they are used in production. The size of difference depends on valuation methods of inventories applied by enterprises. FIFO is the most commonly used method in Hungary. Neither the own-produced stocks, nor the purchased stocks have yet been adjusted for holding gains. There is an ongoing work to for the development of this methodology. Introducing the recording of holding gains will fulfil the requirement of ESA.

3.2.3. Other valuation issues

47. Concerning the production of sole proprietors with tax number and unregistered production activities of households (which are recorded under Households sector) the relevant legal acts are described in chapters 3.7-3.22.

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

49. 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.

50. "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.

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

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

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

54. Annual reports of government units are compiled on cash basis. In order to obtain accrual data necessary adjustments are made based on the information from the annual reports. Concerning the output, adjustments are done for IC, compensation of employees and for fees received.

55. 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.

56. 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

57. Valuation of consumption of fixed capital is described in Chapter 3.3.3.

3.2.4. Market and non-market output

58. In the Hungarian 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

59. According to the classification of producers the output is calculated by applying three valuation principles:

a) output valued at basic prices – for the total output of market production

b) production for own final use

c) output calculated from the costs side – for the total output of other non-market producers

60. Classification of the institutional units is carried out according to paragraph 3.27 and Table 3.1 of the ESA regulation. The value of market and non-market output for the Hungarian economy is illustrated in the following table.

Table 3.5 Market and non-market output, 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**

61. 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 Corporations sector or to the General government sector.

62. **The non-profit institutions** in legal terms 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 constitute 3% of all non-profit institutions. Public non-profit non-market producers belong to the General government sector, while the private ones to the NPISH sector.

63. In 2002 the market output and output for own final use of non-financial corporations was the following:

Table 3.6 Market output and output for own final use in 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**

64. **Government units** classified in the General government sector are other non-market producers. But some of their secondary activities they can be market production, on the basis of the 50% criterion of ESA95.

65. Every government unit 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 units stay under market producers, which fulfil the criteria for the whole period of the survey.

66. Last filtering step is to examine figures for secondary activities of the remaining government units. 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.

67. . To obtain the other non-market output for the GG sector the following formula is used:
Other non-market output = total costs of production - market sales - output for own final use

68. 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**

69. In the **Households sector** the share 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

70. 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)

71. 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.

72. The information required for making these adjustments are available from corporate profit tax returns, personal income tax declarations, liability and subsidy declaration forms, SBS, and other 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 amounts of adjustments are showed in the next table.

73. 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.

74. 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)

(without agriculture and forestry (A))

Table 3.9	Net sales	Capitalised goods for own GFCF	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) winnings from lottery or gambling			-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 type3 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)

(without agriculture and forestry (A))

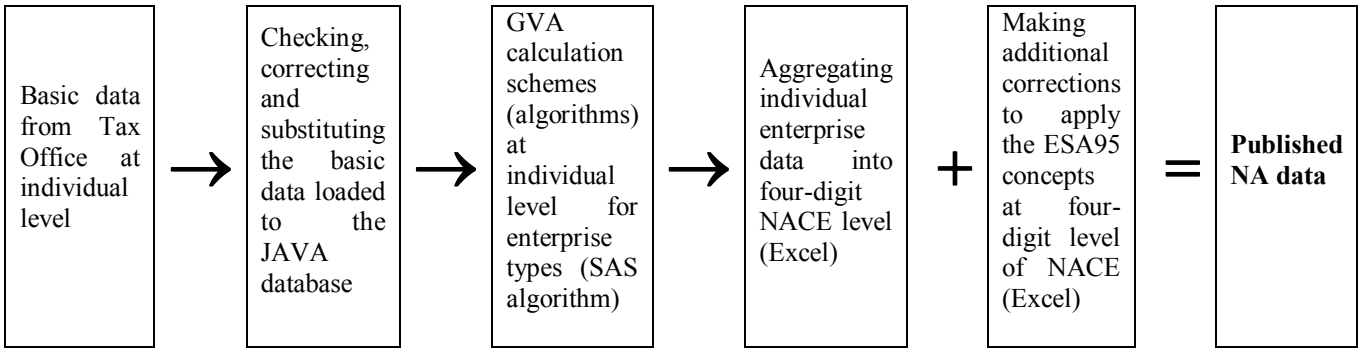
	Output P1		Intermediate consumption P2	Gross value added B1g
Terminated or transformed companies	254 002		162 970	91 032
Missing companies	109 197		82 328	26 869
Non profit institutions	119 385		78 794	40 591
Special calculation method total	**482 584**		**324 092**	**158 492**
u) Re-classification of companies	-189		-5 765	5 576
v) Outward processing	-86 095		-86 095	0
w) Agricultural grossing up	26 658		26 658	0
x) 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

75. 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)
- compiling component indicators at individual enterprise level from basic data (administrative aspect), the corrections are made according to the ESA95 concept and the valuation principles. The calculation is made by schemes (algorithms) and using various auxiliary information (for example: disaggregating the data deriving from the budget) and by importing the basic 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 enterprise data into four-digit NACE classes, and making additional corrections (from administrative aspects) to apply the ESA95 concepts and valuation.

Table 3.10 The compilation of production accounts for the non-financial corporations



76. Six types of enterprises are distinguished considering their characteristics, information sources and available individual data (see Chapter 11.1)[2]. The calculation schemes (algorithms) differ by each type:

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 Corporate Tax

77. Companies following non-calendar business year, of which tax declaration is available for the whole business year at the time of 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.

[2] Type 1 enterprises no longer exist.

78. The detailed process of measuring the output and intermediate consumption and the switch from the administrative aspect to the ESA95 aspect and valuation 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.

79. 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 goods and services for market sales 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

80. In the Hungarian National Accounts the starting point for calculating output is the net sales and the own production capitalised. The latter one includes the total (consolidated) amount of the capitalised goods for own GFCF in the business year, and the change in own-produced inventories.

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

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

82. In the business year the net sales include the counter value of contractual sales of goods 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 products 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.

83. Own production capitalised 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 inventories.

84. 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, 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 irrespective of whether or not used."

Intermediate consumption

85. 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.

86. 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	

87. Material costs include the cost of purchased raw materials used during the financial year, for example: purchased parts, tools used for operations such as small tools, devices for manufacturing, protective clothing, work clothes etc., office supplies, cost of energy sources (water, gas, electrical energy), cost of purchased animals etc. Material costs are reduced by the value of recyclable waste originated from the production process, so the recyclable waste is recorded as goods in inventories.

88. 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.[3]

89. 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.

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

91. The value of services purchased for resale includes the cost of services purchased and sold in an unaltered state.

92. 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 return (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 their 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.

[3] According to the Law on Accounting, contracted services include all services other than intermediaton (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.

93. "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 return, 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.

94. 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.

Adjustments

a) Goods purchased for resale

95. Goods purchased for resale includes the cost (decreased by depreciation and increased by the amount of loss in value backmarker) 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

96. 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) Taxes and subsidies modifying basic price

97. 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. Those subsidies on products, which are not recorded as part of the net sales, are added. (Sales data deriving from business accounting do not include VAT.)

98. 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

99. Usually there is difference between the declared amounts taxes and those actually collected by the government. Similarly, the amounts of subsidies may differ in the two sources. We assume that government data is more reliable, therefore, we correct the accounts of enterprises by the sum of the difference.

100. Concerning some tax and subsidy on products, there is no data available at enterprise level. . These are estimated on the basis of government data. Several sectors are affected by these data, so they are distributed on the basis of estimation among sectors.

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

101. Occasional 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).

102. Excise duties and consumption taxes are important items 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.

103. Net sales of these products should be reduced by excise duties (using SBS data) to value output at basic prices.

d) Welfare services

104. Enterprises provide their employees various social welfare services, either at reduced price or free (for example kindergarten, subsidised meals). The costs of these services not covered by the fees are recorded as compensation of employees. So output has been increased by the total cost of social welfare services provided for employees excluding the fees paid by employees.

105. These data are not available from corporate profit 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 provided to employees

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

107. These data are not available from corporate profit tax returns, only in SBS. For enterprises covered by SBS, 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)

f) Mineral exploration cost

108. Minerals are explored in order to discover new and exploitable stocks of mineral, oil or natural gas. According to the ESA95 regulation the costs of the exploration for own uses are added to the output.

g) Winnings from lottery or gambling

109. : In the case of enterprises engaged in gambling corrections are made on the basis of the personal income tax data on tax form number 0203.

110. We reduce the net sales by the sum of amount paid to the winners (including withholding tax (20%). Amounts spent on 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 between households, the net sales of gambling- or bet-organiser enterprises contain the all the amounts, which is paid by participants in games of chance. Gambling-organiser companies have to deduct and pay 20% of the amount distributed among winners to 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

111. 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

112. 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) Reimbursement paid to employees

113. This item comprises - instead of benefits-in-kind - the amount 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 the same amount.

114. These data are not separately available from corporate profit 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 provided to employees

115. 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 provided to employees. These items are subtracted from the intermediate consumption and added to the compensation of employees.

116. These data are not separately available from corporate profit 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 business car for personal purposes

117. 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

118. 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 was developed to eliminate this difference. The methodology for the adjustment of IC and GFCF data on small tools was developed is the following:

119. 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.

120. 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

121. This adjustment is necessary, because some 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., paragraph 196-199)

o) Exhaustiveness estimation for type 3 corporations

122. This correction is needed, because several 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 profit taxes. The calculation is made by experts' estimation. (For further details see Chapter 3.6., paragraph 200-202)

p) Tips

123. It Hungary consumers give tips for certain services. 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.

124. The adjustment is made in case of 4 market activities:

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

125. When estimating tips and gratuities, no separate calculation is made for estimating the values of tips and gratuities given for business purposes (which is actually intermediate consumption). Tips and gratuities given by households (as consumers) are estimated only, recorded in the output and consequently in the value added of enterprises, as well as in the final consumption expenditure of households.

126. 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-size businesses with legal entity.

q) Recording gross value of inward processing

127. 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 is no change of ownership between residents and non-residents. Sales 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 this recording, the characteristics of the goods 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.The difference between the value of the export of processed goods and the value of 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

128. According to ESA 3.61 the output and IC value of hotels, restaurants and cafes have to include 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

129. 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)

130. 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

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

131. In the national accounts, private pension funds existing since 1998 had been classified into the Financial corporations sector. 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 exist. In accordance with this decision, in Hungary 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.

v) Outward processing

132. In the case of outward processing 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.

w) Agricultural grossing up

133. 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.

x) FISIM allocation

134. According to 448/98 Council Regulation and 1889/2002 Commission Regulation the recording of financial activities was changed from first of January 2005. FISIM (Financial Intermediation Indirectly Measured) has to be calculated by a new methodology and has to be allocated to user sectors/industries. The above regulation does not require distinguishing loan and deposit transactions between financial institutions denominated in local and in foreign currency.

135. Taken into account user needs, a recommendation was approved by the OECD National Accounts Working Group in order to make FISIM calculation more advanced. It was recommended to calculate separately for transactions denominated in local (HUF) and in foreign currencies (DEV).

136. FISIM calculation with two reference rates is based on loans, deposits and interest flows supplied by the National Bank of Hungary splitted into local and foreign currency. Both current and constant price FISIM time series provide more realistic results in national accounts, than FISIM calculated by single internal and single external reference rates.

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

138. As loans, deposits, interest incomes and expenditures are available in HUF and DEV breakdown, FISIM is calculated on HUF loans and deposits and DEV loans and deposits. Total FISIM by institutional sector is obtained as a sum of HUF and DEV FISIM on loans and deposits.

139. Total FISIM of Non-financial and Financial corporations is allocated to industries on the basis of their stock of loans and deposits. In the case of General government, Households and Non-profit institutions serving households sectors total FISIM is allocated by the proportion of their output before allocation of FISIM.

140. For detailed description of FISIM allocation see Chapter 9.

3.3.1.2. Special calculation methods

141. In 2002, companies that were terminated or transformed during 2002 had to submit a corporate profit tax return (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 their individual data of the preceding year deriving from JAVA database. In case of transformed enterprises, the legal successor enterprise provides a corporate profit tax return form for the period after the transformation.

142. "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 returns, 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.

143. 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)

144. For this sector see section 3.16.

3.3.3. Government sector (S13)

145. Three different data sources are used:

a) Annual financial reports of budgetary institutions;

b) Financial statements of public corporations classified in the sector

c) Statistical survey for public NPIs classified in the sector.

146. The accounting rules and the reporting requirements are the same for every budgetary 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 the individual reports and the ESA95 is calculated on an individual basis – except for CFC. The ESA95 aggregates of individual budgetary institutions are aggregated at 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. 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.

147. 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 types of adjustment:

d1) Calculation of non-deductible VAT.

Material expenses include VAT items as follows:

- VAT on purchased goods and services;

- VAT on goods and services sold (and paid into the budget)

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

VAT on goods and services sold;
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 selling 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 report on the execution of the budget. 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 budgetary 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 medallists 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

148. 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 replacement/book-keeping value. The expected service lives were determined according to the recommendations presented in the OECD Manual on Measuring Capital.

149. 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.

150. The experts multiplied the existing data in physical units – square metres – by the actual specific construction costs in order to valuate the stock of dwellings. The construction costs are calculated by dwelling types. The model applied for the estimation of the 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 the dwelling stock contains also the cost calculation of those dwellings which are not built any longer.

151. 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 (economic owner), in case these units do match the criteria of being independent ones in terms of economic decisions.

152. 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.

153. 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 data in physical units by the specific construction costs. The expected service lives of the infrastructural assets are experts' estimations.

154. 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.

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

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

157. 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.

158. 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.

159. 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 4.12.4.1.)

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

Sub-sectors	CFC
S.13 General government	593 488
Of which:	
S.1311 central government	270 320
S.1313 local government	318 520
S.1314 compulsory social securities	4 648

P.11 Market output

160. 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.

161. Corporate profit tax return 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.

162. 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**		

163. The statistical survey is compiled by HCSO; the classification of transactions follows the ESA95 requirements. There is no need to apply additional adjustments when calculating GVA and output from the JAVA database.

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**		

164. 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)

165. The estimation of output and intermediate consumption for sole proprietors faces several difficulties. The non-legal trade and employment is typical in this subsector. Producers tend to hide (a part of) their income in order to decrease social contribution and tax burden. In addition, it is difficult to separate the final consumption of households and intermediate costs of production.

166. The method of estimation (model) is based on a number of assumptions. The data of personal income tax returns are considered not to be creditable; therefore this estimation uses them only for the determination of the number of active sole proprietors. The sole proprietors have to produce at least the minimum expected gross value added (GVA) per employee. The small companies with 0-10 employees have more creditable data than that of sole proprietors; hence the expected gross value added is determined by these data. The aggregated data of employees of sole proprietors is regarded to be more creditable from the Labour Force Survey than those from the personal income tax returns. The method uses the aggregated number of employees from the Labour Force Survey.

167. The estimation is made at four digit level of NACE Rev.1.1 industries and by counties (NUTS III). It is based on the determination of labour input and the expected gross value added per labour input. The total labour input is the sum up the full time number of active sole proprietors, their employees and helping family members. The source of expected gross value added is the data of small companies with 0-10 employees; the method determines the mean of GVA per employee for these companies. The calculation distributes the national average gross value added per employee (3.052 thousand HUF in 2002) of small companies into activities and counties using the deviation between the expected minimum income (by activities and counties) and the national mean of expected minimum incomes. Gross value added arises from the multiplication of labour input and gross value

added per employee for each industries and counties. The last step of estimation calculates the output and intermediate consumption from the gross value added and the ratio of intermediate consumption and output, by inverse method.

168. The first step of estimation is the determination of the concerned number of sole proprietors, their employees and the helping family members. This aggregated number could be calculated by the next form:

$$L^a = \left(\alpha^{FT} L^{SP} + \frac{\left(\alpha^{PT} + \alpha^{P}\right) L^{SP}}{2} \right) X + L^{LFS} \cdot FTE + \frac{L^{HFM}}{2} \qquad (1)$$

Where L^a shows the concerned, aggregated number, L^{SP} means the number of active sole proprietors, who submitted their personal income tax return in year 2002. The number of their employees is the L^{LFS}, which number comes from the Labour Force Survey. The L^{HFM} shows the number of helping family members, which arise from the personal income tax returns. The rate FTE means the Full Time Equivalent. The factor of correction is the rate X, which is the ratio of sole proprietors, who submitted in their personal income tax returns with zero value in the main rows.

169. The distribution of sole proprietors can be derived from the Business Register. So the rate α^{FT} shows the share of the full-time sole proprietors, α^{PT} means the share of sole proprietors, who are engaged with their activity in part-time. The rate α^{P} is the share of pensioner sole proprietors. The shares of α's are determined from the number of operating sole proprietors of Business Register.[4] The sum of these shares equal one: $\alpha^{FT} + \alpha^{PT} + \alpha^{P} = 1$

170. The estimation assumes that sole proprietors, who are pensioner or active in part-time and the helping family members deal with their activity in half time.

[4] The active number of sole proprietors in this calculation differs from the data of Business Register, because the Register determines the status of sole proprietor „operating" if they did not get back their certificate (licence) for their activity. Therefore we assume that the sole proprietors, who submitted personal income tax return, are active.

Table 3.16 Aggregated number of labour input of sole proprietorships, 2002.

Sole proprietors from Business Register	Number	Share, (α^l, %)
full time	266 673	**56,18**
part time	125 946	**26,53**
pensioner	82 059	**17,29**
All	474 678	**100,00**
Number of active sole proprietors (L^{SP})	**401 797**	
Number of employees of sole proprietors (L^{LFS})	**249 600**	
Number of helping family members (L^{HFM})	**3 216**	
Full time equivalent (FTE)	**0,978815**	
Factor of correction of number of sole proprietors (X)	**0,976686**	
Estimated, aggregated number of labour input (L^a)	***552 368***	

171. The aggregated number of labour input is broken down for industries and counties, in proportion to the active (who submitted personal income tax return for year 2002) sole proprietors. The matrix, which contains the number of active sole proprietors, is compiled from the database of personal income tax returns. The industries are distributed by NACE, and there are twenty counties in Hungary (including Budapest).

172. The distributed numbers for industries and counties can be calculated by the next formula:

$$l_{ij}^{a} = \frac{l_{ij}^{SP}}{\sum_i \sum_j l_{ij}^{SP}} L^{a} \qquad (2)$$

Where l_{ij}^{SP} shows the active number of sole proprietors in branch i and county j, from database of personal income tax returns. The l_{ij}^{a} is the distributed number of labour input in industry i and county j.

173. The estimation based on the gross value added per employee of small companies with 0-10 employees as well. 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. Small companies also tend to hide a (smaller) part of their income. Their original data needs to be adjusted; because these companies can be characterized by over-reporting their costs.
The ic^{SC} (intermediate consumption per employee of small companies) is adjusted by 15%: $ic^{SC\_c} = 0{,}85 \cdot ic^{SC}$
In the previous formula the ic^{SC_c} means the corrected intermediate consumption per employees. The gross value added per employee of small companies equal the difference between output and corrected intermediate consumption per employees: $gva^{SC} = go^{SC} - ic^{SC\_c}$.

Table 3.17 Output, intermediate consumption and gross value added of small companies, thousand HUF, 2002.

GO per employee of companies with 0-10 employees (go^{SC})	5 949
IC per employee of companies with 0-10 employees (ic^{SC})	3 408
GVA per employee of companies with 0-10 employees	2 541
Factor of correction (over-recording of costs)	0,85
corrected GVA per employee of companies with 0-10 employees (gva^{SC})	**3 052**

174. The estimation requires data on expected gross value added by counties and branches. Hence the estimation uses the expected minimum incomes, which come from the Ministry of Finance. These data were prepared with the aim of auditing income tax data of sole proprietors. This information is available only for 2001, because the Ministry has not calculated them since 2002. The expected minimum incomes are available for the activity nomenclature for sole proprietors.[5]

175. The estimation requires the expected minimum income by industries, so the data by professions should be transformed and aggregated by industries. This aggregation results in means in which the number of sole proprietors by activities is used as weights for the aggregation. In addition, the estimation requires also means by counties and a mean for the whole economy, so these are calculated from the means of industries and counties.

176. The estimation assumes that at least the expectable gross value added has to be produced, but the values of gross value added differ from each other in counties and industries. So gross value added by activities and counties are calculated by the ratio of wages in particular county and branch to the national average income.

$$gva_{ij}^{SP} = \frac{w_{ij}}{\overline{w}} gva^{SC} \qquad (3)$$

In this form gva_{ij}^{SP} shows the estimated gross value added per employee in branch i and county j. The value $\overline{w}$ means the mean of incomes for the whole economy.[6]

177. In 2001 this mean ($\overline{w}$) of directives of Ministry of Finance was 561 thousand HUF. Because of the lack of relevant data (the Ministry of Finance stopped calculating these incomes in 2001), directives of 2001 were extrapolated in the following three years.
However, the gross annual minimum wage was 684 thousand HUF in 2005, which significantly exceeded the total average of the 561 thousand 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. 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.

[5] This nomenclature is a Hungarian speciality for the sole proprietors, by which the Hungarian Tax and Financial Control Administration can sort the groups of sole proprietors by professions. This nomenclature can be directly converted into NACE classification.

[6] The ratio of wage to average wage for the whole economy has extreme value in some branches. In these cases the outliers are replaced with ratios from expert's estimations.

178. The gross value added for the sole proprietors can be calculated by multiplying expected GVA per labour input and labour input for all branches and counties, as follows:

$$GVA_{ij}^{SP} = gva_{ij}^{SP} \cdot l_{ij}^{a} \quad (4)$$

The GVA_{ij}^{SP} is the gross value added in branch i and county j.

179. The output and intermediate consumption is determined by inverse method from the gross value added. The estimation uses the ratios of intermediate consumption to output in each counties (j) and branches (i):

$$r_{ij}^{SC} = \frac{ic_{ic}^{SC}}{go_{ij}^{SC}} \quad (5)$$

These ratios are calculated from the data of small companies, and need two additional corrections. The first correction excludes the extreme values of ratios, because the low number of companies or failures in corporate profit tax returns can cause extreme rates of intermediate consumption and output. 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 ratios of intermediate consumption and output of small companies are reduced by expert estimation.

180. These ratios allow the calculations of intermediate consumption and output for each counties and branches by inverse method:

$$GO_{ij}^{SP} = \frac{GVA_{ij}^{SP}}{1 - r_{ij}^{cc}} \quad (6)$$

$$IC_{ij}^{SP} = GO_{ij}^{SP} - GVA_{ij}^{SP} \quad (7)$$

Where the r_{ij}^{cc} is the corrected ratio of intermediate consumption and output. The GO_{ij}^{SP} and IC_{ic}^{SP} shows the output and intermediate consumption in branch i and county j of sole proprietors.

Table 3.18 Output, intermediate consumption and gross value added of sole proprietors in 2002, (million HUF)

NACE Rev.1.1		Result of estimation for sole proprietors			Gross value added of S1	Share in GVA of S1 (%)
		Output	Intermediate consumption	Gross value added		
A	AGRICULTURE, HUNTING AND FORESTRY	112 875	50 231	62 644	686 677	9.12
B	FISHING	253	107	146	3 243	4.50
C	MINING AND QUARRYING	342	149	193	34 497	0.56
D	MANUFACTURING	264 247	114 253	149 994	3 180 349	4.72
E	ELECTRICITY, GAS, STEAM AND WATER SUPPLY	0	0	0	433 823	0.00
F	CONSTRUCTION	293 582	133 059	160 523	774 349	20.73
G	WHOLESALE AND RETAIL TRADE; REPAIR OF MOTOR-VEHICLES, MOTORCYCLES AND PERSONAL AND HOUSEHOLD GOODS	576 148	226 135	350 013	1 715 250	20.41
H	HOTELS AND RESTAURANTS	124 297	57 880	66 417	259 953	25.55
I	TRANSPORT, STORAGE AND COMMUNICATIONS	221 423	94 623	126 800	1 184 458	10.71
J	FINANCIAL INTERMEDIATIONS	115 894	47 403	68 491	559 103	12.25
K	REAL ESTATE, RENTING AND BUSINESS ACTIVITIES	650 020	230 151	419 869	2 589 066	16.22
L	PUBLIC ADMINISTRATION AND DEFENCE; COMPULSORY SOCIAL SECURITY	0	0	0	1 326 663	0.00
M	EDUCATION	81 838	29 330	52 508	778 988	6.74
N	HEALTH AND SOCIAL WORK	87 822	28 764	59 058	666 059	8.87
O	OTHER COMMUNITY, SOCIAL AND PERSONAL SERVICE ACTIVITIES	219 272	91 411	127 861	648 811	19.71
Total:		**2 748 013**	**1 103 496**	**1 644 517**	**14 841 289**	**11.08**

181. 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 and 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.

182. 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)

183. 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 3.19 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

184. 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.

185. 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).

186. 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

187. 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.

188. 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.

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

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

191. 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

192. 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.

193. 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.

194. The exhaustiveness estimations in the production side concentrate on the non-financial corporations sector and the Households sector. Most of the presumed seize of non-observed economy is based on the underreporting behaviour of small-sized enterprises, and enterprises with staff less than 10 employees.

195. Nevertheless, estimation of non-observed economy by production approach needs to be improved. In connection with the project on the integration of the SUT into the national accounts (see Chapter 6), we intend to develop the 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. 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.

Exhaustiveness estimation for type 2 corporations

196. This adjustment is necessary, because some 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.

197. 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.

198. It is found that:

- The fewer 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.

199. As a result, output derived from accounting data has been increased systematically by roughly 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

200. 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. The methodology based on business accountants estimations. A coefficient matrix was calculated for the IC/output ratio by 4 digit NACE level, by county. In 1997-2003 this ratio was used, but 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. So from 2004 a new exhaustiveness method was developed. It was supposed that the deposit partnerships avoid the corporate taxes, and the intermediate consumption of deposit partnerships -based on business accountants' estimations- was decreased systematically by 20%.

201. Tax evasion resulted from over-reported costs still exists mainly due to the high additional taxes imposed upon labour costs. 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 operating costs, which makes possible to avoid tax payments related to hidden labour costs.

202. For testing the estimations described in points n) and o) (see Chapter 3, paragraphs 121-122) several experimental calculations were made in the frame of a Eurostat Grant project on non-observed economy. Results showed that it is not feasible to replace the above-mentioned estimations in the near future. However, the introduction of industry-specific estimation methods in the calculations is considered as a possible way for further development.

Tips

203. 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 services
- 6022 Taxi operation
- 5530 Restaurants
- 5540 Bars

Gratuities

204. There is a widespread and tolerated illegal payment in the Hungarian health care system, called gratitude money, which creeps into the health care staff 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.

205. 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.

206. 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

207. 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

208. Enterprises provide various social welfare services to 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.

209. These data are not directly available from corporate profit 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

210. 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).

211. These data are not directly available from corporate profit 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

212. 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.

213. These data are not directly available from corporate profit 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 Office on wages in kind. (See Chapter 4.7)

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

214. 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

215. 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 in a hectic way 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.

216. 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.

217. 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)

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

Table 3.20 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**

219. Agricultural enterprises in the Non-financial corporations sector 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.

220. Small plots of households with any agricultural activity or sole proprietorships with tax number are qualified as private farms 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 m^2,
- the area of glass-house is 100 m^2 or more.

221. 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.

222. 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%.

223. 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).

224. 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.).

225. 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 omitted from agricultural industry in NA. The main data sources of adjustments are the corporate profit tax return forms and the SBS survey.

226. 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.

227. 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.

228. 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

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

230. In Hungary, calculation of the agricultural output is based on a detailed food balance sheets, which is compiled for most of the agricultural products (so-called "commodity flows") by the

Agricultural Statistics Department. The food 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 inventories
= 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

231. 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).

232. Agricultural output covers own account GFCF of animals, as well. The main source of calculation is the food balance of animals.

233. These food 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.

234. *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).

235. 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 resale or processing,

- the information coming from the sample survey on local markets.

236. 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).

237. 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 food balance sheets. Food 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.

238. Output is to be valued at basic prices. Agricultural food balance sheets are compiled at producer prices which excludes both taxes and subsidies on products. 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 accrual principle.

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

Measurement of intermediate consumption

240. 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)

241. 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.

242. 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 3.21 Sources and methods used for estimating IC of agriculture

Description	Sources and methods
SEEDS AND PLANTING STOCK	*Sources*: Statistical data collections on inputs of agricultural production, balance sheets of agricultural products, FADN *Method*: 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.
ENERGY; LUBRICANTS	*Sources*: Statistical data collections on inputs of agricultural production, FADN, data of national energy balance sheet. *Method*: 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.
FERTILISERS AND SOIL IMPROVERS	*Sources*: 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. *Method*: 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.
PLANT PROTECTION PRODUCTS AND PESTICIDES	*Sources*: 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. *Method*: 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
VETERINARY EXPENSES	*Sources*: Statistical data collections on inputs of the agricultural production, FADN, quarterly statistical data collections on the prices of veterinary products. *Method*: 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	*Sources*: Statistical data collections on inputs of the agricultural production, balance sheets of agricultural products, FADN, quarterly statistical data collection on prices of feeding stuffs. *Method*: 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	*Sources*: Statistical data collections on inputs of agricultural production, FADN. *Method*: 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	*Sources*: Statistical data collections on inputs of agricultural production, FADN. *Method*: 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	*Sources*: Statistical data collections on inputs of agricultural production, FADN, statistical data collections on agricultural and forestry services *Method*: Expert judgement by taking into account all data sources.
OTHER GOODS AND SERVICES	*Sources*: Statistical data collections on inputs of agricultural production, FADN. *Method*: 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.

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

244. Hunting and forestry have not been included in EAA, so output and intermediate consumption for these industries are estimated from their corporate profit tax returns. 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)

245. In Hungary, fishing activity is in fact of marginal importance 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 3.22 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**

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

Table 3.23 Calculation of gross value added of fishing (B), 2002 (million HUF)

Table 3.20	Net sales	Capitalised goods for own GFCF	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 purchased for resale			-1 177						-1 177	0
b) services purchased 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									-7	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**						**-1 383**	571
Terminated or transformed c			371						254	117
Missing comp.			-9						10	-19
Total			**362**						**264**	98
u) Re-classification of companies			0						0	0
v) Outward processing			0						0	0
w) Agricultural grossing up			120						120	0
x) 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)

247. 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. Mining and quarrying enterprises are classified to the Non-financial corporations and to the Households sectors.

Table 3.24 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**

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

Table 3.25 Calculation of gross value added of mining and quarrying (C), 2002, (million HUF)

Table 3.22	Net sales	Capitalised goods for own GFCF	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
Total			**88 441**						**55 196**	**33 245**
			Output P1						**Intermediate consumption P2**	**Gross value added B1g**
a) goods purchased for resale			-5 473						-5 473	0
b) services purchased 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
u) Re-classification of companies			0						0	0
v) Outward processing			0						0	0
w) Agricultural grossing up			0						0	0
x) 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)

249. 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. Concerning the level of gross value added the following industries are the most important: 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 3.26 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 807806
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 314301 816	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 3.27 Calculation of gross value added of manufacturing (D), 2002 (million HUF)

Table 3.24	Net sales	Capitalised goods for own GFCF	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 purchased for resale			-1 557 097						-1 557 097	0
b) services purchased 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 m) assets of small value									14 899	-14 899
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
u) Re-classification of companies										0
v) Outward processing			-85 737						-85 737	0
w) Agricultural grossing up			20 840						20 840	0
x) 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)

250. 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 3.28 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 3.29 Calculation of gross value added of electricity, gas and water supply (E), 2002 (million HUF)

Table 3.26	Net sales	Capitalised goods for own GFCF	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
Total			**2 038 365**	**483 032**					**1 577 588**	**460 777**
			Output P1						**Intermediate consumption P2**	**Gross value added B1g**
a) goods purchased for resale			-1 079 714						-1 079 714	0
b) services purchased 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 n) exhaustiv. 2			5 114							5 114
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
u) Re-classification of companies										0
v) Outward processing										0
w) Agricultural grossing up										0
x) 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)

251. Value added of construction amounted to HUF 774 349 million in 2002, which represented 5.2% of the total value added. Construction was carried out by Non-financial corporations, General government and Households sectors. The share of Households sector was quite high because of the importance of own account construction and renovation of dwellings. For more information about the main data sources used for estimation of output and intermediate consumption see Chapter 3.1.

Table 3.30 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**

252. In the Business statistics there is a special annual questionnaire for the structure of construction industry by type of structure groups.

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

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

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

256. Not all the recommendations of the GNP Committee Task Force on Construction (CPNB 202) related to exhaustiveness have been applied yet.

Some of the recommendations are included in our methodology, these are:

The business register is intensely used for checking the reliability of data for NACE Rev 1.1 45 activity. For calculating the output of the own-account construction of the Households sector, additional administrative data sources - the permits issued by the local governments – are used.

257. The following tasks are planned to deal with in the near future:

- 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.

3.12.1. Own account construction and renovation of dwellings

258. 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 industry F

259. Data sources:

- „Detailed data on the remit to use of dwellings" (1078/01 OSAP) report

- Dwelling Conditions 1999, a special, stratified sample survey, which covered about 0.2% of the total dwelling stock.

- Dwelling construction cost model elaborated in 1999 and updated quarterly by the Dwelling statisticians in the Social Statistics Department of HCSO.

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

261. Quantity data of own account construction of new dwellings are obtained from the dwelling statistics.

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

263. 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 (5.12.3.3.1.).

264. 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.

265. The calculated costs of each dwelling types include both the building material cost and the labour cost. In case of the own account construction the building material costs were deducted and only the unskilled labour costs were taken into account

266. In the case of unregistered construction activity of households the rate of Intermediate consumption/Output is lower that 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.

Table 3.31 Calculation of gross value added of construction (F), 2002 (million HUF)

Table 3.28	Net sales	Capitalised goods for own GFCF	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
Total			**2 496 656**						**2 036 132**	**460 524**
			Output P1						**Intermediate consumption P2**	**Gross value added B1g**
a) goods purchased for resale			-126 625						-126 625	0
b) services purchased 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 n) exhaustiv. 2			21 478							21 478
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
u) Re-classification of companies										0
v) Outward processing										0
w) Agricultural grossing up										0
x) 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**

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

267. Gross 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 3.32 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)		**1 682 481**	**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

268. Output of wholesale and retail trade services is measured by trade margin in accordance with ESA95. Regarding trade margins product specific data collection is not available but quite detailed data are available about trade activities and sales (CPA categories at six-digit level).

269. 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.

270. Not all the recommendations of GNP Committee related to exhaustiveness have been applied yet.

Table 3.33 Calculation of gross value added of wholesale and retail trade services (G), 2002 (million HUF)

Table 3.30	Net sales	Capitalised goods for own GFCF	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
Total			**13 732 376**						**12 337 391**	**1 394 985**
			Output P1						**Intermediate consumption P2**	**Gross value added B1g**
Adjustments a) goods purchased for resale			-10 496 400						-10 496 400	0
b) services purchased 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
u) Re-classification of companies										0
v) Outward processing			-338						-338	0
w) Agricultural grossing up			5 112						5 112	0
x) 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)

271. In 2002, the gross value added of hotels and restaurants amounted to HUF 259 953million, 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 of non-financial corporations see Chapter 3.1. and that of households see Chapter 3.3.4.

Table 3.34 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**

272. 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.

273. 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”.

274. Not all the recommendations of GNP Committee related to exhaustiveness have been applied yet.

3.14.1. Private accommodation activity of households

275. 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.

276. The main source of data is the questionnaire of the National Statistical Data Collection program (OSAP 1761) 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).

277. 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.

278. 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.

279. 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).

280. Intermediate consumption is calculated by means of IC/Output 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.

Table 3.35 Calculation of gross value added of hotels and restaurants (H), 2002 (million HUF)

Table 3.32	Net sales	Capitalised goods for own GFCF	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
Total			**385 892**						**265 480**	**120 412**
			Output P1						**Intermediate consumption P2**	**Gross value added B1g**
a) goods purchased for resale			-79 848						-79 848	0
b) services purchased 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 p) tips			9 475							9 475
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
u) Re-classification of companies										0
v) Outward processing										0
w) Agricultural grossing up			12						12	0
x) 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**

3.15. Transport, storage and communication (I)

281. 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. 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 GVA are the most important activities. The estimates of storage services include storage on behalf of other enterprises carried out by enterprises with storage as 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 engaged in storage as main activity are included.

Output was increased by the estimated value of tips in the class 6022 "Taxi operation". The basic source to estimate the volume of tips was a household survey conducted in 1997 by HCSO.

Table 3.36 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 3.37 Calculation of gross value added of transport, storage and communication (I), 2002 (million HUF)

Table 3.34	Net sales	Capitalised goods for own GFCF	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
Total			**2 809 579**						**1 798 990**	**1 010 589**
			Output P1						**Intermediate consumption P2**	**Gross value added B1g**
a) goods purchased for resale			-230 401						-230 401	0
b) services purchased 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							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
u) Re-classification of companies										0
v) Outward processing			-20						-20	0
w) Agricultural grossing up			9						9	0
x) 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)

282. In 2002, the gross value added of financial intermediation (J) amounted to HUF 559 103 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 3.38 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	305 777	0	305 777
66	Insurance and pension funding, except compulsory social security	140 617	0	140 617
67	Activities auxiliary to financial intermediation	42 871	47 787	90 658
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	366 673	0	366 673	2.5
66	Insurance and pension funding, except compulsory social security	93 076	0	93 076	0.6
67	Activities auxiliary to financial intermediation	31 247	68 107	99 354	0.7
Total (J)		**490 996**	**68 107**	**559 103**	**3.8**

3.16.1. The classification of financial corporations

283. 65.11 Central banking
This class includes the National Bank of Hungary.

65.12 Other monetary intermediation
This class consists of deposit-collecting financial institutions.

With the exception of the central bank, the subcategory includes banks, specialized credit institutions, credit co-operatives and money market funds within 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 within the investment enterprises.

66 Insurance and pension funding, except compulsory social security
The industry 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 industry contains institutions with a core activity of an auxiliary financial service closely related to financial intermediation activity. 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)

284. NACE 65.11 contains only the National Bank of Hungary. The data source is NBH aggregate profit and loss account its statement of operating expenditure.

Output

285. Other non-market output of the National Bank of Hungary is recorded as a sum of costs.

The calculation method is the following:
Other non-market output is the sum of P.2 Intermediate consumption, K.1 Consumption of fixed capital, D.1 Compensation of employees.

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

Table 3.39 Other non-market output of Central Bank, 2002 (million HUF)

P.2	Intermediate consumption	detailed profit and loss account of National Bank	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.1	Output	P.2+K.1+D.1	21 433

Intermediate consumption

286. Intermediate consumption covers material costs, cost of contracted services, cost of 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 3.40 Intermediate consumption of Central Bank, 2002 (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
P26	Expenses classified as wages and salaries in kind	Declaration of the liabilities against the budget	34
P28	Commission expenses	profit and loss account of National Bank	3 830
P2	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)

287. The production account is based on data collected by the Hungarian Financial Supervisory Authority.

Output

288. In 2002 the value of output was the following:

Table 3.41 Output of other monetary intermediation, (million HUF)

P.11	Financial activity	P.119+P.112	562 357
P.119	FISIM output	own estimation	373 841
P.112	Commission revenue and profit/loss of other financial transactions	Profit and loss account of credit institutions	188 516
P.12	Profit/loss of other business activities	Profit and loss account of credit institutions	-1 005
P.13	Items adjusting sales to valuation at basic-price	Corporate profit tax return	-8 176
P.14	Capitalised own performance	Corporate profit tax return	351
P.15	Imputed value of welfare services	Corporate profit tax return	484
P.16	Imputed value of own-produced services provided to employees	Corporate profit tax return	3 169
P.1	**Output**	**P.11+P.12+P.13+P.14+P.15+P.16**	**557 180**

289. Within the financial activities (P.11) FISIM (P.119) is an important item. FISIM is the financial intermediation services indirectly measured. It measures the service output of financial intermediation without an explicit fee, included in the amount of interest.

Total FISIM output of NACE 65 industry was split in 4 digit level FISIM producing classes as other monetary intermediation (S.122), financial leasing and other credit granting (S.123) based on the ratio of their loans and deposits.

FISIM methodology and its impact on the level of GDP and GNI is described in Chapter 9.

Holding gains and losses are not taken into account in the gross output of other monetary intermediation.

290. The P.112 contains the total of commission revenues from services and profit/loss of other financial transactions. Foreign exchange and security dealers' margins realized by other monetary financial intermediation are accounted as part of their output. P.112 contains payment and transaction commissions, guarantees, other fees and commissions.

291. The P.12 Other business activities contains P.121 Profit/loss of other business, non-financial activities including the profit and loss of non-financial and investment services and other revenues.

P.13 Items adjusting sales to valuation at basic price:

Product taxes

292. P.1363 Cultural contribution, the amount of which is taken from the “Declaration of the liabilities against the budget” tax return forms.

293. P.1365 The local business tax is a product tax payable also by financial enterprises with the exception of pension funds and insurance associations. The report on the execution of the budget contains the total amount of local business tax, of which we estimate an amount for the financial corporations sector. The local business tax calculated for the financial sector is distributed in proportion to the output among individual financial corporations.

294. In terms of P.14 Capitalised own performance the data reported on the corporate profit tax returns are used. Own-account GFCF includes the total (consolidated) amount of the capitalized value of own-account assets (recorded within assets) in the financial year. Similarly to non-financial enterprises, welfare services (P.15) and own produced services provided to employees (P.16) are also imputed in the case of other monetary intermediation.

Intermediate consumption

295. In 2002 the intermediate consumption of other monetary intermediaries is illustrated in the following table.

Table 3.42 Intermediate consumption of other monetary intermediation, (million HUF)

P.21	Material costs	Corporate profit tax return	14 612
P.22	Costs of contracted services	Corporate profit tax return	145 832
P.23	Costs of other services	P.231+P.232+P.233	21 292
P.231	Banking expenses	Corporate profit tax return	985
P.232	Insurance services used	Corporate profit tax return	689
P.233	Regulatory fees	Corporate profit tax return	19 618
P.26	Expenses classified as wages and salaries in kind	Corporate profit tax return	4 381
P.27	Cost of small tools	Corporate profit tax return	1 834
P.28	Commission expenses	Profit and loss account of credit institutions	53 992
P.291	Part of output of Central Bank	Profit and loss account of National Bank	18 466
P.2	**Intermediate consumption**	**P.21+P.22+P.23-P.26+P.27+P.28+P.291**	**251 647**

296. The P.21 Material costs and P.22 Costs of contracted services derive from the corporate profit tax return. P.22 “Costs of contracted services” included 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. This is not material cost referring to this sub-sector, this item consists of IT, accounting, renting, telecommunication services provided by another corporation.

297. P.23 Costs of other services = P.231 Banking expenses + P.232 Insurance services used + P.233 Regulatory fees.

The P.231 Banking expenses are also corporate profit tax return data. They contain those banking costs, which are recorded as fees and commissions payable. The P.232 Insurance services are estimated from insurance premiums paid by financial enterprises, which are corrected according to national account concept. The premiums payable 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 in ESA95. P.232 = P.2321 Insurance premiums paid multiplied by a coefficient. The estimation of the coefficient is based on insurance corporations claims / gross premiums ratio. This ratio is for covering risk and 1- claims / gross premiums has to be accounted as intermediate consumption.

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 profit tax returns.

298. The P.26 Expenses classified as wages and salaries in kind includes purchased goods and services provided 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. This item is recorded among the material-type costs in the profit and loss accounts of the enterprises, but in ESA95 it is a component of D.1.

299. Purchase of small tools are recorded as P.27. In business accounts cost of small tools below HUF 50 000, can be accounted in one lump sum. The Hungarian regulation defines a lower threshold which is used in the national accounts.

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

301. P.291 item comprises a proportional part Central Bank output, allocated to intermediate consumption of NACE 65 without NACE 6511 National Bank.

302. 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 Rev.1.1. 65.2)

Output

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

Table 3.43 Calculation of output of other financial intermediation, (million HUF)

Code	Item	Source	
P.119	FISIM output	own estimation	5 518
P.12	Other financial activity	P.121-P.122	89 320
P.121	Net sales revenues	Corporate profit tax return	272 915
P.122	Value of services purchased for resale	Corporate profit tax return	183 595
P.13	Items adjusting sales to valuation at basic price	P.1363+P. 1365	-1 431
P.1363	Cultural contribution	Corporate profit tax return	- 8
P.1365	Local business tax and tourism tax	Government statistics	- 1 423
P.14	Capitalised own performance	Corporate profit tax return	- 1
P.15	Imputed value of welfare services	Corporate profit tax return	57
P.16	Imputed value of own produced services provided to employees	Corporate profit tax return	374
P.1	**Output**	**P.119+P.12+P.13+P.14+P.15+P.16**	**93 837**

304. The other financial intermediaries (financial leasing enterprises, other credit granting outside the banking system, factoring companies, securities brokerage firms trading on their own accounts, etc.) are recorded on the basis of the corporate profit tax return of enterprises with double-entry and single-entry bookkeeping.

305. All enterprises dealing with lease, factoring, hire purchase or other credit granting activities are included in the financial corporations sector. These companies' credit granting activities are split to user sectors as at interest as at FISIM calculation. Division of households and enterprises is in line with

statistical requirements. Interest income and repayment of principal and FISIM are separated from the fee of leases and factoring, FISIM is deducted from the interest income of loans. In case of financial lease companies FISIM is accounted.

Accounting in 2002 is the following:

306. FISIM output is recorded as output for FISIM producers of NACE 65.2 and intermediate consumption for FISIM consumers. Total FISIM output of NACE 65 industry was split to various 4 digit level FISIM producing classes as other monetary intermediation (S.122), financial leasing and other credit granting (S.123) based on the proportion of their loans and deposits.

For the reference year 2002, there was no supervisory profit and loss statement information available for other financial intermediation classified NACE 65.2. These kind of enterprises were accounted based on corporate profit tax return items. Unit of observation is based on institutional level, not on activity level.

The second component of the output is P.12 Other financial activity. These data are available from the corporate profit tax return. The guidelines for completing corporate profit tax return contains 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 services.

P.121 Net sales revenue at NACE 65.2 consists of fees and commissions received from fund and portfolio management.

The value of services purchased for resale is also taken from the corporate profit tax return. P.122 Value of services purchased for resale at NACE 65.21 is the acquisition cost of sold vehicles against receivables by the financial leasing company.

P.13 Items adjusting sales to valuation at basic price**:**

Product taxes

307. P.1363 Cultural contribution: the amount is taken from the "Declaration of the liabilities against the budget" tax return forms.

308. P.1365 The local business tax is a product tax payable by financial enterprises with the exception of pension funds and insurance associations. The report on the execution of the budget contains the total amount of local business tax, of which an amount is estimated for the financial sector. The local business tax calculated for the financial corporations sector is distributed in proportion to the output of the individual financial corporations.

309. Under P.14 Capitalised own performance, the relevant figure reported on corporate profit tax return is used.

310. In terms of P.14 Capitalised own performance the data reported on the corporate profit tax return are used. Own-account GFCF includes the total (consolidated) amount of the capitalized value of own-account assets (recorded within assets) in the financial year. Similarly to non-financial enterprises, welfare services (P.15) and own produces services provided to employees (P.16) are also imputed in the case of other financial intermediation.

311. 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 3.44 Intermediate consumption of other financial intermediation, (million HUF)

Code	Item	Source	
P.21	Material costs	Corporate profit tax return	1 663
P.22	Costs of contracted services	Corporate profit tax return	24 288
P.23	Costs of other services	P231+P232+P233	5 434
P.231	Banking expenses	Corporate profit tax return	1 474
P.232	Insurance services used	Corporate profit tax return	315
P.233	Regulatory fees	Corporate profit tax return	3 645
P.24	Intermediated services	Corporate profit tax return	4 448
P.26	Expenses classified as wages and salaries in kind	Corporate profit tax return	690
P.27	Cost of small tools	Corporate profit tax return	82
P.291	Part of output of Central Bank	own estimation	2 967
P.292	FISIM consumed	FISIM calculation	3 829
P.2	**Intermediate consumption**	**P.21+P.22+P.23+P.24-P.26+P.27+ P.291+P.292**	**42 021**

312. P.21 Material costs and P.22 Costs of contracted services derive from the corporate profit tax return. P.22 “Costs of contracted services” includes 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. This is not material cost referring to this sub-sector, this item consists of IT, accounting, renting, telecommunication services provided by another corporation.

313. The P.231 Banking expenses are also corporate profit tax return data. They contain those banking costs, which are recorded as fees and commissions payable. The P.232 Insurance services are estimated from insurance premiums paid by financial enterprises, which are adjusted according to national account concept. The premiums payable 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 in ESA95. P.232 = P.2321 Insurance premiums paid multiplied by a coefficient. The estimation of the coefficient is based on insurance corporations claims / gross premiums ratio. This ratio is for covering risk and 1- claims / gross premiums has to be accounted as intermediate consumption.

314. 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 profit tax returns.

315. 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. P.24 is related to services intermediated and P.122 is related to goods. P.24 is in the NACE 65.2 consists of security trade commissions, fees and charges, custody charges and auditing fees.

316. P.26 Expenses classified as wages and salaries in kind consist of two components:
P.261 Purchased goods and services provided to employees and
P.262 Value of services of cars provided for the personal use of employees.

317. The P.26 item includes purchased goods and services provided to employees as wages and salaries in kind 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. This item is recorded among the material-type expenses in the profit and loss accounts of the companies, but in ESA95 this is part of GVA.

318. Purchases of small tools are recorded as P.27. in business accounts cost of small tools below HUF 50000, can be accounted in one lump sum. The Hungarian regulation defines a lower threshold which is used in the national accounts.

319. 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. Industry classified under NACE 66 Insurance

320. Enterprises engaged in insurance are classified in 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

321. 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 (HFSA).

3.16.3.2. Main data sources

322. The statistics of insurance services are primarily based on the data reported to the supervisory authority. The coverage in S.125 sub-sector is practically complete.

323. 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 adapting the EU accounting legislation.

324. The corporate profit tax return contains 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 against the general government and data referring to government subsidies.

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

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

326. 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. The tables contain the aggregate data of insurance corporations and insurance associations.

3.16.3.3.1. Life insurance

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

Table 3.45 Output of the life insurance business, data for 2002

	description	data source references	(million HUF)	
	A – INSURANCE ACTIVITY		Before exclusion of holding gains/losses	After exclusion of holding gains/losses
P.11	**Insurance activity**	**P.111+P.112-P.113-P.115+P.116**	76 992	79 290
P.111	Premiums earned	Profit and Loss account Life assurance business. B01.a.- 01.c – 07a	204 164	204 164
P.112	Adjusted premium supplements	P.1121*P.1122	56 672	56 672
P.1121	Premium supplements	Profit and Loss account Life assurance business .B02-B(11-11b) + Non technical account[(C01+C02+C03)*ß]+C05- (C07*ß)	59 408	59 408
P.1122	Adjustment coefficient: δ	1-(Balance sheet Liab. A./Balance sheet Liab. (A+C+D))	0,953946	0,953946
P.113	Claims due	P.1131+P.1132	72 772	72 772
P.1131	Claims payable	Profit and Loss account Life assurance business B05aa1.-B05ac.	72 301	72 301
P.1132	Changes in technical provisions against outstanding risks	Profit and Loss account Life assurance business B05ba.	471	471
P.115	Adjusted changes in technical and actuarial reserves	P.1151-P.1152	111 072	108 774
P.1151	Changes in technical and actuarial reserves	Loss account Life assurance business. B06.aa.+B06.ba+B06ca+B09.aa	111 072	111 072
P.1152	Holding gains/losses	Separate calculation	0	2 298
	B – OTHER ADJUSTMENTS			
P.13	**Items adjusting sales to valuation at basic price**	**P.1365**	**1 042**	**1 042**
P.1365	Local business tax and tourism tax	Government statistics	1 042	1 042
P.14	**Own production capitalised**	**Corporate profit tax return*ß**	**0**	**0**
P.15	**Imputed value of welfare services**	**(Declaration of the liabilities against the budget *0.097)*ß**	**35**	**35**
P.16.	**Imputed value of own produced services provided to employees**	**(Declaration of the liabilities against the budget *0.635)*ß**	**229**	**229**
P.1	**TOTAL OUTPUT**	**P.11-P.13+P.14+P.15+P.16**	**76 214**	**78 512**

Note: ß = 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.

328. 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:

329. 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.

330. 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). 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. 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 statement. 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. Unrealised gains/losses shown in the profit and loss account probably belong to investments held for linked life policies, where the investment risk is borne by policy holders. Accordingly there is no deduction concerning unrealised gains/losses in case of non-linked non-participating life business.

331. 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.

332. 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. This methodological improvement was implemented in September 2009.

333. The following table illustrates the effect of exclusion of holding gains/losses from the insurance technical reserves on the output of life insurance business.

Table 3.46 Treatment of holding gains/losses in case of insurance technical reserves 2002, (million of HUF)

	type of life insurance			
	linked participating	**non-linked non-participating**	**total life insurance**	
	type of technical reserve			
	unit-linked reserves	*other mathematical reserves*	*total life insurance technical reserves*	*total insurance technical reserves*
Change in life insurance technical reserves	30 542	80 530	111 072	
Life insurance technical reserves in the balance sheet	281 197			1 650 482
Ratio of unit linked reserves and total insurance reserves	17.04%			
Realized holding gains/losses	-131	-637	-767	
Non-realized holding gains/losses in the P&L	2 428		2 428	
Adjusted change in life insurance technical reserves	28 244	80 530	108 774	

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

335. P.13 “Items adjusting sales to valuation at basic price”:
P.1365 “Local business tax” is 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 corporations in the financial corporations sector.

336. P.14 “Own production capitalised” contains the figure reported also in the corporate profit tax returns. Own production capitalised shall include the total amount of the capitalised goods for own GFCF in the financial year, and the change in own-produced stocks.

337. 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.)

338. For the calculation of the P.16 “Imputed value of own produced services provided to employees” a coefficient is used. In this case the calculation is based on the own produced services and wages and salaries in kind (preferential insurance premiums, management of insurance policies free of charge) provided 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 wages and salaries in kind. 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

339. 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 3.47 Output of the non-life insurance business line, data for 2002

	description	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 account Non-life business A01.a.-01.c - 06.a	291 523
P.112	Adjusted premium supplements	P.1121*P.1122	17 430
P.1121	Premium supplements	Profit and Loss account Non technical account [(C.01+ C.02 + C.)*(1-ß)]- [C. 07*(1- ß)] + Non-life business A03+ A05aa + A05ba + A05ca + 07	18 144
P.1122	Adjustment coefficient: δ	1-(Balance sheet Liab. A./Balance sheet Liab. (A+C+D))	0,960648
P.113	Claims due	P.1131+P.1132	170 731
P.1131	Claims payable	Profit and Loss account Non-life business. A04aa1.-A04ac (claims management costs, shown as separate item in Hungarian accounting) – A10	150 708
P.1132	Changes in technical provisions against outstanding risks	Profit and Loss account Non-life business. A04 ba.	20 023
	B – OTHER ADJUSTMENTS		
P.13	**Items adjusting sales to valuation at basic price**	**P.1365**	**218**
P.1365	Local business tax and tourism tax	Government statistics	218
P.14	**Own production capitalised**	**Corporate profit tax return*(1-ß)**	**56**
P.15	**Imputed value of welfare services**	**(Declaration of the liabilities against the budget *0.097)*(1-ß)**	**42**
P.16.	**Imputed value of own produced services provided to employees**	**(Declaration of the liabilities against the budget *0.635)*(1-ß)**	**275**
P.1	**TOTAL OUTPUT**	**P.11-P.13+P.14+P.15+P.16**	**138 377**

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

340. 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.

341. 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 dividends 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). 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.

342. 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 equalization provisions are reported in the line P.115 "Changes in insurance technical provisions" and not in P.1131 "Changes in technical provisions against outstanding risks". Since 2004 the item "claims payable" has been corrected by the item "equalization provisions". Claims management expenses are not included in claims incurred, this type of expenses is recorded as a separate item in the profit and loss account and can be easily deducted.

343. P.13 "Items adjusting sales to valuation at 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.

344. P.14 "Own production capitalised" contains the figure reported also in the corporate tax declarations. Own production capitalised shall include the total amount of the capitalised goods for own GFCF in the financial year, and the change in own-produced stocks.

345. 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.)

346. For the calculation of the P.16 "Imputed value of own produced services provided to employees" a coefficient is used. In this case the calculation is based on the own produced services and wages in kind (preferential insurance premiums, management of insurance policies free of charge) 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 wages in kind. 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

347. 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 on the basis of expert estimation 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.

3.16.3.3.4. Reinsurance

348. The following scheme is applied for the calculation of reinsurance:

Table 3.48 Calculation of reinsurance balance, 2002 (million HUF)

Code	description	Data source	Non-life	Life	total
I.	Premium transferred to reinsurers	Profit & Loss Account	63 812	22 508	**86 320**
II.	Share or reinsurers in the change of provisions for unearned premium (+/-)	Profit & Loss Account	1 209	37	**1 246**
III.	Share of reinsurers in the expenditure related to claims (-)	Profit & Loss Account	20 534	11 598	**32 132**
IV.	Share of reinsurers in the change of provisions for outstanding claims (+/-)	Profit & Loss Account	3 720	85	**3 805**
V.	Share of reinsurers in the change of actuarial and other technical provisions (+/-)	Profit & Loss Account	10	1	**11**
VI.	Reinsurance commission (-)	Profit & Loss Account	15 915	3 283	**19 198**
P.28	***Reinsurance balance***		*22 424*	*7 504*	***29 928***

349. 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

350. 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 3.49 Output of voluntary pension funds, 2002 (million HUF)

Code	description	data source	
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.1111	Members' contributions	Profit and Loss Account	28 439
P.1112	Employer's contributions, support,	Profit and Loss Account	42 656
P.112	Contribution supplements	Profit and Loss Account	31 686
P.113	Payment of services	Cash flow	14 963
P.115	Change in technical provisions	separate calculation	81 295
P.12	**Revenues from non-fund activities**	Profit and Loss Account	**8**
P.15	**Imputed value of welfare services**	**Declaration of the liabilities against the budget**	**1**
P.16.	**Imputed value of own produced services provided to employees**	**Declaration of the liabilities against the budget *0.635**	**6**
P.1	**TOTAL OUTPUT**	**P.11+P.12+P.15+P.16**	**6 537**

Table 3.50 Output of private pension funds, 2002 (million HUF)

Code	description	data source	
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.1111	Members' contributions	Profit and Loss Account	102 393
P.1112	Employer's contributions, support, donations	Profit and Loss Account	2 956
P.1113	Subsidies to unemployed members	Profit and Loss Account	54
P.112	Contribution supplements	Profit and Loss Account	37 243
P.113	Payment of services	Cash flow	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**	**Declaration of the liabilities against the budget *0.097**	**1**
P.16.	**Imputed value of own produced services provided to employees**	**Declaration of the liabilities against the budget *0.635**	**6**
P.1	**TOTAL OUTPUT**	**P.11+P.12+P.15+P.16**	**10 733**

The first component of the output is P.11 "Pension fund activity", consisting of the following items:

352. The item P.111 "premiums" in case of voluntary mutual pension funds contain the amounts for membership contributions paid by members, employer's membership contributions, other contributions of members, received regular support, and individual donations. 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.

353. 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). Pension funds can separate 4-5% of pension contributions to cover their operational costs, the remaining part of pension contributions they should record on the account of their members. As a result of this fact we assume that the property income generated from investments

of provisions is a property income of members and there is no adjustment 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.

354. 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).

355. P.115 “Change in technical provisions”
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.

356. 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.

357. The calculation applied to P.15 “Imputed value of welfare services”, and P.16 “Imputed value of own produces services provided 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

358. 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 3.16.3.3.5 for the voluntary mutual pension funds.

Table 3.51 Output of voluntary health and income-replacement funds, 2002 (million HUF)

Code	description	data source	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	Profit and Loss Account	884	1 387
P.1112	Employer's contributions, support, donations	Profit and Loss Account	2 697	6 448
P.112	Contribution supplements	Profit and Loss Account	48	493
P.113	Payment of services	Profit and Loss Account	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**	**Declaration of the liabilities against the budget *0.097**	**0**	**0**
P.16.	**Imputed value of own produced services provided to employees**	**Declaration of the liabilities against the budget *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

359. Estimation of intermediate consumption is based on the information in the declaration of liabilities against the government, as well as on the data of the corporate profit tax return in the case of insurance companies and insurance associations and of profit and loss accounts in the 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 3.52 Data sources for intermediate consumption in the branch 66

Code	Description	Data source	
		Insurance companies	**funds**
P.21	Material costs	Corporate profit tax return	P&L
P.22	Costs of contracted services	Corporate profit tax return	P&L
P.23	Costs of other services	Corporate profit tax return	P&L
P.24	Value of goods and services purchased for resale	Corporate profit tax return	P&L
P.26	Expenses classified as wages and salaries in kind	P.261+P.262	
	Purchased goods and services provided to employees	Declaration of the liabilities against the budget	
P.262	Value of services of cars provided for personal use of employees	Declaration of the liabilities against the budget	
P.27	Cost of small tools	Corporate profit tax return.	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.29**	**P.21+P.22+P.23+P.24-P.26+P.27**

360. P.21 Material costs shall include the original cost of purchased raw materials used during the financial year.

361. P.22 “Costs of contracted services” included 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. This is not material cost referring to this subsector, this item consists of IT, accounting, renting, telecommunication services provided by another corporation.

362. 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.

363. 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 back marked) 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.

364. P.26 “Expenses classified as wages and salaries in kind” contain the P.261 “Value of purchased goods and services provided 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 goods and services provided 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.)

365. Fixed assets, rights, titles and intellectual property are recorded as P.27 Cost of small tools, if the purchase or production value of each item is below a specific threshold, as they are expensed straight away, in one lump sum. There was a methodological change with the aim 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 (for detailed description see Section 3.3.1.1. Adjustments point m_j).

366. The P.28 “Reinsurance balance” line contains the reinsurance balance calculated in accordance with the method described in section 3.16.3.3.4.

367. The P.29 item comprises proportional part of FISIM treated as intermediate consumption of FISIM consumers. For NACE 6602 and 6603 health and income replacement funds there is no FISIM allocated, because they did not have loans and deposits in a significant amount, they had investments mainly in securities, which have no FISIM.

Table 3.53 Intermediate consumption of the branch 66, 2002 (million HUF)

Code	6601	6602	6603	6603
	insurance companies and associations	pension funds	insurance companies and associations	Income-replacement- and health funds
	life business		non-life business	
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	263	3
P.262	134	15	191	1
P.27	68	5	194	18
P.28	7 504	0	22 424	0
P.29	409	0	744	0
P.2	**46 595**	**15 195**	**79 049**	**931**

3.16.3.5. Summary

368. On the basis of the guideline above, the following table shows the calculation of the gross value added of division 66:

Table 3.54 Gross value added of branch 66, 2002 (million HUF)

ESA code	Data for 2002
P.1 total	235 991
P.2 total	-141 770
B.1g total	**94 221**

3.16.4. Activities auxiliary to financial intermediation (NACE 67)

3.16.4.1. Activities auxiliary to financial intermediation NACE 67.1 (except insurance)

369. This NACE category contains the following entities: 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 3.55 Output NACE 67.1, 2002 (million HUF)

ESA code	Description	Data source	NACE 67.11	NACE 67.12	NACE 67.13	Total
P.12	Other financial activity	P.121-P.122	3 871	12 994	17 169	34 034
P.121	Net sales revenues	Corporate profit tax return	3 871	13 094	101 838	118 803
P.122	Value of goods purchased for resale	Corporate profit tax return	0	100	84 669	84 769
P.13	Items adjusting sales to valuation at basic price	Corporate profit tax return	- 43	- 216	- 504	-763
P.14	Capitalised own performance	Corporate profit tax return	0	- 4	694	690
P.15	Imputed value of welfare services	Corporate profit tax return	6	5	2	13
P.16	Imputed value of own produced services provided to employees	Corporate profit tax return	40	32	11	83
P.1	**Output**	**P.12+P.13+P.14+P.15 +P.16**	**3 874**	**12 811**	**17 372**	**34 057**

370. The main data source is the following: Budapest Stock Exchange in 67.11 is recorded on the basis of its corporate profit tax return, similarly to institutional units classified in NACE 67.12.

371. Institutional units classified to 67.12 are recorded on the basis of the data of corporate profit tax return of enterprises with double-entry and single-entry bookkeeping.

372. The first component of the output is P.12 Other financial activity. These data are available in the corporate profit tax return. According to experts experiences, enterprises classified to NACE 67.1 "Activities auxiliary to financial intermediation" units item. P.121 Net sales revenues consist mainly of fees and commissions of fund and portfolio management.

373. The value of goods purchased for resale is P.122: for enterprises classified at NACE 67.1 consists of purchase price of trading securities.

374. P.13 Items adjusting sales to valuation at basic price:

Product taxes

375. P.1363 Cultural contribution: the amount is taken from the "Declaration of the liabilities against the budget" tax return forms.

376. P.1365 The local business tax is a product tax payable by financial corporations 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 financial corporations sector is divided in proportion to the output of the individual financial corporations.

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

378. 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

379. The majority of economic organizations 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.

380. 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.

381. Their output is equal to the total operating expenditures, but we are planning to revise our accounting method, because for example the fees on deposit insurance activity of the National Deposit Insurance Fund significantly exceed its production costs.

3.16.4.1.2. Intermediate consumption NACE 67.1

Table 3.56 Detailed intermediate consumption NACE 67.1,2002 (million HUF)

ESA code	Description	Data source	NACE 67.11	NACE 67.12	NACE 67.13	Total
P.21	Material costs	Corporate profit tax return	210	191	2 601	3 002
P.22	Costs of contracted services	Corporate profit tax return	656	2 061	4 608	7 325
P.23	Costs of other services	P231+P232+P233	140	301	388	829
P.231	Banking expenses	Corporate profit tax return	72	36	117	225
P.232	Insurance services used	Calculated by coefficient	11	17	56	84
P.2321	Insurance premium paid	Corporate profit tax return	27	43	141	211
P.233	Regulatory fees	Corporate profit tax return	57	248	215	520
P.24	Intermediated services	Corporate profit tax return	82	2 833	2 180	5 095
P.26	Expenses classified as wages and salaries in kind	Corporate profit tax return	46	76	41	163
P.27	Cost of small tools	Corporate profit tax return	5	5	73	83
P.292	FISIM consumed	FISIM calculation	0	316	0	316
P.2	**Intermediate consumption**	**P.21+P.22+P.23+P.24-P.26+P.27+P.292**	**1 047**	**5 631**	**9 809**	**16 487**

382. The P.21 Material costs and P.22 Costs of contracted services derive from the corporate profit tax return. P.22 “Costs of contracted services” included 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. This is not material cost referring to this sub-sector,

this item consists of IT, accounting, renting, telecommunication services provided by another corporation.

383. The P.231 Banking expenses are corporate profit tax return data. The P.232 Insurance services used are based on P.2321 Insurance premiums paid by enterprises which are adjusted 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.

384. 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 profit tax return.

385. A P.26 Expenses classified as wages and salaries in kind consist of two parts:
P.261 Purchased goods and services provided to employees and
P.262 Value of services of cars provided for the personal use of employees.

386. The P.26 item Wages and salaries in kind contains purchased goods and services provided 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 goods and services provided to the employees by the employer, but are not necessarily required for the production activities of the employers.

387. Fixed assets, rights, titles and intellectual property are recorded as P.27 Cost of small tools, 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.

388. P.292 item FISIM treated as intermediate consumption of FISIM consumers.

389. 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

390. 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)

391. 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

392. 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 and non-legal entities applying single or double-entry bookkeeping).

3.16.4.2.3. Output calculation method

393. The output of organisations performing activities auxiliary to insurance is calculated on the basis of the following table:

Table 3.57 Output of activities auxiliary to insurance, 2002 (million HUF)

Code	Definition	Data source	Double-entry bookkeeping	Single-entry bookkeeping
P.12	**Other financial activity**	**P.121-P.122**	**37 146**	**4 485**
P.121	Net sales revenues	Corporate profit tax return	37 956	4 485
P.122	Value of goods purchased for resale	Corporate profit tax return	810	0
P.13	**Items adjusted sales to valuation at basic price**	**P.1365**	**1 089**	**589**
P.1365	Local business tax and tourism tax	Government statistics	1 089	589
P.14	**Own production capitalised**	**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 produced services provided 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**

394. A P.12 "Other financial activity" is the first component of the output, and it is based on P.121 "Net sales revenues". 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.

395. P.122 Value of goods purchased for resale: (see: 3.16.4.2.3.) is deducted from the sales revenues to calculate P.12.

396. 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 3.16.3.3.).

3.16.4.2.4. Calculation of intermediate consumption

397. 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 3.58 Intermediate consumption of branch 67.2, 2002 (million HUF)

Code	Definition	Data source references	Double-entry bookkeeping	Single-entry bookkeeping
P.21	Material costs	Corporate profit tax return	1 337	1 548
P.22	Costs of contracted services	Corporate profit tax return	9 657	0
P.23	Costs of other services	Corporate profit tax return	895	1 347
P.24	Intermediated services	Corporate profit tax return	11 981	0
P.26	Expenses classified as wages and salaries in kind	P.261+P.262	171	30
P.261	Purchased goods and services provided to employees	Declaration of the liabilities against the budget	37	0
P.262	Value of services of cars provided for personal use of employees	Declaration of the liabilities against the budget	134	30
P.27	Cost of small tools	Corporate profit tax return	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

398. On the basis of the description above, the following table shows the calculation of the gross value added of the group 67.2:

Table 3.59 The gross value added of the branch 67.2, (million HUF)

ESA code	**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)

399. In 2002 the gross value added of real estate, renting and business activities was HUF 2 589 066 million, which constituted 17.4% of the total value added. 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 3.60 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	154 046	129	19 726	173 901
73	Research and development	26 227	25 026	1 562	52 815
74	Other business activities	605 660	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**

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

401. The figures on research and development activities derive from institutional units classified under NACE code 73. No special methodology has been developed yet for measuring research and development services for own use within the same enterprise, or carried out by units as secondary activities. So the figures recorded on the table do not include the research and development secondary activities of industries doing significant own 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.

Renting of fixed assets

402. Renting of fixed assets are recorded in accordance with Annex II of ESA.

403. Operational leasing rents paid to the lessor are recorded as output (P.1) of the leasing service in the 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 final consumption expenditure (P.3).

404. The value of rents paid for 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 the principal and of interest payment, both related to the imputed loan.

405. Financial and operational leasing is considered in Hungarian business accounting similarly to the methodology in ESA95.

406. Domestic services provided by private persons such as cleaners, chairwomen, butlers, cooks, maids, drivers, gardeners, governesses, secretaries, tutors, au-pairs and baby-sitters are accounted mainly 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.

407. 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. The consumption expenditure of households on domestic and household services (COICOP code 05.6.2.) is used for extrapolation, 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.

Table 3.61 Calculation of gross value added of real estate, renting and business activities (K), 2002 (million HUF)

Table 3.58	Net sales	Capitalised goods for own GFCF	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
Total			**3 502 377**						**2 420 639**	**1 081 738**
			Output P1						**Intermediate consumption P2**	**Gross value added B1g**
a) goods purchased for resale			-562 491						-562 491	0
b) services purchased 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**
u) Re-classification of companies			-189						-5 765	5 576
v) Outward processing										0
w) Agricultural grossing up			220						220	0
x) 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

408. Dwelling services are estimated by the following categories:

- actual rent for
  - local government owned dwellings
  - private dwellings
- imputed rent for
  - owner-occupied dwellings.

409. In Hungary, over 90 percent of the dwellings stock (in square meter) is privately owned. The share of actually rented dwellings is small, representing around 6 percent. Out of this, about half of it is rented at market rate.

Table 3.62 The distribution of occupied dwellings (m²) in Hungary by type of occupation in 2002

	Privately owned, owner-occupied	Privately owned, private rented	Government owned, rented	**Total**
Stock (thousand m²)	265 136	7 282	7 649	**280 066**
%	94.67	2.60	2.73	**100.0**

410. The difference between the levels of two types of rentals is significant and it is assumed that the difference will not diminish in the coming years. On the other hand it is assumed that the present situation, when most of rented dwellings concentrate in the capital and other major cities, may change within a definite period.

Table 3.63 Different types of rents figures, HUF/month/m²

Year	Private	Government
2002	668	172

411. The output of dwelling services of actual rented and owner-occupied dwellings consists of three elements:

- CFC
- Intermediate consumption
- Net operating surplus

3.17.1.1. Dwelling stock and CFC

412. To estimate the consumption of fixed capital, dwelling stock data was compiled by using the population census and data of the dwelling survey of 1999.

413. The dwelling stock is split in 28 types by regions, comfort levels, and other characteristics of the dwellings. The method used to calculate the stock value for the dwellings is mainly similar to the one used to estimate the annual investments in dwelling (5.12.3.3.1.). The model applied to estimate the stock value also used to calculate the costs of those dwelling types, which are not built any longer.

The gross value of the stocks could be constituted from the construction costs and from the physical data (m^2) of selected dwelling types. The dwelling stock was categorized by sector and vintage on the basis of the results of the valuation.

414. The age group structure and service lives estimation are based on the Population Censuses and the dwelling survey of 1999. The service life was estimated taking into account the changes in the number of existing dwellings by age groups. The sample survey in 1999 contained questions concerning the actual, stock market values. The ratio of the net/gross value was estimated by vintages, by experts. Census data make periodical revisions on the ratio of the net and gross asset value possible. Starting from these data, experts estimated the level of deterioration.

415. The value of annual discards is estimated indirectly, as the residual of the changes in gross value of stocks and the investments in dwelling. The vintage structure of discards is estimated on the basis of the information of the annual report of local governments on annual dwelling discards (OSAP 1076).

416. Value of dwellings contains the value of garages and holiday homes, no matter if they are inhabited or not.

417. Additional information available to account the changes in the stocks of dwellings are: new dwelling investments, privatization, major improvements, changes in stocks due to disaster or collapse, utilization of the dwelling for non-dwelling purposes etc.) The investment price index for dwelling construction is used to revaluate the stock.

418. Estimation procedure for the current year is as follows:

a) The closing gross and net values on the stock of previous year are revalued by the investment price indices of construction to current prices.

b) In each age group the gross capital stock at the end of current year is calculated as the revalued gross stock + investment – discard +/- other stock modifying items.

$Y_t = Y_{t-1}$+ Investment (t) +/- Stock modifying items (t) – Discard (t)

where Y is the gross stock and both year are converted in current year prices.

c) 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 service lives data.

d) The changes of the net stock value for the current 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.

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 service lives).

Yt = Yt-1+ Investment (t) +/- Stock modifying items (t) - (Yt-1/ARL)

where Y is the net stock, both year are converted in current year prices and ARL is the average remaining service lives.

Table 3.64 Capital Stock of dwellings in 2002 at current prices (2003.01.01), (million HUF)

Year of construction	Total		Private - Households		Government	
	Gross	Net	Gross	Net	Gross	Net
-1900	**2 503 950**	**355 404**	2 409 086	341 832	94 864	13 572
1900-19	**2 398 568**	**383 938**	2 307 392	369 236	91 176	14 702
1920-44	**4 372 133**	**905 116**	4 205 846	870 514	166 287	34 602
1945-59	**3 989 775**	**1 456 130**	3 837 598	1 400 543	152 177	55 587
1960-69	**6 148 383**	**2 537 125**	5 914 066	2 440 494	234 317	96 631
1970-79	**8 958 840**	**5 144 704**	617 466	4 948 988	341 375	195 716
1980-89	**8 120 672**	**5 357 568**	7 811 305	5 153 867	309 367	203 701
1990 -	**3 989 614**	**3 224 601**	3 854 592	3 118 979	135 022	105 622
Total	**40 481 935**	**19 364 586**	**38 957 351**	**18 644 454**	**1 524 584**	**720 132**

419. CFC of dwellings is calculated by data of net capital stock. Linear depreciation function is applied on the basis of average remaining service lives.

CFC 2002 = NET CAPITAL STOCK of 2003.01.01 at 2002 prices - NET CAPITAL STOCK of 2002.01.01 at 2002 prices - Investment 2002 - Stock Modifying Items 2002

Table 3.65 CFC of dwellings, 2002 (million HUF)

	Private	Government	Total
NET CAPITAL STOCK of 2003.01.01 at 2002 prices	18 644 454	720 132	19 364 586
-NET CAPITAL STOCK of 2002.01.01 at 2002 prices	18 416 178	734 406	19 150 584
- Investment of 2002	595 501	18 420	613 921
-Stock Modifying Items of 2002	17 358	-17 358	0
Consumption of fixed capital of 2002	**384 583**	**15 336**	**399 919**

420. The estimation of dwelling services is based on data of inhabited dwellings, which data came from population census.

Table 3.66 The value of net stock and CFC of inhabited dwellings, 2002, (million HUF)

	Net value of stock	CFC
Total dwellings (see Table3.64. and 3.65)	19 364 586	399 919
Total inhabited dwellings	**17 428 127**	**359 928**
Of which: owner-occupied dwellings	16 267 868	335 579
local government owned, rented dwellings	648 119	13 803
privately owned, private rented dwellings	512 140	10 547

3.17.1.2. Expenditure on maintenance and repairs of dwellings

421. The estimates on maintenance and repairs are based on Household Budget Survey. HBS includes two separate rows, one for regular (minor) and one for irregular (major) maintenance 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.

422. 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.

423. For the separation the Household Budget Survey is used (see table 3.67). First, the expenditure on maintenance and repairs per rented dwelling (e) is calculated by the quotient of the total amount of maintenance and repairs of rented dwellings (b) and the number of rented dwellings (d), both are coming from HBS. 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 (e) is multiplied by the number of owner-occupied dwellings (f). This amount (g) is recorded as household final consumption expenditure.

424. 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 (h).

Table 3.67 Distribution of the maintenance and repairs of the dwellings

Items		**2002**
Total expenditure on maintenance and repairs - COICOP 4.3 of HBS (million HUF)	(a)	96 598
Of which: total expenditure on small maintenance and repairs of rented dwellings (million HUF) – from HBS	(b)	3 535
Number of dwellings (million) – from HBS	(c)	3,7476
Of which: number of rented dwellings (million) – from HBS	(d)	0,2557
Maintenance and repairs per rented dwellings (HUF/dwelling)	(e)=b/d	13 828
Number of owner-occupied dwellings (million) – from HBS	(f)=c-d	3.4919
Total expenditure on small maintenance and repairs of owner-occupied dwellings (million HUF) = *Household final consumption*	(g)=e*f	48 285
Total expenditure on minor maintenance and repairs of owner-occupied dwellings, recorded as intermediate consumption (million HUF)	(h)=a-b-g	44 778

425. After this process, the total expenditure on minor maintenance and repairs of owner-occupied dwellings (h) is recorded as intermediate consumption for owner-occupied dwelling services.

426. The total expenditure on small maintenance and repairs of rented dwellings (b) is divided between local government owned and privately rented dwellings using the share of the appropriate dwelling category to their total stock in square meter and recorded as intermediate consumption for rented dwelling services. It was assumed that the expenditure on small maintenance and repairs per one square meter of owner-occupied dwelling is the same as the expenditure on small maintenance and repairs per one square meter of rented dwellings. So, 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 and privately owned, private rented dwellings. The calculation process is shown in Table 3.68.

Table 3.68 The expenditure on maintenance of rented dwellings in 2002

Item		Data for 2002
Expenditure on small maintenance and repairs on owner-occupied dwellings – COICOP 4.3 from HBS million HUF (see Table 3.67 (a)-(b) = 96 598 - 3535 M HUF)	(a)	93 063
Stock of owner-occupied dwellings in thousand m² (see Table 3.62)	(b)	265 136
Expenditure on small maintenance and repairs on owner-occupied dwellings per one m² - thousand HUF	(c) = a/b	0.351
Stock of local gov.owned, rented dwellings in thousand m² (see Table 3.62)	(d)	7 649
Expenditure on small maintenance and repairs on local gov. owned, rented dwellings - million HUF	(e)=c*d	**2 685**
Stock of privately owned, private rented dwellings - in thousand m² (see Table 3.62)	(f)	7 282
Expenditure on small maintenance and repairs on privately owned, private rented dwellings – million HUF	(g)=c*f	**2 556**
Expenditure on small maintenance and repairs on all rented dwellings – million HUF	*(h)=e+g*	***5 241***

427. There is another element of the expenditures on maintenance and repair: the other services relating to the dwellings. It contains estate tax, co-proprietor charges for caretaking, gardening, stairwell cleaning, heating and lighting, maintenance of lifts and refuse disposal chutes, etc. in multi-occupied buildings. The estimation of these elements is based on Household Budget Survey data (COICOP 04.4.4). The total amount of it is built into the estimation of intermediate consumption of rented and owner-occupied dwellings. The total amount is distributed among the different sub-sectors using the relevant shares in square meter (see Table 3.62).

Table 3.69 Other services relating to the dwellings in 2002

	Share of dwellings to the total dwelling stock (in m²), %		Million HUF
Total other services relating to the dwellings - COICOP 04.4.4 of HBS			**71 522**
of which: owner-occupied dwellings	94.67	(a)	67 709
local government owned, rented dwellings	2.73	(b)	1 953
privately owned, private rented dwellings	2.60	(c)	1 860

428. The estimated intermediate consumption for maintenance and repairs (based on COICOP 4.3) and other services (based on COICOP 4.4.4) of owner-occupied and rented dwellings can be seen in Table 3.70.

Table 3.70 Intermediate consumption for maintenance and repairs of the dwellings in 2002 (million HUF)

	Maintenance and repairs (COICOP 4.3)	Other services (COICOP 4.4.4)	**Total IC for maintenance and repairs**
Owner-occupied dwellings	44 778	67 709	**112 486**
Local government owned, rented dwellings	2 685	1 953	**4 638**
Privately owned, private rented dwellings	2 556	1 860	**4 415**

3.17.1.3. Valuation of rented dwellings – actual rent

3.17.1.3.1. Local government owned dwellings

429. The output of the services of local government owned dwellings is estimated using average rent and total square meter data of rented dwellings (c). The estimation of CFC (d) is described in Chapter 3.17.1.1., while the estimation of intermediate consumption (e) is in Chapter 3.17.1.2. Rent data (g) 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.

Table 3.71 Dwelling services for local government owned rented dwellings, 2002

Square meter of local government owned rented dwellings (thousand m^2)	(a)	7 649
Average rent m^2/month/HUF	(b)	172.3
Total dwelling services (million HUF)	c = a*b*12	**15 817**
Of which: CFC – million HUF	(d)	13 803
Intermediate consumption - million HUF	(e)	4 638
Net operating surplus - million HUF	(f) = c-d-e	-2 623
Rent paid by the tenants - million HUF	(g)	7 478

430. Rents actually paid by the tenants are recorded as final consumption expenditures of households and the, while subsidies are recorded as social transfers in kind from the government.

431. 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.

3.17.1.3.2. Privately rented dwellings

432. 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 total 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.

433. The estimation of CFC (d) is described in Chapter 3.17.1.1., while the estimation of intermediate consumption (e) is in Chapter 3.17.1.2.

Table 3.72 Dwelling services for privately owned rented dwellings, 2002

Square meter of privately owned rented dwellings (thousand m^2)	(a)	7 282
Average rent m^2/month/HUF	(b)	668
Total dwelling services (million HUF)	c = a*b*12	**58 370**
Of which: CFC	(d)	10 547
Intermediate consumption	(e)	4 415
Net operating surplus	(f) = c-d-e	43 408
Rent paid by the tenants = (c)		58 370

3.17.1.4. Valuation of owner occupied dwellings by the user cost method

434. 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.

435. 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.

436. The next Task Force 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.)

3.17.1.4.1. Data sources and methods

437. The estimation of owner-occupied dwelling services applying the user cost method is built of the following elements in Hungary:

Table 3.73 Elements of user cost method

UC01	Consumption of fixed capital (on owner-occupied dwellings) valued at current prices
UC05	Expenditures on maintenance and repair of owner-occupied dwellings
UC08	Net insurance premiums paid by owner occupants; estimated by (UC06) - (UC07)
UC11	Average value of net stock of owner-occupied dwellings, valued in current prices
UC14	Average value of land associated with owner-occ. dwell. in curr. prices
UC16	Value of net (mortgage) debt on owner-occupied dwellings and associated land
UC18	Net stock of dwellings and land (net of loans) - (UC11+UC14)-UC16
UC18/a	Fixed (2.5%) rate for real return
UC19	Imputed real return on owner-occupied dwellings and associated land - UC18*UC18/a
UC23	**Imputed rental value of services of owner-occupied dwellings, (estimated thus: UC01 + UC05 +UC08 + UC19)**

3.17.1.4.2. Consumption of fixed capital (UC01)

438. The value of CFC of inhabited owner-occupied dwellings was 335 579 million HUF in 2002 (for more information see Chapter 3.17.1.1, Table 3.66).

3.17.1.4.3. Expenditures on maintenance and repair (UC05)

439. The expenditures on maintenance and repair of owner-occupied dwellings was 112 486 million HUF in 2002 (for more information see Chapter 3.17.1.2, Table 3.70).

3.17.1.4.4. Insurance premiums and claims (UC08)

440. The estimation of insurance of dwellings is based on reports of insurance companies and the gross output of non-life insurance services which is 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. The estimated value of net insurance premiums paid by owner-occupants was 18 188 million HUF in 2002.

3.17.1.4.5. Average value of net stock (UC11)

441. The average value of net stock of inhabited owner-occupied dwelling was 16 267 868 million HUF in 2002 (for more information see Chapter 3.17.1.1, Table 3.66).

3.17.1.4.6. Average value of land (UC14)

442. The accurate estimation of land is very difficult having in mind how much it is influenced by many different factors of the real estate market. The rate provided by a research institute that is specialised in the rehabilitation of many districts in Budapest was accepted. 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. The estimated average value of land associated with owner-occupied dwellings was 3 253 547 million HUF in 2002.

3.17.1.4.7. Value of (mortgage) debt (UC16)

443. 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. The value of net (mortgage) debt on owner-occupied dwellings and associated land was 605 960 million HUF in 2002.

3.17.1.4.8. Imputed real return (UC19)

444. 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.

3.17.1.4.9. Detailed results of the user cost method

Table 3.74 Estimation of owner-occupied dwelling services applying the user cost method with a fixed (2.5%) real ROR

Item		2002
UC01	Consumption of fixed capital (on owner-occupied dwellings) valued at current prices; (million HUF)	335 579
UC05	Expenditures on maintenance and repair of owner-occupied dwellings; (million HUF)	112 486
UC08	Net insurance premiums paid by owner occupants; estimated by (UC06) - (UC07); (million HUF)	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; (million HUF)	472 887
UC23	**Imputed rental value of services of owner-occupied dwellings, (estimated thus: UC01 + UC05 +UC08 + UC19); (million HUF)**	**939 140**

3.17.1.4.10. The allocation of FISIM and its effect on imputed rent

445. After introducing the user cost method into the Hungarian National Accounts the new FISIM regulation came into force (Commission Regulation (EC) No 1889/2002 of 23 October 2002, on the implementation of Council Regulation (EC) No 448/98 completing and amending Regulation (EC) No 2223/96 with respect to the allocation of financial intermediation services indirectly measured (FISIM) within the European System of national and regional Accounts (ESA)) that is why it was necessary to update the calculation taking into account the effect of FISIM allocation. The allocation of FISIM had

impact on the HFC figures in two ways. First, the FISIM allocated to the households as consumers were recorded (205 976 million HUF). 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 3.75 The estimation of owner-occupied dwelling services with FISIM (million HUF)

Denomination	2002
Consumption of fixed capital	*335 579*
Intermediate consumption	*156 294*
Of which:	
Net insurance	18 188
Maintenance and repair	112 486
FISIM	25 620
Net operating surplus	*472 887*
Gross output of owner-occupied dwelling services (imputed rent)	**964 760**

3.17.1.4.11. Plans for improvements

446. 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)

447. 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.

Table 3.76 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**

448. Main data sources used for the estimation of output and intermediate consumption are described in Chapter 3.1.3, valuation in Chapter 3.2.3 and adjustments in Chapter 3.3.3.

3.19. Education (M)

449. The gross value added of education was HUF 778 988 million in 2002, which accounted for 5.2% of total value added. 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 3.77 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**

Unregistered education activity of households[7]

450. 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).

451. 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.

452. The Household Budget Survey includes information on education expenditures, 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 3.78 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

453. 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.

454. 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/Output ratio is much less in this field than those in other forms of education.

[7] Unregistered activity includes activity of private individuals with tax number registered in BR (see Chapter 3.1.2.1).

Table 3.79 Calculation of gross value added of education (M), 2002 (million HUF)

Table 3.69	Net sales	Capitalised goods for own GFCF	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
Total			**63 836**						**42 397**	**21 439**
			Output P1						**Intermediate consumption P2**	**Gross value added B1g**
a) goods purchased for resale			-5 576						-5 576	0
b) services purchased 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 n) exhaustiv. 2			1 242							1 242
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
u) Re-classification of companies										0
v) Outward processing										0
w) Agricultural grossing up			175						175	0
x) 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**

3.20. Health and social work (N)

455. 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. Each sector (except financial corporations) took part in it, 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 3.80 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**

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**

Gratitude money

456. 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.

457. 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. Based on this survey's data a detailed model was established for estimating tips (gratitude money) on health services. The model operated with the estimated amounts of gratitude money by types of treatment. 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".

Table 3.81 Calculation of gross value added of health and social work (N), 2002 (million HUF)

Table 3.72	Net sales	Capitalised goods for own GFCF	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
Total			**138 237**						**77 547**	**60 690**
			Output P1						**Intermediate consumption P2**	**Gross value added B1g**
a) goods purchased for resale			-13 519						-13 519	0
b) services purchased 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
u) Re-classification of companies										0
v) Outward processing										0
w) Agricultural grossing up			166						166	0
x) 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**

3.21. Other community, social and personal service activities (O)

458. 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. 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, 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 3.82 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**

459. In order to improve exhaustiveness output is increased by the estimated value of tips. The basic source to estimate the value of tips is the result of a household survey conducted by HCSO in 1997. The adjustment is made in class 9302 (Hairdressing and other beauty services).

Table 3.83 Calculation of gross value added of other community, social and personal service activities (O), 2002 (million HUF)

Table 3.74	Net sales	Capitalised goods for own GFCF	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
Total			**595 317**						**353 110**	**242 207**
			Output P1						**Intermediate consumption P2**	**Gross value added B1g**
a) goods purchased for resale			-24 653						-24 653	0
b) services purchased 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) winnings from lottery or gambling			-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						Intermediate consumption P2	Gross value added B1g
Adjustments n) exhaustiv. 2			9 063							9 063
o) exhaustiv. 3									-5 608	5 608
p) tips			1 314							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
u) Re-classification of companies										0
v) Outward processing										0
w) Agricultural grossing up			4						4	0
x) 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)

460. In Hungary these activities are regarded as insignificant. The methodological improvement to estimate these activities is in progress. At this time the GVA coming from these activities are recorded in industry K.

3.23. Extra territorial organizations and bodies (Q)

461. Except diplomatic corps there are no extraterritorial bodies in Hungary and vice versa. Goods and services purchased by these diplomatic corps in Hungary are accounted as exports. The services provided by Hungarian embassies abroad are accounted for in the output of the central government.

3.24. Taxes on products (D.21)

462. Payments on producing or selling goods and services are classified into taxes on products. Taxes on products are taxes payable per unit of goods and services produced or transacted.

463. The items classified as taxes on products (D.21) in 2002 are as follows:

Table 3.84 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		Report on the execution of the Budget Ministry of Finance's data
D.212C	Excise duties on imported products		Report on the execution of the Budget Ministry of Finance's data
D.212D	Environment protection fees on imported products		Report on the execution of the Budget Ministry of Environmental Protection's data
D.214	**Taxes on products, except VAT and import taxes**		**D.214A+...+D.214L**
D.214A	*Excise duties on domestic products*		Report on the execution of the Budget Ministry of Finance's data
D.214A1	Excise duties		Report on the execution of the Budget Ministry of Finance's data
D.214A2	Alcohol production duty		Report on the execution of the Budget Ministry of Finance's data
D.214B	Stamp duties		Report on the execution of the Budget Ministry of Finance's data
D.214C1	Duty on acquisition of property		Report on the execution of the Budget Ministry of Finance's data
D.214E	Cultural contribution		Report on the execution of the Budget Ministry of Cultural Heritage's data
D.214F	Gambling tax		Report on the execution of the Budget Ministry of Finance's data
D.214H1	Contribution on tourism		Report on the execution of the Budget Ministry of Economy and Transport's data
D.214I	*Turnover taxes*		*D.214I1+... D.214I5*
D.214I1	Breeding contribution		Report on the execution of the Budget Ministry of Agriculture's data
D.214I2	Tax on horse-race		Report on the execution of the Budget Ministry of Agriculture's data
D.214I3	Contribution on game-preserving		Report on the execution of the Budget Ministry of Agriculture s data.
D.214I4	Contribution to develop fishery		Report on the execution of the Budget Ministry of Agriculture's data
D.214I5	Contribution to forest maintenance		Report on the execution of the Budget Ministry of Finance's data
	Taxes payable to local governments		**D.214C+D.214I6+ D.214H2**
D.214C2	Duty on acquisition of property		Report on the execution of the Budget 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		Report on the execution of the Budget Ministry of Environment Protection's data.
D.214J	Contribution to Nuclear Fund		Report on the execution of the Budget Ministry of Finance's data

Table 3.85 Taxes on products (million HUF) 2002

	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

464. The data source for recording taxes and subsidies is mainly the report on the execution of the Budget Reporting; submitted to Parliament each year.

465. 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 (TAC) to convert the cash data of taxes and social contributions to accrual data.

466. Only taxes actually received and subsidies actually paid are recorded in this account, so our tax data should not be adjusted with the amount of taxes not collected.

467. As a basic principle we use one month's time adjustment (shifting backwards) for taxes and social contributions.

468. No time adjustment is applied in case of some tax types. Examples include customs duties, where liabilities must be paid within 5 days after the decision is disclosed. We do not apply time adjustments for taxes on sales or turnover or specific goods and services, since it is not justified by either the amount of taxes or the annual change of liabilities.

469. In case of *local government taxes* we use the cash method. Concerning 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. The details of the specific arguments for adjusting or not the cash figures of various tax types will be explained when describing the different types of taxes

470. Consumption tax is levied on vehicles registered in Hungary or the volume of roasted 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).

471. Stamp duties paid for administrative procedures initiated by enterprises for the production of specific goods have been classified under taxes on products since 2003.

472. Taxes related to the process of production or services provision are included in other taxes on production. 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.

473. 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 aggregated data are available.

Some important tax types

Import duties (D.212A)

474. Customs burden is a liability determined and imposed by customs office, which is levied on private individuals, farmers and other organizations, who import/export dutiable goods. Customs have to be settled before inland release in accordance with customs tariff imposed on product. Elements of customs revenue:

Table 3.86. Customs revenue (million HUF) 2002

Total customs revenue	*129 341*
of which customs and clearance costs	89 501
surcharges	1 526
customs guarantee	34 660
payments by inhabitants	3 610
statistical and import pass duty	44

Taxes are collected by the customs office on the basis of taxpayers' own declarations.

Excise duties on imported products (D.212B)

475. 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 jewelleries,
- passenger cars,
- roasted coffee, coffee extract.

Taxes are collected by the customs office on the basis of taxpayers' own declarations.

Duty on acquisition of property (D.214C)

476. The liability occurs at the time of the acquisition of a property.

Taxpayer: the legal or natural entities who acquire movable estate (acquisition of movable estate in e.g. at an auction) or real estate property, selected intangible assets, e.g. a 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 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 contracts, gifts, inheritance are treated unitedly by the Hungarian laws, however, revenues for the latter two items are recorded as D.91.

Table 3.87 Duties on acquisition of property (million HUF) (2002)

Duty	Central government	Local government	Total
Sum of property on acquisition duty	40 343	39 772	80 115
of which inheritance (D.91A) (S.14)	3 365	3 200	6 565
gifts (D.91A) (S.14)	1 063	1 072	2 135
duty on acquisition of property:	35 915	35 500	71 4 15
of which: on motor vehicles	5 674	5 110	10 784
on real property	30 241	30 300	60 541
Allocation of duty on acquisition of property (D.214C)	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 centimetre 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 (Tax Office) 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.

Environment protection fee (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 (Tax Office), 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 jewelleries,
- passenger cars,
- roasted coffee, coffee extract.

Time adjustment: one month.

487. Taxes are collected by the Tax 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 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. This heading of taxes is collected by the customs office on the basis of taxpayers' o 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 3.88 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 Hungarian product classification.

Time 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 3.89 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 burdens 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 in one amount in order to extinguish tax liabilities. It includes both VAT and profit tax. As the value VAT may be dominant, it is classified to taxes on products.

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. 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)

500. Its content is the same as mentioned above in respect of the Duty on acquisition of property **(**D.214C). The amount collected is divided among local governments and the central government, as determined by the annual Act on Budget.

Tax on company sales (D.214I1)

501. The tax is linked to the sales of the firm.

502. 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.

503. 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.

504. 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.

505. 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.

506. 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.

507. Data sources 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)

508. The VAT on goods and services is collected in stages by enterprises and which is ultimately charged to the final purchasers. .In Hungary tax rates are 25, 12 or 0%.

509. Data sources and figures in 2002:

Table 3.90 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)**		Report on the execution of the budget , Ministry of Finance

Table 3.91 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**

510. 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 with 0% rate are basic medicines, medicine ingredients, aid assets of handicapped and blind people and textbooks.

511. There are certain types of sales of goods 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.

512. 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).

513. 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.

514. 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.

515. Enterprises engaged in *tourism* pay VAT on the basis of their trade margin.

516. 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* 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.

517. 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)

518. Subsidies on products are subsidies payable per unit of a good or service produced or imported. 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.

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.

519. The EU regulation (2516/2000 Council 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 in few subsidies.

520. HCSO classified the following items as subsidies on products (D.31.) in 2002:

Table 3.92 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		Report on the execution of the Budget Ministry of Agriculture
D.319	**Other subsidies on domestic products**		**D.3191+…. D.3199**
D.3191	Individual subsidy		Report on the execution of the Budget Ministry of Finance
D.3193	Agricultural market subsidy		Report on the execution of the Budget Ministry of Agriculture.
D.3194	Subsidy on public service activities of radios and televisions		Report on the execution of the Budget Parliament's data
D.3195	Subsidy to eliminate forest damages		Report on the execution of the Budget Ministry of Agriculture's data.
D.3197	*Market access subsidy*		*D.31971 - D.31972*
D.31971	Market access subsidy		Report on the execution of the Budget Ministry of Agriculture's data.
D.31972	Repayment of market access subsidy		Report on the execution of the Budget Ministry of Agriculture's data.
D.3198	Subsidy to decrease agricultural production costs		Report on the execution of the Budget Ministry of Agriculture's data.
D.3199	Subsidy based on fixed area and yields		Report on the execution of the Budget Ministry of Agriculture's data.
	Subsidy payable by local governments		
D.3192	Subsidy on passenger transport		Report on the execution of the Budget Local governments' data
D.3196	**Subsidies from extra-budgetary funds**		**D.31963 + D.31964**
D.31963	Subsidy from the cultural fund		Report on the execution of the Budget Ministry of Culture's data.

Table 3.93 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**
D.3121	*Direct subsidy on exports*		*4201*	*-2184*	*2017*
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
D.3197	*Market access subsidy*		*18988*	*6282*	*25270*
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
D.3196	**Subsidies from extra-budgetary funds**		*882*		*882*
D.31963	Subsidy from the cultural fund		882		882

Subsidy on agricultural products (D.3193)

521. Intra-annual government subsidy to manage market problems of sales of agricultural products and live animals.

522. 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.

523. 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)

524. Among these subsidies there are 25 various legal titles and aims.

525. 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.

526. The reimbursement of market access subsidy (D.31972) is recorded as negative subsidy.

527. 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)

528. 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 public passenger transport (D.3192)

529. Social assistance benefits in kind (D.6313) are defined in paragraph 4.105 of ESA. Accordingly, subsidies on ticket sales of enterprises engaged in public passenger transport and calculated according to the number of persons transported are classified among social assistance benefits in kind.

530. 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 (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. 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	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

4.1. The reference framework

3. 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 taxes on production less subsidies on production. Compensation of employees, taxes and subsidies are estimated directly using various 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. The income components are calculated in the same industry and sector classifications as the production approach.

4.2. Valuation

4. The sources available for the estimate of GDP from the income approach generally use concepts and valuation criteria similar to those established in ESA95. However, in several cases (such as remuneration in kind, certain taxes, and insurance transactions) some adjustments are made to record income transactions correctly 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 declarations and Structural Business Survey (SBS) contain the figures which are the sources used for compiling income transactions. These declarations include data deriving directly from business accounting. The data can be used after the necessary adjustments only.

6. The information required for making these adjustments are available from corporate tax declarations , personal income tax declarations, liability and subsidy declaration forms, SBS, and other administrative data.

7. For the General government sector, most data are obtained from the annual reports of the budget institutions. Concerning enterprises classified to the general government sector, besides data coming from government sources corporate profit tax declarations and SBS data are also used.

4.4. The roles of direct and indirect estimation method

8. Most income transactions 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 from corporate profit 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 production side. Operating surplus of the General government sector is calculated on the basis of direct information which 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 is defined as the total remuneration in cash or in kind, payable by an employer to an employee in return for work done by the latter during the accounting period (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:

- basic wages and salaries paid at regular intervals;

- cost of living allowances, local allowances and expatriation;

- enhanced rates of pay for overtime, night work, weekend work disagreeable or hazardous circumstances;

- 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;
- exceptional 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 goods 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;
- price reduction obtained in free or subsidised canteens 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 rates of interest (ESA 95, 4.04.)

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	551287	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;
- Administrative data from government.

4.7.1.1.1. Corporate profit tax declarations

18. In 2002, approximately 200,000 enterprises with double-entry bookkeeping, 100,000 enterprises with single-entry bookkeeping submitted detailed profit tax declarations and 24,000 enterprises submitted simplified corporate tax declarations to the tax authority.

19. 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 state tax authority.

20. Enterprises keep their books and compile 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

21. 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

22. 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

23. Enterprises submit declarations 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 structural business survey (SBS)

24. Under the National Statistical Data Collection Program (OSAP) the enterprises involved in the survey are obliged to supply information. Each enterprise with more than 49 employees must submit a complete 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

25. The employment statistics has been harmonised with the Eurostat requirements in the past years. This is why monthly and annual employment reports have been integrated into STS and SBS, the employment indicators have been modified, 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

26. 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 (TAC) 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

27. The compilation of compensation of employees relies primary on corporate profit tax declarations. 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.

28. The HCSO's own data collection covers a limited group of large enterprises (depending on the number of employees). In the case of these enterprises, figures on employment and wages are compared with the relevant data of 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 by elementary level.

30. The figures on employment and wages coming from different sources are compared at individual enterprise level. If the difference is higher than 20%, the reason of the difference is scrutinized.

4.7.1.2.1. Schematic accounting of compensation of employees

31. Calculating compensation of employees, Payroll expenses (D.1111) in line with national law on Accounting are taken from the tax declaration Other personnel-type expenses .(D.11121) are also taken from the tax declaration, but this category contains 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	Unemployment insurance	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**

* There was a further split of ESA-codes.

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 actual 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 compensate employees in cash – as cost reimbursement – for tools, overalls used during production activities. However, these expenditures are not accounted as 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 cost reimbursement is deducted from other personnel-type expenses (D.11121), while it is added to (P.2) intermediate consumption.

39. Hungarian SBS provide 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. SBS covers enterprises with more than 49 employees. Therefore, smaller enterprises do not directly provide data on occasional cost reimbursement amounts. However, not surveyed enterprises were supposed to pay cost reimbursements, too.

41. As a first step, a multiplier as an average is estimated, then, cost reimbursements are calculated by using this multiplier for those 44 percent PIT (personal income tax) paying enterprises which do not submit annual SBS 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 goods 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 goods 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 goods and services, the value of purchased goods 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 the Hungarian national accounts four such items are distinguished as described below.

D.11211 Value of own products and services received from the employer

48. The annual SBS provides data on the value of own produced goods products and services given to employees by the employer.

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.

Coefficient of own produced products and services: LALA068/JAJ0M045=0. 425
Where LALA068=benefit from own production
JAJOM045= personal income tax paid by the enterprise

D.11212 Value of purchased products and services transferred via the employer

50. The annual SBS contains the purchase value of goods and services transferred to employees less reimbursements (PHAF008), with which amount the intermediate consumption of the enterprise is reduced and in-kind wages and salaries are increased.

51. Similarly to the estimate of own production, for those enterprises which are not in the SBS survey but reported personal income tax on in kind benefits, benchmark estimates are 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 are done based on the SBS 1999 data.

Coefficient for estimating purchased products and services:
PHAF008/JAJ0M045=0.197
Where PHAF008 = purchase value of goods and services transferred to employees less reimbursements
JAJOM045= personal income tax paid by the enterprise

D.1122 Welfare services

52. The value of social, welfare and in-kind benefits of employees less reimbursements is available from the annual SBS (PHAF009). Welfare services increase both the market output (P.1) 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 are done based on the Labour Cost Survey(LCS) data for 2000. This coefficient was applied in 2002.

Coefficient used for estimating welfare services:
LALA013/JAJ0M045=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. The estimate on the interest difference of preferential loans relies 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 costs accounted as representation and business gifts (JAJ0M084). 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 business cars for private purposes

56. The value of use of business cars 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 obtained from detailed calculations. JAJ0M050*3.937

The procedures used for estimating this item 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, corrected to the accrual-based (TAC) data of the government statistics.

58. In corporate profit tax declarations, payroll taxes contain the contributions payable by enterprises on the basis of the number of employees and the payroll and other personnel-type expenses.

59. The employer's contribution to vocational training and to rehabilitation are deducted from wage contribution and recorded as other taxes on production.

D.1212 Unemployment insurance

60. Unemployment insurance is paid to Labour Market Fund by the employer. Labour Market Fund is an autonomous state fund created by an integration of Solidarity Unemployment Fund, Employment

fund, Rehabilitation Fund and Wage Guarantee Fund. The purpose of this Fund is to finance tasks and programmes related to employment, unemployment and to develop training schemes. The data available from APEH 0203 declaration are corrected to the accrual-based (TAC) data of the government statistics.

D.1213 Employer's contribution to voluntary mutual insurance fund

61. The figures reported in the Labour Cost Survey, the "other personnel-type expenses" are reduced. The amounts paid to voluntary mutual insurance funds and private pension funds by employers for employees, 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 contribution to sickness benefit expenses is a separate item. The "other personnel-type expenses are reduced with the corrected accrual-based data and the reduction is 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. The amount paid as pension under early retirement scheme is deducted from "other personnel-type expenses" 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 as sick leave benefit

64. The contribution to amounts paid by the enterprise as sick leave benefits and the contribution to the fund of sickness benefits is reported in one amount, in one line, as employment cost. The figures coming from Labour Cost Survey are adjusted with the contribution to the sickness benefit fund (D.11124; Government statistics, separate item), and then they residual is 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 transmitted from the State Tax Authority 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) Tax declarations substituted by SBS
These are enterprises, whose tax declarations were not received by the HCSO in a given year due to some reason, but they submitted SBS report. E.g. enterprises employing prison inmates do not fall under the scope of the Companies Act, therefore information about such companies is only available from SBS.

(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 in case of small limited liability companies and enterprises with single-entry bookkeeping
The effects on the compensation of employees of the corrections described in the production approach of non-financial enterprises are accounted here.

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 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. Their payroll expenses and social security contributions are estimated on the basis of their previous year's figures.

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 comprehensive census, but in 2001 and in 2002 it was a representative survey.)

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 sales 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 of 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 Financial intermediation	66 Insurance,-pension fund	67 Financial supplementary activity	J branch 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
E/ Profit and loss account data of supervisory reports

Ad/A Corporate tax declarations (0229 and 0228 APEH forms)

75. In case 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 contribution to vocational training and rehabilitation).

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 social security 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. Figures are taken from the employment statistics 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 goods and services transferred to employees, and the income 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

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 (TAC), therefore our data originating from other sources are adjusted to the figures of government statistics.

Ad/E Profit and loss account submitted to supervisory authority

79. In case of pension funds and voluntary mutual insurance funds the annual reports submitted to the Hungarian Financial Supervisory Authority (HFSA) are used for the calculation of the compensation of employees, 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.

4.7.2.2. Accounting of compensation of employees

80. Apart from a few exceptions described in the next section, it is identical with the method applied to non-financial enterprises (see point 4.7.1.).

4.7.2.2.1. Financial and non-financial enterprises account compensation of employees with the following differences:

- The expenditure on goods and services that employers provide to their employees during the work, are usually not accounted among the personnel-type expenses of financial intermediaries.

- All enterprises in the financial sector keep their books according to the rules of double-entry and single-entry bookkeeping, and compile 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).

- There are some slight differences in the methodology of estimating in-kind benefits.

4.7.2.2.2. In-kind benefit in the financial sector

81. In kind benefits not recorded among personnel expenses in the administrative data, so they should be imputed within 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 (goods, services, etc.), which is not reimbursed. 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 business cars is also an in-kind benefit, and as the tax on such income is a separate item in the tax declaration too, a separate estimate is made on it.

84. The following items are recorded as in-kind benefits:

a) Value of own produced goods and services provided to employees (eventual fees deducted)

b) Value of purchased goods and services provided 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 are the declarations on tax and contribution liabilities, in which the 44% personal income tax is recorded.

86. In order to separate the three categories (own produced and purchased goods and services transferred to employees and welfare services), the data of the Labour Cost Survey for 2002 was used.

87. 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, the calculations are 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. **(1)** Value of own produced goods and services provided 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.

90. 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.

91. 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.

92. 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			

93. **(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.

a) Costs reimbursed in relation to the job (LALA016), which amounted to HUF 2,029,171,000 in our sample,

b) 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,

c) 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.

94. 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.

95. 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	Cost reimbursed	Other in-kind	Training fee	Total
	in-kind benefits	in relation to jobs	Incomes	language learning support	
	(PAJ0M045)	(LALA016)	(LALA018-066-067-068)	(60% of LALA073)	
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				

96. **(3)** Imputed value of welfare services
We relied on the following data for the calculation:

a) Welfare and cultural expenses (LALA013) taken from the Labour Cost Survey, amounting to HUF 384,866,000 in 2002.

b) 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.

97. 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.

98. 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	Welfare and cultural expenses
	(PAJ0M045)	(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	

99. **(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.

100. **(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.

101. The only information available for our calculations was the so-called company car tax paid to the state budget by the financial enterprises.

102. 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).

103. 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.

104. 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

105. 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.

106. 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.

107. 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.

108. 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.

109. 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.

110. 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					
Data/1 car	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

111. At present we consider the application of this estimating method acceptable.

112. **(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

113. 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 comply with ESA categories.

114. 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.

115. 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, the value of benefits is estimated 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 x 02/21)x 21/01 / 02/09	10 953
M15	Pension fund contribution and insurance supplements	02/20 x 21/01 / 02/09	10 550
M16	Welfare services	Labour cost survey	16 527
M17	Personal income tax paid by the employer	03/45 x 21/01 / 02/09	8 242
0M18	Accrual adjustment	(53/15-53/14) x 21/01 / 02/09	38 494

4.7.3.2. Employer' social contribution

116. 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

117. 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) x 21/04 / 02/56	11 775

4.7.4. Households sector (S14)

4.7.4.1. Employees of sole proprietors

Wages and salaries

118. Though wages and salaries paid by sole proprietors to their employees should be included in the personal income tax declaration of sole proprietors, the total amount of these data is not reliable, 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 9 673 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 figures of SBS.

119. Using the yearly average earnings regarding the total economy is the way of correcting the deficiencies due to underreporting the number and wages of the employees.

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

120. For the year 1999, the number of employees from the personal income tax declarations by industries was used 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.

121. Since 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. 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

122. 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 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

123. The main source for the social security contributions is the report of the Social Security Funds. Employers' social contributions (for pension insurance or health insurance) and wage proportional health insurance contributions are obtained from the Social Security Funds. In the 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 the sole proprietors themselves. 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

124. Estimates in the sector of NPISHs are based on the above-described annual survey data. Information on wages and salaries and personnel-type expenses as well as employers' actual social contributions is assumed to be correct. The estimation is direct for compensation of employees, both the remuneration of temporary or casual labour input is accounted.

125. We have good information about the largest institutions based on administrative sources or on other surveys we make the follow-up verifications of the non-profit survey results individually for this group.

126. Besides data verification and grossing up procedures there are no corrections performed regarding these variables.

127. For the purpose of making the data comprehensive, initially a system of multipliers was applied based on the responding organizations, but later the HCSO 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.

128. 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.

129. Concerning the activity of churches and their religious institutions a separate survey serves also as a direct source for the estimations.

130. Other exceptions are political parties in case of which we calculate compensation of employees on the basis of their published fiscal report by using the indices of the employment statistics.

131. 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

132. 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.

133. 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.

134. 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	*Wage bill and payroll taxes*		*D.2911+D.2912*
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	*Wage bill and payroll taxes*		*21 292*	*96*	*21 388*
D.29C1	Training contribution	1 month	18 480	72	18 552
D.29C2	Rehabilitation contribution	1 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)

135. A contribution paid in order to ensure the functioning of vocational training 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)

136. The aim of the contribution is to promote the employment of people with ability 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).

137. Time adjustment of the cash figures: in the case of "Training contribution" and "Rehabilitation contribution" one month time adjustment is used.

138. 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 to change 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)

139. 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

140. 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.

141. 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	***Subsidies on payroll and workforce***		**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	***Subsidies on intermediate consumption***		**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	***Other subsidies***		**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	***Subsidies on payroll and workforce***		***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	***Subsidies on intermediate consumption***		***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	***Other subsidies***		**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)

142. 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 increase in employment.

Subsidies on employment of handicapped persons (D.3912)

143. 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)

144. 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)

145. 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

146. The gross operating surplus is a residual of income from production. Compensation of employees and other taxes on production are deducted from gross value added and other subsidies on production are added. In non-market production, gross operating surplus is identical to consumption of fixed capital because it generates no operating surplus.

147. 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

148. Mixed income is the income of unincorporated enterprises owned by households to which the owners contribute with their labour inputs that cannot be separated from the operating surplus. It covers the income of production of household for own final use, as well.

149. The mixed income of Households sector is a balancing item and calculated as follows:

+ Gross value added
- Compensation of employees
- Other taxes on production
+ Other subsidies on production
Mixed income

Table 4.23 Mixed income, 2002 (million HUF)

		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	406 866	16 818	658	9 286		398 676
B	Fishing	145	40	5			100
C	Mining and quarrying	192	104	1			87
D	Manufacturing	149 132	51 173	769			97 190
E	Electricity, gas, steam and water supply						
F	Construction	275 285	31 475	517			243 293
G	Wholesale and retail trade; repair of motor vehicles; motorcycles and personal and household goods	410 181	110 026	1 352			298 803
H	Hotels and restaurants	105 579	42 424	347			62 808
I	Transport, storage and communications	118 619	26 102	448			92 069
J	Financial intermediation	68 107	4 997	146			62 964
K	Real estate, renting and business activities	1 330 835	34 302	1 390		808 466	486 677
L	Public administration and defence; compuls. social Security						
M	Education	65 537	5 218	95			60 224
N	Health and social work	125 667	65 246	514			59 907
O	Other community, social and personal service Activities	241 958	65 534	161			176 263
P	Private households with employed persons						
Q	Extraterritorial organizations and bodies						
	Industries, total	**3 298 103**	**453 459**	**6 403**	**9 286**	**808 466**	**2 039 061**

4.12. Consumption of fixed capital

150. Consumption of fixed capital (CFC) is estimated by sectors, industries and types of fixed assets using the new replacement value of the capital stock and the expected average economic life of the different categories of those assets. The estimation is based on the statistical survey of the capital stock on the reference date 1. January 2000. These initial data are extrapolated for the following years.

4.12.1. Data sources, methods of Capital Stock valuation

151. The revaluation of the non-financial assets from gross book-keeping value to replacement cost was made by using either 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.

152. Empirical information was used for valuation of stock for certain types of assets. In these cases the specific acquisition costs of the reference year were multiplied 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.

153. Sufficiently detailed data were available on the assets of agricultural units from 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. Data on dwellings in natural units was available from dwelling surveys; indicating the adaptation of the empirical value relations.

4.12.1.1. Corporation sector (Financial and non-financial corporations)

154. A sample survey (OSAP1800) was carried out on the tangible fixed assets owned by financial and non-financial corporations. The voluntary sample survey collected data on the gross bookkeeping values of the assets, the replacement values, the relative deterioration of the assets, the new replacement value, the average age and the expected service lives of the assets. The gross book-keeping value, the replacement value and the relative deterioration were determined by vintage.

155. The new replacement values of the assets at national level 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 – and assigned to the historical price of the tangible fixed assets. If there was no an adequate market price for the asset in new condition, the experts applied an estimated market price based on the bookkeeping value and the relative deterioration of the used assets.

- in the second step the experts of HCSO revalued the asset at new replacement value according to the results of the estimations on the existing assets, the relative deterioration of these assets and with the help of the function of wear and tear.

156. The stock of software at replacement value is estimated from cumulated investment data for the previous five years revalued by a price index developed as the adaptation of the Canadian method and considering the recommendations of OECD Task Force on software measurement in the NA.

4.12.1.2. General government sector

157. The estimation for the value of tangible fixed assets owned by the central government was based 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).

158. Concerning the institutions of the central government, the gross (new replacement) value of the capital stock and the relative deterioration 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 replacement /book-keeping value. The expected service lives were determined according to the recommendations presented in the OECD Manual on Measuring Capital.

159. The OSAP 1616/03 collected data on the real estates of the local governments exhaustively. The survey contained the estimated (net) values and the average relative deterioration 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 similar assets owned by the central government.

160. 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.

161. The calculation of the gross capital stock is carried out by multiplying the data in physical units by the specific construction costs. The expected service lives of the infrastructural assets are experts' estimations.

4.12.1.3. Households sector

162. Dwellings amount to a significant part of the stock of fixed capital in the household sector. The capital consumption of fixed capital of dwellings is based on direct data sources. See more details in the section 4.12.4.1.

163. The following sources were available for the capital stock estimation of the households as producers:

- 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 with single-entry bookkeeping;
- Survey data of the General Agricultural Census in 2000 on units engaged in agricultural activity: the estimation of stocks was made by experts based on data in physical units.

164. The main assumption is that production activities in the household sector are less capital intensive than in the same industries of the corporation sector.

165. In order to estimate the replacement value from the gross bookkeeping value, the 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.

166. Fixed assets owned by households sector do not contain durable goods assigned to the Households.

4.12.1.4. Non-profit institutions serving households sector

167. The annual data collection on non-profit institutions does not provide all the necessary basic information to revalue their capital stock.

168. At the request of the HCSO the four large historical churches provided estimates on their buildings categorised by function. The physical parameters of the buildings and the current state of them (rate of deterioration) were available from the survey.

169. Churches and other historical monuments are not valued at "market prices", but at the level of the construction costs with the present technologies. Based on the size, 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 revalue the stock to the price level of the accounting period.

170. The value of the stock of the other buildings, machinery and equipment is estimated indirectly applying similar rate used in other sectors.

171. A supplementary estimation was made to value the stocks of buildings of non-profit institutions working in education or in social work.

4.12.2. Annual extrapolation of the stock data

172. Statistical data and statistical models are both applied in order to carry forward the new replacement (gross) value of the stock and – by taking into account the deteriorations of the assets – the net values.

173. Perpetual Inventory Method (PIM) was applied to determine the stock value and the consumption of fixed capital of following years. PIM provides data on the Capital Stock by accumulating the value of asset acquisitions of the preceding years. Accumulated and annual consumption of fixed capital is estimated by applying expected service lives and depreciation functions to the model.

174. The extrapolation of data on dwellings and cultivated assets are not based on PIM, as there is direct information on the annual stock changes.

4.12.2.1. Conversion of the stock to provide input to PIM

175. 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. This initial, surveyed stock was the basis of all model calculations.

176. 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 in each year. This means that theoretical investment time series were estimated (by inversion) which the observed stock value could be exactly derived from with the help of the model.

177. 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.

As a consequence of the previous steps, new theoretical 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.

4.12.3. Estimation of the consumption of fixed capital by PIM

178. Consumption of fixed capital is estimated by industries and sectors for the following main asset categories:

- Buildings, other structures;
- Machinery with long service lives;
- Machinery with short service lives;
- Transport equipment
- Computer software.

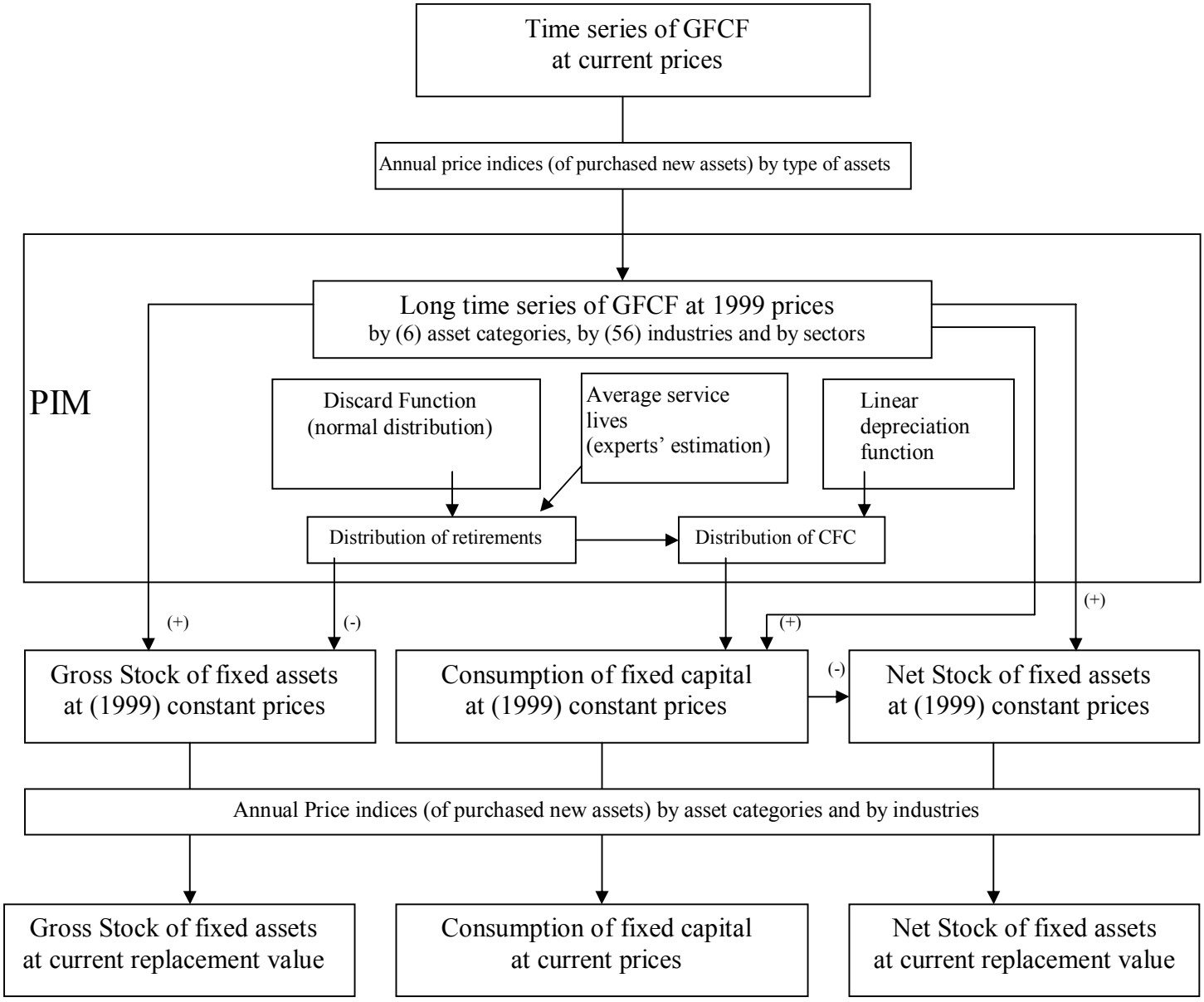
Based on the information acquired from the annual survey on the structure of investments (OSAP1932), the machinery with long and with short service lives could be well identified and separated.

179. Consumption of fixed capital on government sector is calculated by sub-sectors as well.

Table 4.24 Consumption of fixed capital by sectors, 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**

Table 4.25 Calculation of fixed assets and consumption of fixed capital using the Perpetual Inventory Method



4.12.3.1. Modelling background of the Perpetual Inventory Method (PIM)

180. 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 lives;
- Investment price indices of the asset categories in question;
- Average service lives of the assets;
- Information on the pattern of asset discards by categories
- Information on the pattern of asset deterioration by categories.

181. In accordance with the OECD Manual on Capital Stock published in 2001 (Measuring Capital, OECD 2001), the perpetual inventory method applies two basic functions, namely

1. mortality or discard function: m (A,L)
2. depreciation function: d (A,L)

to calculate stock and CFC data for assets, where L is the expected average service lives and A is the age of the asset.

182. The depreciation function can be calculated on the basis of the mortality function as the percentage of all gross fixed capital formation to be written off in reference years.

183. The combination of functions used for extrapolation by HCSO was the combination of normal distribution discard function and linear depreciation function which reduces the net value of the assets with the same amount year by year.

184. Using linear depreciation function the next connection must be true (if A=0 then d(A,L)=0):

$$d(A,L) = \sum_{i=A}^{\infty} \frac{m(i,L)}{i}$$

185. Using the investment time series, the expected average service lives and above mentioned functions, the output (gross and net stock value and CFC) data of the PIM can be calculated, as:

$$G_{i,t} = I_i \left[1 - \sum_{j=0}^{t-i} m(j, L_i) \right]$$

$$N_{i,t} = I_i \left[1 - \sum_{j=0}^{t-i} d(j, L_i) \right]$$

Consumption of fixed capital in a reference year (t) for an asset invested in a given year (i) can be calculated by multiplying the value of gross fixed capital formation by the share of the depreciation:

$$CFC_{i,t} = I_i d(t-i, L_i) = I_i \sum_{i=t-i}^{\infty} \frac{m(i, L_i)}{i}$$

Where

i: is the year in which the asset was invested

t: is the reference year

I_i : is the value of investment

L_i : expected service lives of an asset invested in the year i

$G_{i,t}$: the value of gross capital stock of vintage i, in the reference year t

$N_{i,t}$: the value of net capital stock of vintage i, in the reference year t

$CFC_{i,t}$: consumption of fixed capital for vintage i, in the reference year t

186. Consumption of fixed capital in reference year t (CFC_t) is computed as the sum of the consumption of fixed capital for the various investment years:

$$CFC_t = \sum_{i=0}^{t} CFC_{i,t}$$

187. The model calculates at constant prices (of 1999). It means that input data (data of GFCF) at current prices are revalued to constant prices at first. Output data of the model (data of CFC and stock) at constant prices are revalued to current prices. The investment price indices by industries and by asset categories are used for estimating CFC and stock data.

188. Different price indices are used of domestic machinery and for domestic transport equipment on the basis of the industrial production price indices. Import price indices are used in case of imported machinery and transport equipment. The deflation of construction works is carried out by applying cost based construction price index.

189. Investment price indices by industries are calculated by taking into account the weights of asset groups in the year t-2. The annual price indices are obtained as the weighted averages of the industrial price indices, where the weights are the annual investments of the industries.

190. The expected service lives of the assets owned by corporations were calculated by taking into account the results of the direct survey. The average expected service lives are available by vintages.

191. In case of direct observation, the value of major repairs is recorded 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 lives data for the old vintages is necessary. Service lives applied for the old vintages were derived from the relative deterioration of those vintages.

192. Service lives could not be estimated from the primary data sources in the Government sector, therefore the expected service lives are fixed for the whole series**.** The estimation made by external experts covered the expected service live of infrastructure, like public roads, public utilities, dams and dikes. Longer service lives than recommended by Eurostat (GNIC/011, Conclusions and recommendations of the GNI Committee's Task Force on the consumption of fixed capital on roads, bridges etc.) are used based on the opinions of the external experts.

193. Information on the expected service lives of the assets owned by the Households sector was derived from the survey on the corporations. Service lives reported by small corporations were applied for the assets of households.

Table 4.26 Service lives by assets and by sectors for vintages 1780-2002

		Corporations	Central government	Local government	Households	NPISHs
Buildings, other structures	Min-max	40-150	56-150	56-150	40-150	40-150
	Average	82.8	77.5	74.9	82.8	84
Machinery with long service life	Min-max	9-134	18-116	18-73	9-134	9-134
	Average	35.9	38.6	27	36.7	38
Machinery with short service life	Min-max	5-25	4-28	8-11	5-25	5-25
	Average	11.4	9.6	8.7	11.4	11
Transport equipment	Min-max	6-142	7-106	13-73	6-142	6-142
	Average	29	21	18,2	29.2	29
Computer software	Min-Max,	5	5	5	5	5
	Average	5	5	5	5	5

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.

4.12.4. Estimation of consumption of fixed capital based on direct data sources

4.12.4.1. Dwellings

194. To estimate the consumption of fixed capital, dwelling stock data was compiled by using the census and data of the dwelling survey of 1999.

195. The dwelling stock could be split into 28 types by considering the regional dimensions, the comfort levels, and the characteristics of the dwellings. The method used for calculating the stock value for the dwellings is mainly similar to the one used for estimating the annual dwelling investment data (5.12.3.3.1.). The model applied for estimating the stock value also contains the cost calculations of those dwelling types, which are not built any longer. The gross stock for the dwellings could be constituted from the construction costs and from data in physical units (m^2) of the certain dwelling types. The dwelling stock was categorized by sector and vintage.

196. The age group structure and service lives estimation are based on the Population Censuses and the dwelling survey of 1999. The basis for the service life's estimations was the reduction in the number of dwellings in the certain age groups between two Censuses. While the age groups are covering the same structure the reduction in the number of dwellings gives the clue for the service lives estimation. The sample survey carried out in 1999 contained questions concerning the genuine, market values. The ratio of the net/gross value was estimated by vintages, by experts. Census data

make periodical revisions on the ratio of the net and gross asset value possible. Starting from these data, experts estimated the level of deterioration.

197. 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).

198. Value of stocks dwellings contains the value of garages and holiday homes, no matter if they are inhabited or not.

199. The stock modifying items (new dwelling investments, privatization, dwelling major improvements, disaster or collapse because of complete depreciation and further utilization of the construction for non-dwelling purposes etc.) and the investment price index for construction are used to carry forward the stock data.

200. Estimation procedure for the current year is as follows:

a) The closing gross and net values on the stock of previous year are calculated by the investment price indices of construction into the current prices.

b) In each age group the gross capital stock of current year is calculated as the revalued gross stock + investment – discard +/- other stock modifying items.

$$\mathbf{Y_t = Y_{t-1} + Investment\ (t) +/- Other\ stock\ modifying\ items\ (t) – Discard\ (t)}$$

where Y is the gross stock and both year are converted in current year prices.

c) 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 service lives data.

d) The changes of the net stock value for the current 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.

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 service lives).

$$\mathbf{NETY_t = Y_{t-1} + Investment\ (t) +/-Other/incidental\ stock\ modifying\ items\ (t) - (Y_{t-1}/ARL)}$$

where NETY is the net stock, both years are converted in current year prices and ARL is the average remaining service lives.

Table 4.27 Capital Stock of dwellings in 2002(2003.01.01), at prices of 2002 (million HUF)

	Total		Private - Households		Government	
	Gross	Net	Gross	Net	Gross	Net
-1900	**2 503 950**	**355 404**	2 409 086	341 832	94 864	13 572
1900-19	**2 398 568**	**383 938**	2 307 392	369 236	91 176	14 702
1920-44	**4 372 133**	**905 116**	4 205 846	870 514	166 287	34 602
1945-59	**3 989 775**	**1 456 130**	3 837 598	1 400 543	152 177	55 587
1960-69	**6 148 383**	**2 537 125**	5 914 066	2 440 494	234 317	96 631
1970-79	**8 958 840**	**5 144 704**	617 466	4 948 988	341 375	195 716
1980-89	**8 120 672**	**5 357 568**	7 811 305	5 153 867	309 367	203 701
1990 -	**3 989 614**	**3 224 601**	3 854 592	3 118 979	135 022	105 622
Total	**40 481 935**	**19 364 586**	**38 957 351**	**18 644 454**	**1 524 584**	**720 132**

201. CFC of dwellings is calculated by data of net capital stock. Linear depreciation function is applied on the basis of average remaining service lives.

CFC $_{2002}$ = NET CAPITAL STOCK of 2003.01.01 at 2002 prices - NET CAPITAL STOCK of 2002.01.01 at 2002 prices - Investment 2002 - Stock Modifying Items 2002

Table 4.28 CFC of dwellings, 2002 (million HUF)

	Private	Government	Total
NET CAPITAL STOCK of 2003.01.01 at 2002 prices	18 644 454	720 132	19 364 586
-NET CAPITAL STOCK of 2002.01.01 at 2002 prices	18 416 178	734 406	19 150 584
- Investment of 2002	595 501	18 420	613 921
-Stock Modifying Items of 2002	17 358	-17 358	0
Consumption of fixed capital of 2002	**384 583**	**15 336**	**399 919**

4.12.4.2. Plants and breeding animals

202. Regular surveys provide information on stock increases and decreases, and on actual prices on the stock of cultivated assets such as plants and breeding animals.

203. The stock value of plants and breeding animals was calculated by multiplying the surveyed stock in physical units with the average price or with the cost of plantation. The classifications of capital stock by sectors and by vintage are available.

204. The expected service lives data can be set as fixed ones, since they are mainly determined by biological and technological factors. Relative deterioration for plants can be set by the age and by the service lives. The calculation of CFC on cultivated assets can be calculated with the factors based on direct data sources.

205. The stock of breeding animals is not reduced by the consumption of fixed capital.

Table 4.29 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**

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 incurred 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 incurred by households, by non-profit institutions serving households (NPISHs) and by 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	193 007	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. In 2006, the estimation of production, consumption and income deriving from illegal activities was introduced in the Hungarian National Accounts in compliance with the ESA'95. (3.08). According to the proposal of Eurostat, estimations for three main items of illegal activities have to be compiled, namely: prostitution, drugs and smuggling. Out of these three items HCSO has made estimates for prostitutions and drugs, because the size of these activities is more or less stable in short and medium term and various pieces of information are available on these items. Smuggling is a different topic. It is an activity that adapts immediately to the price differences caused by changes of market and legal regulations. These can hardly be measured by statistical means. It is more unlikely to find the necessary information than in the case of the first two items. So presently the national accounts do not include estimates on smuggling.

For more details see Chapter 7, starting with 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 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. Government final consumption expenditure

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;

- Goods and services purchased by General government of from 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 the market producers.

8. Government units are registered by the Hungarian State Treasury. The coverage of this register is complete.

9. The estimates for the compilation of the government sector are based on annual reports of government institutions and on the report of the execution of the budget. Each government institution has to submit an annual financial report, and all their activities are included in the government budget. Therefore, the common data sets derived form the two sources are identical.

5.1.3. NPISHs final consumption expenditure

10. For NPISHs the final consumption expenditure 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 expenditures made by households and other units, this value means their non-market output

- expenditures by NPISHs on goods or services produced by market producers and redistributed without any transformation through their non-profit activities to households for their consumption as social transfer in kind.

The main data source is the annual survey on NPISHs conducted by HCSO.

5.1.4. Gross fixed capital formation

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

12. The main sources to estimate the annual GFCF are the Structural Investment Survey, within the Structural Business Statistics, the balance sheets of corporations 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 put into operation are available.

5.1.5. Changes in inventories

13. Changes in inventories are calculated as the difference between the closing stock of the current year and the adjusted closing stock of the previous year. The data source for calculating changes in inventories is provided by the corporate profit tax return and by the Quarterly Shortern Statistics (STS).

5.1.6. Acquisitions less disposals of valuables

14. There is no source information on this item yet, and so presently no estimates are included in the national accounts.

5.1.7. Exports and imports of goods and services

15. In 2002, the source of exports and imports of goods data was the external trade statistics and data for services came from the balance of payments statistics. The statistical recording of external trade was based on customs documentations. Until 2002 the Ministry of Economic Affairs and the HCSO were jointly responsible for the statistical processing of data collected within the framework of the customs procedures by the Hungarian Customs and Finance Guard. Since that time the HCSO 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

16. In most cases the relevant data sources provide sufficient information to conform to ESA95 concepts of final use and purchasers' prices. Only in few 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 form "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:

17. In case of household final consumption expenditures the purchased consumption is accounted at market prices, while the own produced goods for consumption and wages and salaries in kind at basic prices. At estimating government and NPISH (non-profit institutions serving households) consumption expenditures, the non-market output is accounted at production costs, while the goods and services purchased from market producers and transferred to households at purchasers' prices. GFCF (gross fixed capital formation) also valued at purchasers' prices. Changes in inventory on own account stocks are valued at basic prices, while on purchased stocks valued at purchaser prices. In case of foreign trade statistics, some adjustments should be done to convert the basic data of exports and imports to fob parity.

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

18. Adjustments, of administrative or private accounting data to meet the ESA 95 concepts, are explained in details as part of the methodology concerning the expenditure components.

5.4. The roles of direct and indirect estimation methods

19. As a general rule, estimation of **household final consumption expenditure** is based on annual or sub annual direct statistical surveys and administrative sources. But because of the different reliability of these sources in some cases both direct and indirect (benchmarking and extrapolation) estimation methods and modelling (imputed rent) are used in combination (See 5.5 and 5.7)

20. **For NPISHs and for the general government the estimations on final consumption expenditures** are based on the annual survey on NPISHs conducted by HCSO and on the annual financial reports of the budgetary institutions and on data from the budget, therefore we apply a direct method for the calculation.

21. The calculation of the annual **GFCF** data is mainly survey based. The survey does not provide direct information on units with less than five employees. The estimation for the non-observed units is based on supplementary information. Dwelling investments are estimated from data in physical units by applying a detailed dwelling construction cost model. 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

22. In 2002 reference year value of **exports and imports of goods and services** were estimated from administrative (custom) and BOP sources.

5.5. Roles of benchmarks and extrapolation

23. 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.

24. Benchmark data are applied for the indirect estimation of investments carried out by corporations and sole proprietors with less than five 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 described in the 5.10 chapters.

5.6. The main approaches taken with respect to exhaustiveness

25. 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

26. Several sources are used 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 are not considered as exhaustiveness adjustments. However, there are some important area where it is necessary to make some adjustments in order to achieve exhaustiveness.

27. One of these areas is the consumption of alcoholic beverages and tobacco. For 1998 and 1999 the compilation of supply and use tables made possible to verify the consumption of tobacco products and alcoholic beverages at current prices. Since then the food balances on alcoholic beverages and tobacco are used for verification.

28. Giving tips is a widespread phenomenon in Hungary. Probably the most important type of tip is the gratitude payment in health care services (money is given directly from household to doctors and nurses unofficially without any invoice). The value of tips was estimated using the Household Budget Survey and the personal income tax declaration data. The calculation 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. Based on this survey's data a detailed model was established for estimating tips (gratitude money) on health services. The model operated with the estimated amounts of gratitude money by types of treatment. The results of the model were used for the final calculation of 2001 data and the revised data of 2000. Concerning tips in other service fields (catering, passenger transport and hairdressing), an estimation was introduced in the final calculations of year 2001. These calculations are based on a special survey conducted in 1997 as a supplementary module of HBS survey on hidden activities[8].

29. In the framework of the PHARE exhaustiveness project the HCSO conducted a pilot estimates for the two main types of illegal activities, namely drugs and prostitution. The results were not introduced into the regular calculation immediately and it was postponed until a major revision was made. As part of the major revision in 2005 the estimation of illegal activities were updated and incorporated into the accounts.

30. Production and sales of drugs was estimated according to an estimate on 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 reports of the police were used mainly.

31. In the case of prostitution the method is similar. First, an 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.

[8] Hidden Economy in Hungary, 1998.(HCSO, Budapest, 1998)

32. The calculation was made from 2000 onwards and had an impact on the output, intermediate consumption, final consumption and exports and imports figures.

33. In the case of **final consumption expenditures of NPISHs and the government** no adjustments were made for exhaustiveness.

34. All producers are considered to be the subject of **GFCF** estimations. The data collection currently provides direct data on units with 5 or more employees, the non-observed part is taken into account by applying supplementary information available. The data collection covers the transaction in all the required tangible asset categories. Units and transactions directly non-observed, like transactions in second-hand assets within Households sector, and intangible fixed assets are carried out by the units with less than 5 employees it is assumed their values are insignificant.

35. For the exports and imports of goods and services figures HCSO did not make any adjustment to ensure exhaustiveness (except for some illegal activities like drugs and prostitution), taking into account that the data on exports and imports of goods came from custom declarations, and the data on exports and imports of services came from the balance of payments are considered as full scope. Corrections for shuttle trade, smuggling 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

36. Household final consumption expenditures are estimated by commodity groups and by income sources. Since year 2000, these estimations use the COICOP (Classification of Individual Consumption by Purposes).

37. Three categories of consumption expenditure are distinguished based on how products are being procured (how households came into possession of the product):

a. own-accounts-products;

b. wages and salaries in kind;

c. purchased goods and services.

38. The consumption of agricultural own-accounts-production is valued at procurement prices. The estimation is made by products, quantity data are multiplied by the current year's prices. The data come from agricultural surveys.

39. The imputed rent is calculated by using the user-cost method (see in chapter 3.17 and 5.7.3.4). The output of owner-occupied dwelling services is estimated as a sum of costs with mark up (consumption of fixed capital, intermediate consumption and net operating surplus).

40. The estimation of wages and salaries in kind is based on the corporate profit tax return and the reports of government institutions, these items are valued at basic prices.

41. The purchased goods and services are valued at market prices.

42. 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, central heating and hot water supply;
- medicine consumption from the Ministry of Health;
- transport statistics, like number of passengers by transportation modes, fare receipts by transportation modes;
- postal services data form the Hungarian Post Co. and telecommunication data from telecommunication enterprises;
- data for public libraries, cinemas, theatres and exhibitions form the Ministry of Education and Culture;
- hotels and accommodation surveys from tourism statistics;
- consumption of insurance services is estimated from reports of insurance companies.

43. 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.

44. Benchmark and extrapolation techniques are applied in those cases when Household Budget Survey data used. 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. Using the year by year changes at current prices of the expenditure figures from the HBS at four digit-level COICOP categories the t-1 year household consumption data at current prices in national accounts are extrapolated.

45. Data on retail sales are used directly to estimate household final consumption expenditures, and making 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.

46. For the time being there is no consistent way of balancing household consumption figures by commodities. The consistent way would be to use supply and use tables, but this technique is not applied in the Hungarian National Accounts yet.

47. The final consumption expenditure of households as a total refers to the consumption of resident households. 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

48. The consumption of persons living in institutions is implicitly covered by Household Budget Survey data after using 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. HBS covers Hungarian households where the head of household is 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 additional information is missing.

49. Expenditure on goods under a hire purchase are accounted as household final consumption expenditures with the full amount of the purchase when the products are delivered to the households.

50. There is no separate estimation on open-air markets, street vendors and repairing services. These items are covered by the household budget survey and the related estimated household consumption expenditures in national accounts. Small street catering services are not covered, because the '*Restaurants, café and the like figures' (11.1.1)* based on the retail trade statistics data, which did not cover these street vendors.

51. For second hand goods trade margins on sales are covered by retail trade statistics so taken into account in National Accounts.

52. The private use of business cars is included in wages and salaries in kind.

53. Government's payments to market producers as social transfers in kind (for medicines etc.) are included in the final consumption of government.

54. The subscriptions, contributions etc. to NPISHs were treated according the ESA95 (§4.125-4.126), i.e. they are not accounted as household final consumption expenditures, they are recorded as current transfers to NPISHs.

55. Charity and gifts from abroad are assumed to be not significant items, therefore they are not covered.

56. Estimations on the consumption expenditure of illegal activities like *'Narcotics' (02.3.0.)* and *'Prostitution' (12.2.0.)* are included in the household final consumption expenditures.

57. A distinction is 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), duties related to dwelling investments – 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.

58. 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**

59. The table shows that there is a significant discrepancy between the two sources concerning 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, a benchmarking technique is applied, while HBS figures are integrated into the estimation process through an extrapolation technique.

5.7.2. Main data sources

5.7.2.1. Household Budget Survey

60. The target population of the survey consists of all Hungarian citizens living in private households in the territory of Hungary. 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.

61. 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. One-third of the sample is rotated every year. So, a third of the households participate 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. The sample size (9 879) is 0.3 per cent of the total number of households.

Table 5.5 Response rates of HBS in 2002

Regions	Number of			Response rate, in per cent of	
	targeted households	called[1]	respondent	targeted households	called[1]
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.*

62. Despite all efforts the survey of the selected household may fail in some cases. The most frequent reason is the refusal, but there are various other reasons besides that. In 2002 the number of refusals was 4161. The second important reason is the long time is absenteeism. 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 in the course of 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.

63. The data collection is conducted 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 has to keep diary.

64. The data supplying obligations of households are the following:
The households participating in the survey have to keep 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 are listed in specified details every day.

65. At the end of the first quarter of the next year, the households are interviewed about their personal incomes during the previous 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.

66. The interviewers provide numerical codes to the individual income and expenditure items of the household diaries and interviews. Data capturing are done at the County Directorates of HCSO. The data processing itself, data quality control, corrections and analysis are done in the Central Office.

67. For estimating totals weights are 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 participating in the survey. The aggregation is made by using these weights, but in consequence of refusals the demographical data of participating households differ from demographical data of total population originated form other statistics. For this reason in the database of the HBS, a demographical correction is made. 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 weights.

68. 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.

In these cases external source of data was not applied.

69. 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.

70. 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.

71. 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

72. 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 report of the local government on the number of trade units with operating licence

73. There are two surveys on retail trade activities. One of them is the survey on monthly retail sales (OSAP 1045/02 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 choosen 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.

74. The other survey is a quarterly survey on the retail trade turnover by commodities (OSAP 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 groups.) 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.

75. These commodity groups were the following in 2002:

1. Vehicles
2. Fuels and lubricants
3. Alcoholic beverages
4. Non-alcoholic beverages
5. Coffee and tobacco
6. Food
7. Medical products, appliances and equipment
8. Articles and products for personal care
9. Clothing
10. Building materials ironware
11. Furniture
12. Lightning equipments
13. Household textiles
14. Non-durable household goods
15. Major electric household appliances
16. Small electric household appliances
17. Photographic and cinematographic equipment
18. Telecommunication equipment

19. Information processing equipment
20. Recording media
21. Books, newspapers and magazines
22. Major and small tools and equipment for the house and garden
23. Building materials
24. Painting materials
25. Bathroom equipment
26. Wallpapers and floor coverings
27. Liquid and solid fuels
28. Households cleaning supplies
29. Second hand goods
30. Other goods

5.7.2.3. Other sources

Agricultural statistics

76. Agricultural statistics provide the sources to estimate the consumption of on own-account products. 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 explained in Chapter 3.7 and Chapter 11).

77. In Hungary the agricultural output calculation is based on a detailed balance sheet which is compiled for most the agricultural products (so called "food balances") by the Agricultural and Environmental 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

78. The food balances 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 food balances.

Housing, public utilities statistics

79. Housing and public utilities basic statistics provide sources to estimate the value of actual rent, water, sewerage collection, electricity and heat energy consumed by private households.

80. Electric energy supply, piped gas supply, central heating and hot water supply. 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 inquires quantity of supply 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.

81. Water supply, sewerage: 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.

82. 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

83. There are several data sources to estimate the purchase 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 is the retail trade statistics on 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 consumption of subsidized medicines and therapeutical appliances.

Transport

84. Household consumption of transport services is estimated from sources of transport statistics. Data collected on the goods and passenger transport include the 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

85. The data of the post and telecommunication services 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, including mobile phones), data on radio and television services, including cable televisions network and Internet services.

Culture

86. 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 turnover from the sales of the tickets, as well.

Tourism (Hotels and accommodation units, package holidays)

87. 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 organized tourism there are data on tour operators and travel agencies, as well as organized tourism, including data on sales. The data suppliers are travel agencies registered by the Hungarian Chamber of Commerce and have a tour operator license. 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 license throughout the whole year or periodically offering night accommodation and stay.

5.7.3. Estimation methods

88. The household final consumption expenditure is estimated by commodity groups and by sources of income. Since 2000, the COICOP classification is used to estimate consumption by commodity groups. A backward calculation until 1995 was finished in March 2003.

89. 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		Own account production (A)	Wages and salaries in kind (B)	Purchased goods and services (C)	Total
01	Food and non-alcoholic beverages	117 016	0	1 626 017	1 743 033
02	Alcoholic beverages, tobacco and narcotics	12 625	1 465	823 003	837 093
03	Clothing and footwear	0	802	403 929	404 731
04	Housing, water, electricity, gas and other fuels	336 583	6 549	1 376 241	1 719 373
05	Furnishings, household equipment and routine household maintenance	0	0	617 913	617 913
06	Health	0	2 361	333 721	336 082
07	Transport	0	33 139	1 350 720	1 383 858
08	Communication	0	0	456 948	456 948
09	Recreation and culture	0	8 301	704 723	713 023
10	Education	0	16 067	92 620	108 686
11	Restaurants and hotels	0	25 022	425 484	450 506
12	Miscellaneous goods and services	0	13 904	763 998	777 903
Household final consumption expenditure - domestic concept		**466 224**	**107 610**	**8 975 316**	**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 price data.
- Owner occupied dwellings (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 corporate profit tax returns and reports of the budgetary 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 reduced prices;
- purchased goods and services provided to employees free or at reduced prices;
- private use of business cars etc

For more details see Chapter 4.7, para 45-56. .

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 is used. Before 2003 the Labour Cost Survey was carried out in every five years, 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, as well. 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 have effect on consumption structures, because institutional and private households are probably characterized by different consumption structures; but due to the small number of institutional households and the changes in the coverage of HBS in 2009 (survey household with non-residents head of households) this effect is not significant. Then the previous year's data are extrapolated with the value indices (previous year=100.0) of each commodity group.

90. Then the extrapolated values are adjusted for definitions and concepts of National Accounts, making use of additional data sources as well.

91. The Table 5.6 shows figures according to the three categories of consumption expenditures. The following paragraphs give a more detailed description of the 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 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

92. 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., para 89/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.)*

93. The Retail Trade data and the food balances (in physical terms) are used for checking.

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

94. The Household Budget Survey is the basic data source for estimating consumption on alcoholic beverages, tobacco and narcotics. The use of the extrapolation method mentioned in section 5.7.3., para 89/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.)*.

95. The Retail Trade data and the food balances of alcoholic beverages and tobacco consumption (in physical terms) are used for checking.

96. 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	***Alcoholic beverages, tobacco and narcotics***		***185 048***	***2 335***	***576 235***	***73 475***	***837 093***
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

97. 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., para 89/C provides 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.)*.

98. The Retail Trade data are used for checking.

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	***Clothing and footwear***		***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 and imputed rent (dwelling services)

99. Dwelling services are estimated by the following categories:

- actual rent for
  - local government owned dwellings
  - private dwellings
- imputed rent for
  - owner-occupied dwellings.

100. In Hungary, over 90 percent of the dwellings stock (in square meter) is privately owned. The share of actually rented dwellings is small, representing around 6 percent. Out of this, about half of it is rented at market rate.

Table 5.10 The distribution of occupied dwellings (m²) in Hungary by type of occupation in 2002

	Privately owned, owner-occupied	Privately owned, private rented	Government owned, rented	Total
Stock (thousand m²)	265 136	7 282	7 649	280 066
%	94.67	2.60	2.73	100.0

101. The difference between the level of two types of rentals is significant and it is assumed that the difference will not diminish in the coming years. On the other hand it is assumed that the present situation, when most of rented dwellings concentrate in the capital and other major cities, may change within a definite period.

Table 5.11 Different types of rents, HUF/month/m²

Year	Private	Government
2002	668	172

102. The output of dwelling services of private rented and owner-occupied dwellings consists of three elements:

- CFC
- Intermediate consumption
- Net operating surplus

5.7.3.4.1.1. Dwelling stock and CFC

103. To estimate the consumption of fixed capital, dwelling stock data was compiled by using the population census and data of the dwelling survey of 1999.

104. The dwelling stock is split in 28 types by regions, comfort levels, and other characteristics of the dwellings. The method used to calculate the stock value for the dwellings is mainly similar to the one used to estimate the annual investments in dwelling (5.12.3.3.1.). The model applied to estimate the stock value also used to calculate the costs of those dwelling types, which are not built any longer. The gross value of the stocks could be constituted from the construction costs and from the physical data (m^2) of selected dwelling types. The dwelling stock was categorized by sector and vintage on the basis of the results of the valuation.

105. The age group structure and service lives estimation are based on the Population Censuses and the dwelling survey of 1999. The service life was estimated taking into account the changes in the number of existing dwellings by age groups. The sample survey in 1999 contained questions concerning the actual, stock market values. The ratio of the net/gross value was estimated by vintages, by experts. Census data make periodical revisions on the ratio of the net and gross asset value possible. Starting from these data, experts estimated the level of deterioration.

106. The value of annual discards is estimated indirectly, as the residual of the changes in gross value of stocks and the investments in dwelling. The vintage structure of discards is estimated on the basis of the information of the annual report of local governments on annual dwelling discards (OSAP 1076).

107. Value of dwellings contains the value of garages and holiday homes, no matter if they are inhabited or not.

108. Additional information available to account the changes in the stocks of dwellings are: new dwelling investments, privatization, major improvements, changes in stocks due to disaster or collapse, utilization of the dwelling for non-dwelling purposes etc.) The investment price index for dwelling construction is used to revaluate the stock.

109. Estimation procedure for the current year is as follows:

a) The closing gross and net values on the stock of previous year are revalued by the investment price indices of construction to current prices.

b) In each age group the gross capital stock at the end of current year is calculated as the revalued gross stock + investment – discard +/- other stock modifying items.

$$\mathbf{Y_t = Y_{t-1} + Investment\ (t) +/- Stock\ modifying\ items\ (t) - Discard\ (t)}$$

where Y is the gross stock and both year are converted in current year prices.

c) 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 service lives data.

d) The changes of the net stock value for the current 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.

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 service lives).

$$\mathbf{Y_t = Y_{t-1} + Investment\ (t) +/- Stock\ modifying\ items\ (t) - (Y_{t-1}/ARL)}$$

where Y is the net stock, both years are converted in current year prices and ARL is the average remaining service lives.

Table 5.12 Capital Stock of dwellings at 2002 prices, (million HUF)

Year of construction	Total		Private - Households		Government	
	Gross	Net	Gross	Net	Gross	Net
-1900	**2 503 950**	**355 404**	2 409 086	341 832	94 864	13 572
1900-19	**2 398 568**	**383 938**	2 307 392	369 236	91 176	14 702
1920-44	**4 372 133**	**905 116**	4 205 846	870 514	166 287	34 602
1945-59	**3 989 775**	**1 456 130**	3 837 598	1 400 543	152 177	55 587
1960-69	**6 148 383**	**2 537 125**	5 914 066	2 440 494	234 317	96 631
1970-79	**8 958 840**	**5 144 704**	617 466	4 948 988	341 375	195 716
1980-89	**8 120 672**	**5 357 568**	7 811 305	5 153 867	309 367	203 701
1990 -	**3 989 614**	**3 224 601**	3 854 592	3 118 979	135 022	105 622
Total	**40 481 935**	**19 364 586**	**38 957 351**	**18 644 454**	**1 524 584**	**720 132**

110. CFC of dwellings is calculated by data of net capital stock. Linear depreciation function is applied on the basis of average remaining service lives.

CFC 2002 = NET CAPITAL STOCK of 2003.01.01 at 2002 prices - NET CAPITAL STOCK of 2002.01.01 at 2002 prices - Investment 2002 - Stock Modifying Items 2002

Table 5.13 CFC of dwellings, 2002 (million HUF)

	Private	Government	Total
NET CAPITAL STOCK of 2003.01.01 at 2002 prices	18 644 454	720 132	19 364 586
-NET CAPITAL STOCK of 2002.01.01 at 2002 prices	18 416 178	734 406	19 150 584
- Investment of 2002	595 501	18 420	613 921
-Stock Modifying Items of 2002	17 358	-17 358	0
Consumption of fixed capital of 2002	**384 583**	**15 336**	**399 919**

111. The estimation of dwelling services is based on data of inhabited dwellings, which data came from population census.

Table 5.14 The value of net stock and CFC of inhabited dwellings, 2002, (million HUF)

		Net value of stock	CFC
Total dwellings (see Table3.64. and 3.65)		19 364 586	399 919
Total inhabited dwellings		**17 428 127**	**359 928**
Of which:	owner-occupied dwellings	16 267 868	335 579
	local government owned, rented dwellings	648 119	13 803
	privately owned, private rented dwellings	512 140	10 547

5.7.3.4.1.2. Expenditure on maintenance and repairs of dwellings

112. The estimates on maintenance and repairs are based on Household Budget Survey. HBS includes two separate rows, one for regular (minor) and one for irregular (major) maintenance

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.

113. 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.

114. For the separation of the two items the Household Budget Survey is used (see table 5.15). First, the expenditure on maintenance and repairs per rented dwelling (e) is calculated by the quotient of the total amount of maintenance and repairs of rented dwellings (b) and the number of rented dwellings (d), both are coming from HBS. 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 (e) is multiplied by the number of owner-occupied dwellings (f). This amount (g) is recorded as household final consumption expenditure.

115. 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 (h).

Table 5.15 Distribution of the maintenance and repairs of the dwellings

Items		2002
Total expenditure on maintenance and repairs - COICOP 4.3 of HBS (million HUF)	(a)	96 598
Of which: total expenditure on small maintenance and repairs of rented dwellings (million HUF) – from HBS	(b)	3 535
Number of dwellings (million) – from HBS	(c)	3,7476
Of which: number of rented dwellings (million) – from HBS	(d)	0,2557
Maintenance and repairs per rented dwellings (HUF/dwelling)	(e)=b/d	13 828
Number of owner-occupied dwellings (million) – from HBS	(f)=c-d	3.4919
Total expenditure on small maintenance and repairs of owner-occupied dwellings (million HUF) = *Household final consumption*	(g)=e*f	48 285
Total expenditure on minor maintenance and repairs of owner-occupied dwellings, recorded as intermediate consumption (million HUF)	(h)=a-b-g	44 778

116. After this process, the total expenditure on minor maintenance and repairs of owner-occupied dwellings (h) is recorded as intermediate consumption for owner-occupied dwelling services.

117. The total expenditure on small maintenance and repairs of rented dwellings (b) is divided between local government owned and privately rented dwellings using the share of the appropriate dwelling category to their total stock in square meter and recorded as intermediate consumption for rented dwelling services. It was assumed that the expenditure on small maintenance and repairs per one square meter of owner-occupied dwelling is the same as the expenditure on small maintenance and

repairs per one square meter of rented dwellings. So, 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 and privately owned, private rented dwellings. The calculation process is shown in Table 5.16.

Table 5.16 The expenditure on maintenance of rented dwellings in 2002

Expenditure on small maintenance and repairs on owner-occupied dwellings – COICOP 4.3 from HBS million HUF (see Table 5.15 (a)-(b) = 96 598 - 3535 M HUF)	(a)	93 063
Stock of owner-occupied dwellings in thousand m² (see Table 5.10)	(b)	265 136
Expenditure on small maintenance and repairs on owner-occupied dwellings per one m² - thousand HUF	(c) = a/b	0.351
Stock of local gov.owned, rented dwellings in thousand m² (see Table 5.10)	(d)	7 649
Expenditure on small maintenance and repairs on local gov. owned, rented dwellings - million HUF	(e)=c*d	**2 685**
Stock of privately owned, private rented dwellings - in thousand m² (see Table 5.10)	(f)	7 282
Expenditure on small maintenance and repairs on privately owned, private rented dwellings – million HUF	(g)=c*f	**2 556**
Expenditure on small maintenance and repairs on all rented dwellings – million HUF	*(h)=e+g*	***5 241***

118. There is another element of the expenditures on maintenance and repair: the other services relating to the dwellings. It contains estate tax, co-proprietor charges for caretaking, gardening, stairwell cleaning, heating and lighting, maintenance of lifts and refuse disposal chutes, etc. in multi-occupied buildings. The estimation of these elements is based on Household Budget Survey data (COICOP 04.4.4). The total amount of it is built into the estimation of intermediate consumption of rented and owner-occupied dwellings. The total amount is distributed among the different sub-sectors using the relevant shares in square meter (see Table 5.10).

Table 5.17 Other services relating to the dwellings in 2002

	Share of dwellings to the total dwelling stock (in m²), %		Million HUF
Total other services relating to the dwellings - COICOP 04.4.4 of HBS			**71 522**
of which: owner-occupied dwellings	94.67	(a)	67 709
local government owned, rented dwellings	2.73	(b)	1 953
privately owned, private rented dwellings	2.60	(c)	1 860

119. The estimated intermediate consumption for maintenance and repairs (based on COICOP 4.3) and other services (based on COICOP 4.4.4) of owner-occupied and rented dwellings can be seen in Table 5.18.

Table 5.18 Intermediate consumption for maintenance and repairs of the dwellings in 2002 (million HUF)

	Maintenance and repairs (COICOP 4.3)	Other services (COICOP 4.4.4)	**Total IC for maintenance and repairs**
Owner-occupied dwellings	44 778	67 709	**112 486**
Local government owned, rented dwellings	2 685	1 953	**4 638**
Privately owned, private rented dwellings	2 556	1 860	**4 415**

5.7.3.4.1.3. Valuation of rented dwellings – actual rent

Local government owned dwellings

120. The output of the services of local government owned dwellings is estimated using average rent and total square meter data of rented dwellings (c). The estimation of CFC (d) is described in Chapter 5.7.3.4.1.1., while the estimation of intermediate consumption (e) is in Chapter 5.7.3.4.1.2. Rent data (g) 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.

Table 5.19 Dwelling services for local government owned rented dwellings, 2002

Square meter of local government owned rented dwellings (thousand m^2)	(a)	7 649
Average rent m^2/month/HUF	(b)	172.3
Total dwelling services (million HUF)	c = a*b*12	**15 817**
Of which: CFC - million HUF	(d)	13 803
Intermediate consumption - million HUF	(e)	4 638
Net operating surplus - million HUF	(f) = c-d-e	-2 623
Rent paid by the tenants – million HUF	(g)	7 478

121. 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.

122. 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.

Privately rented dwellings

123. 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 total 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.

124. The estimation of CFC (d) is described in Chapter 5.7.3.4.1.1., while the estimation of intermediate consumption (e) is in Chapter 5.7.3.4.1.2.

Table 5.20 Dwelling services for privately owned rented dwellings, 2002

Square meter of privately owned rented dwellings (thousand m^2)	(a)	7 282
Average rent m^2/month/HUF	(b)	668
Total dwelling services (million HUF)	c = a*b*12	**58 370**
Of which: CFC	(d)	10 547
Intermediate consumption	(e)	4 415
Net operating surplus	(f) = c-d-e	43 408
Rent paid by the tenants = (c)		58 370

5.7.3.4.1.4. Valuation of owner occupied dwellings by the user cost method

125. 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.

126. 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.

127. The next Task Force 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.)

Table 5.21 Elements of user cost method

UC01	Consumption of fixed capital (on owner-occupied dwellings) valued at current prices
UC05	Expenditures on maintenance and repair of owner-occupied dwellings
UC08	Net insurance premiums paid by owner occupants; estimated by (UC06) - (UC07)
UC11	Average value of net stock of owner-occupied dwellings, valued in current prices
UC14	Average value of land associated with owner-occ. dwell. in curr. prices
UC16	Value of net (mortgage) debt on owner-occupied dwellings and associated land
UC18	Net stock of dwellings and land (net of loans) - (UC11+UC14)-UC16
UC18/a	Fixed (2.5%) rate for real return
UC19	Imputed real return on owner-occupied dwellings and associated land - UC18*UC18/a
UC23	**Imputed rental value of services of owner-occupied dwellings, (estimated thus: UC01 + UC05 +UC08 + UC19)**

Consumption of fixed capital (UC01)

128. The value of CFC of inhabited owner-occupied dwellings was 335 579 million HUF in 2002 (for more information see Chapter 5.7.3.4.1.1., Table 5.14).

Expenditures on maintenance and repair (UC05)

129. The expenditures on maintenance and repair of owner-occupied dwellings was 112 486 million HUF in 2002 (for more information see Chapter 5.7.3.4.1.2., Table 5.18).

Insurance premiums and claims (UC08)

130. The estimation of insurance of dwellings is based on reports of insurance companies and the gross output of non-life insurance services which is divided among the sectors. The data of distribution of policies between households and others is 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. The estimated value of net insurance premiums paid by owner-occupants was 18 188 million HUF in 2002.

Average value of net stock (UC11)

131. The average value of net stock of inhabited owner-occupied dwellings was 16 267.9 billion HUF in 2002 (for more information see Chapter 5.7.3.4.1.1., Table 5.14).

Average value of land (UC14)

132. The accurate estimation of land is very difficult having in mind how much it is influenced by many different factors of the real estate market. The rate provided by a research institute that is specialised in the rehabilitation of many districts in Budapest was accepted. 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. The estimated average value of land associated with owner-occupied dwellings was 3 253 547 million HUF in 2002.

Value of (mortgage) debt (UC16)

133. 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. The value of net (mortgage) debt on owner-occupied dwellings and associated land was 605 960 million HUF in 2002.

Imputed real return (UC19)

134. 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 by the dwelling Task Force. This rate was mainly indicated by experimental compilations of countries that apply in their national accounts the stratification method.

Detailed results of the user cost method

Table 5.22 Estimation of owner-occupied dwelling services applying the user cost method with fixed (2.5%) real rate of return

Item		2002
UC01	Consumption of fixed capital (on owner-occupied dwellings) valued at current prices; (million HUF)	335 579
UC05	Expenditures on maintenance and repair of owner-occupied dwellings; (million HUF)	112 486
UC08	Net insurance premiums paid by owner occupants; estimated by (UC06) - (UC07); (million HUF)	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; (million HUF)	472 887
UC23	Imputed rental value of services of owner-occupied dwellings, (estimated thus: UC01 + UC05 +UC08 + UC19); (million HUF)	939 140

The allocation of FISIM and its effect on imputed rent

135. After introducing the user cost method into the Hungarian National Accounts the new FISIM regulation came into force (Commission Regulation (EC) No 1889/2002 of 23 October 2002, on the implementation of Council Regulation (EC) No 448/98 completing and amending Regulation (EC) No 2223/96 with respect to the allocation of financial intermediation services indirectly measured (FISIM) within the European System of national and regional Accounts (ESA)) that is why it was necessary to update the calculation taking into account the effect of FISIM allocation. The allocation of FISIM had impact on the HFC figures in two ways. First, the FISIM allocated to the households as consumers were recorded (205 976 million HUF). 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 5.23 The estimation of owner-occupied dwelling services with FISIM (million HUF)

Items	2002
Consumption of fixed capital	*335 579*
Intermediate consumption	*156 294*
Of which:	
Net insurance	18 188
Maintenance and repair	112 486
FISIM	25 620
Net operating surplus	*472 887*
Gross output of owner-occupied dwelling services (imputed rent)	964 760

Plans for improvements

136. 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 in 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 "import" side it is an open question. Estimations for the export side is/will be obtained from the Republic Representative's Office, since permission for purchase is issued by it.

5.7.3.4.2 Maintenance and repairs of the dwellings:

137. 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.

5.7.3.4.3 Water supply and miscellaneous services relating to the dwellings:

138. 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.

5.7.3.4.4 Electricity, gas and other fuels

139. 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.

140. 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 5.24 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	***Housing, water, electricity, gas and other fuels***		***789 969***	***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**		**132 796**	**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	17 417	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	3813	0	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, households' equipment and routine maintenance of the house

141. 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., para 89/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.

142. 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 5.25 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	***Furnishings, household equipment and routine household maintenance***		***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

143. The main data sources for the estimation on purchase of medical products and services by households are statistical surveys on the turnover of pharmacies and report on the activity of pharmacy institutes. The surveys contain data on the household medicine consumption, separating the purchased from the subsidized sales.

144. For estimating medical appliances and therapeutical equipments, 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.)*.

145. 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 5.26 the Other adjustments for definitions and concepts show the amount of the gratitude money.

Table 5.26 Estimation process of household consumption expenditure 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

146. 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.

147. 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., para 89/C).

148. 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.

149. 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.)*.

150. 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 household survey on hidden economy which was carried out in 1997.

Table 5.27 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***		***1 988 875***	***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**		**195 108**	**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	80 837	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

151. 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.

152. For estimation on telephone and telefax equipment the Household Budget Survey is used indirectly as described in paragraph 5.7.3., para 89/C).

153. 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 5.28 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

154. 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).

155. Then the extrapolated values are adjusted for the definitions and concepts of the National Accounts.

156. 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.)*.

157. 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.)*. Retail trade 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.)*

158. 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.

159. In the case of *'Books' (09.5.1.)* data from the Hungarian Publishers' and Booksellers' Association were used for checking.

160. 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 travel agencies 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.

161. The calculation for HFC expenditure on software, including games is made independently of the output estimates, using the Household Budget Survey

Table 5.29 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

162. 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 wages and salaries 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 5.30 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

163. For the estimation of consumption expenditure on catering services the retail trade survey is used, excluding canteens.

164. The share of expenditure on restaurants and hotels other than final consumption expenditure (ie. business 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.

165. For the estimation of consumption in *'Canteens' (11.1.2.),* Household Budget Survey data are used directly.

166. In the case of accommodation services survey on the receipts of publicly available accommodation is used. The supply and use tables were used to separate non-household/business tourism accommodation expenditure.

167. Giving tips in restaurants 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 5.31 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

168. 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.)*.

169. 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. They cover payments made by insurance companies directly for example to health care institution or garages. These transactions have to be recorded as the insurance companies would reimburse the household then the households pay to the health care institution or garages. 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, additional information will be available to separate final and intermediate consumption of sole proprietors.

170. 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.

171. As prostitution is concerned, 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 5.32 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	***Miscellaneous goods and services***		***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 in the domestic territory

172. 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 are 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 main groups of products. 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.

173. 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 5.33 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) Data of new labour cost surveys will be built into the estimation of wages and salaries in kind.

B) 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 Hungarian national accounts for these categories. Estimations for the number of dwellings purchased by non-residents were available in the Ministry of Interior, but for the "import" side it is an open question.

5.8. NPISH final consumption expenditure

174. **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 (their non-market output)
- expenditures by NPISHs on goods or services produced by market producers that are supplied without any transformation to households for their consumption as social transfer in kind.
- It covers various individual items. The social transfers in kind are calculated as the difference between their output and their sales and fees received, plus the value of the redistributed goods and services produced by market producers.

175. The estimation of expenditure of NPISHs is based on data collected by HCSO directly from the NPIs.

5.9. Government final consumption expenditure

176. According to ESA 95 two expenditure categories can be distinguished within government final consumption expenditure:

- Services produced by the government other than own account gross fixed capital formation and sales and fees for market and non-market output.

- Expenditures of government on goods and services produced by market producers transferred to households.

177. In the case of services produced by the government, final consumption expenditure is estimated as follows:

> Final consumption expenditure = Output – own account GFCF – sales of eventual market output – fees for nonmarket sales

178. Both output and fees 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.

179. Social transfers via market producers include consumer subsidy on public transport compensating 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 bath for therapeutical purposes (4.2 billion HUF), travel reimbursement to visit health care providers (4.3 billion HUF), compensation of free medical supply (18.1 billion HUF). These items are paid through the social security system. In 2002 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 general practitioners who work as unincorporated enterprises also accounted in Government sector as social transfers in kind.

Table 5.34 Government consumption expenditure in 2002 (million HUF)

					of which:		Other government sources					Total		Government consumption expenditure
		Gross output – own account GFCF	Operational revenues and sales of market production	Government transfer	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 disposal of tangible fixed assets

180. This chapter describes the data sources and main methodological issues of the estimation of gross fixed capital formation.

5.10.1. Gross Fixed Capital Formation (P.51)

181. Gross fixed capital formation consists of acquisitions less disposals of fixed assets using in the production process for more than one year.

Gross fixed capital formation (GFCF) includes:

- the acquisition and own account production of new buildings and other new structures, machinery, equipment and transport equipment, accounting all the imported assets as new assets;
- the acquisitions and disposals of existing assets of domestic origin;
- the acquisition of fixed assets by financial leasing;
- the costs of ownership transfer and other charges related to investments (planning fees and other costs);
- investments in breeding and draught animals, plantations (forests, vineyards and orchard)
- 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.

182. 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 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.

183. The distinction between GFCF and intermediate consumption in the case of small tools is based on the threshold of 500 EUR. See detailed description in Chapter 3, paragraph 118-120.

5.10.1.1. Valuation

184. In the investment statistics the value of acquisitions of fixed assets includes 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 excluded. The value of the fixed capital formation does not include the deductible value added tax. As the valuation of the basic statistics is adequate to the ESA95 requirements no adjustment is needed in the case of acquisition of new tangible assets for national accounts purposes.

185. 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).

186. Financial leases are accounted in lump sum in the year of ownership change.

187. Sales of assets are accounted at actual sales prices. In-kind or uncompensated capital transfer in kind can be calculated at activated value in compliance with business 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.

5.10.1.2. Data sources

188. The main source of GFCF estimations is the structural investment survey, which is part of the Structural Business Statistics. 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 are 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.

189. The GFCF of small business units is estimated from tax records, estimated capital stock data, and other administrative information which primarily is not collected for statistical purposes.

190. 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, instructing the respondents, what the difference is between book-keeping and statistical concepts. For instance it is noted, that 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, the figures of acquisitions and sales of second-hand assets are corrected, too.

191. Agricultural corporations are not covered by the investment survey. Therefore, the Economic Accounts for Agriculture – a special agricultural survey, conducted by the ministry on capital subsidies – are used to calculate gross fixed capital formation. This also ensures the consistency between Economic Accounts for Agriculture and National Accounts.

192. The use of new dwellings the owner has to obtain a permission. The physical characteristics of new dwellings are reported by owners to local governments. They provide the data to HCSO, which applies them in the calculation of dwelling investments.

193. 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 5.35 Gross fixed capital formation

Million HUF

Categories	2002
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 fixed assets	12 130
Total GFCF	**3 944 460**

5.10.1.3. Acquisitions less disposals of tangible fixed assets (P.511)

Table 5.36 Tangible fixed assets composition of GFCF

Million HUF

Categories	2002
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)

194. The estimation of the value of investment in new assets is based mainly on data of the investment module of Structural Business Survey investment questionnaire. More detailed data on annual investments by asset type come from the Structural Investment Survey.

195. The separate asset categories which appear on the questionnaire are the following:

- Buildings and other structures

196. 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.

197. 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.

198. 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.

199. 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:

200. 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:

201. 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:

202. 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:

203. 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:

204. 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:

205. 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 5.37 Annual investment of new tangible fixed assets by categories (Data of investment survey)

Million HUF

Categories	2002
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)

206. The data collection of annual acquisition and disposal on existing tangible assets is as detailed as in the case of new tangible assets. Therefore, the cost of ownership transfer can be measured.

207. Two kinds of transactions on existing assets are distinguished depending on whether the transaction is compensated 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, an uncompensated capital transfer is also recorded

208. 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.

209. 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.

210. 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.

211. The most substantial proportion of transactions on existing dwellings takes place within the Households sector, so the duties/taxes on transactions are recorded as fixed capital formation of this sector. Data on duties are based on administrative sources.

Table 5.38 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	Costs of ownership transfer
Buildings and other structures	**6%**	**51 611**	**48 689**	**2 922**
Surveyed data		41 778	48 689	
Adjustment		9 833		
Machinery and equipment	**7%**	**31 047**	**29 012**	**2 035**
Surveyed data		27 257	29 012	
Adjustment		3 790		
Transport equipment	**7%**	**15 696**	**14 665**	**1 031**
Surveyed data		12 502	14 665	
Adjustment		3 194		
Total costs of ownership				**5 988**

212. The decrease in the dwelling stock of local governments due to privatisation is measured in physical units. The value of the stock change is calculated from the previously determined net stock of dwellings. The 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)

213. Intangible fixed assets include non-material produced assets which directly serve the production 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

214. 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

215. The above-listed breakdown for intangible fixed assets is listed in the annual investment survey, so we have direct investment data of units covered by the survey. The figure of the sampled part of the survey is grossed up. No supplementary estimation is made for possible investments in

intangible fixed assets by non-observed small units. Survey data, after basic data checks, are directly applied in the estimation process and there is no specific method to adjust them.

216. 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 5.39 The intangible fixed asset composition of GFCF

Million HUF

Categories	2002
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

217. 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.

218. 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.

219. 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

220. 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.

221. 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.

222. When estimating GFCF in NACE 72, the estimation of own-account software to be used by the company itself can be separated from customised software, which is also own-developed but for sale. This customised software is accounted as sales of software. There is no separate estimation for the value of originals of pre-packed software in NACE 72.

223. Values of purchased and own-account software include planning, implementation, programming, installation and testing costs.

224. 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.

225. 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

226. 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

227. 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)

228. Acquisitions of existing intangible fixed assets are accounted at purchasers' prices, while disposals of these assets are valued at real sales prices.

229. The data source of the estimation is the same as that referred to in the part about capital formation on new tangible fixed assets.

230. 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)

231. 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

232. This category is part of the investment module of annual Structural Business 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

233. 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 sectors

5.12.3.1. Financial and non-financial corporations

234. Financial and non-financial corporations employing more than 4 employees are observed by the investment survey. Figures reported by the units are 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.

235. 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 conducted by the Ministry on 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.

236. 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.

237. 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 at the purchaser of assets. The non-observed scope of the survey 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 5.11.1.3.2)

238. A few public corporations were classified as non-market producers and were transferred along with all their reported investments to the General government sector.

239. 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 information taken from the direct stock observation – carried out in 2000. The stock was revalued for three main asset categories – buildings and structures; machinery; and transport equipment at two-digit NACE industry level.

240. The following additional data are used to estimate gross 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.

241. When estimating GFCF, we assumed that minor organizations acquire proportionally less tangible fixed assets than major corporations. In case of these minor enterprises the share of buildings in tangible fixed assets is lower than the observed ratios (at current prices).

242. Indirect estimation of gross fixed capital formation of small units (excl. agriculture)

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).

Table 5.40 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 5.41 Separate components of the GFCF (tangible fixed assets) figure of corporations in terms of estimation method

Million HUF

Categories	2002
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

243. General government units are exhaustively covered by the investment module on government institutions of Structural Business Survey, providing information on transactions related to tangible fixed assets according to the asset structure as described above.

244. Public companies which dominant non-market production are classified to this sector with all their investments.

245. Non-profit institutions, which are mainly financed and controlled by government, were placed in the General government sector as well.

Table 5.42 GFCF (tangible fixed assets) of the general government

Million HUF

Categories	2002
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**

246. 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.

247. 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

248. 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 5.43 Estimated GFCF of the Households sector

Million HUF

Categories	2002
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

249. The value of annual new dwelling constructions covers the value of dwellings and holiday homes built (put in use), the cost of other structures (e.g. fences, garages) related to residential buildings, and the value of renovation of residential buildings and holiday homes.

250. 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 1m^2 built area.

251. The basis of model calculation was 28 dwelling models established according to dwelling types, the place of construction and the quality of dwellings.

252. The following dwelling types are distinguished:

- single-family houses;
- multi-storey buildings with several flats; and
- new flats constructed through the exploitation of attics.

253. Four area categories were differentiated for the place of constructions, which were determined by monthly gross salaries of workers employed in construction industry.

254. The separated quality categories of dwellings:

- modest;
- average (flats constructed in attics may belong to this category only);
- luxury dwellings.

255. The important factors considered in the 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.

256. 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.

257. 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.

258. Method of index calculation: the standardized average of specific building costs – that are updated quarterly – is the ratio of standardized average costs per 1 m^2 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.

259. Quarterly standard average cost of dwelling construction

$$\overline{p}_{ti} \equiv \frac{\sum_{k=1}^{28} T_{1999}^{(k)} \cdot p_{ti}^{(k)}}{T_{1999}}$$

Base index

$$I_{ti} \equiv \frac{\overline{p}_{ti}}{\overline{p}_{1999}}$$

where

$\overline{p} \equiv$ *standardized average cost of dwelling construction*

p = modelled specific cost of dwelling construction

T = area of homes built, in m^2

t = 0, 1, 2,…years

i = 1, 2, 3, 4 quarters

k = 1, 2,…..28 home-types

T_{1999} = 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:

$$\overline{p}_t \equiv \frac{\sum_{i=1}^{4} \overline{p}_{ti} \cdot T_{1999(i)}}{T_{1999}}$$

260. 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.

261. 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.

262. Supplementary cost items were as follows:

- Preparatory costs of construction – engineering charges emerging in the process of planning, and other engineering: 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: 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: 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

263. 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

264. 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).

265. 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).

266. 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/m^2.

267. 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

268. 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.

269. 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.

270. 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.

271. 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.

272. 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.

273. 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

274. 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)

275. The estimation for changes in inventories was made by types, sectors and industries.

5.13.1. Valuation

276. Purchased asset stocks are valued at actual purchasing prices excluding reimbursed VAT values. Inventories include materials, commodities, supplies, etc. purchased to be sold without transformation to a third party.

277. Among own-produced assets are classified finished goods, other work in progress and slaughter animals, valuated at **production costs.**

278. Planting cost data are registered under planting wood production forests.

279. In case of selling purchased and own-produced assets purchasing price is applied.

280. The decrease of the stock of inventories because of normal losses is deducted from the stock.

281. 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.

282. Estimation on holding gains/losses has not been incorporated into the accounts. The first calculations are ready and it planned to introduce them.

5.13.2. Data sources

283. 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 corporate profit tax returns of enterprises are used primarily in annual estimations.

284. 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.

285. The gap between the two different estimation methods for annual data is examined by industries and by size of enterprises. Small data adjustments are 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 is compared to tax data by industries, and, if necessary, further data correction is made based on tax data ensuring a wider coverage.

286. 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

287. In annual corporate 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

288. Changes in inventories are estimated as the difference between the closing stocks of two subsequent years.

289. Adjustments in the framework of the estimation procedure are carried out by comparing data from tax records with data from the Quarterly Shortern Statistics (STS). 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.

290. The next table summarizes the main items of changes in inventories:

Table 5.44 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)

291. 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

292. In 2002 the source of exports of goods data was external trade statistics. The statistical recording of external trade of goods 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.

293. Till 1 May 2004, exports and imports 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 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.

294. 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.

295. b) **Product movements among affiliated firms** are contained by external trade data in line with specific characteristics of transactions.

296. 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.

297. Major and minor **repairs** are not differentiated, and are accounted in net costs.

298. All merchanting data are recorded in net value, not regarding the time interval between purchases and sales (ESA paragraph 3.133).

299. The export of goods accounted in national accounts consists of exports included in external merchandise trade statistics and some items recorded separately.

300. 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 trade statistics.

301. The exports of goods recorded in external merchandise trade statistics consists of normal exports, exports after inward processing and exports for outward processing. External 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.

302. 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.

303. 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.

304. Major and minor processing are not distinguished in statistics, therefore the gross value of all contracted works is listed among products.

305. 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).

306. The classification is made according to the national version of the Combined Nomenclature on ten-digit level (CN8+2 digits for national subdivisions).

307. The exports of goods in external merchandise trade statistics is valued on fob terms.

308. 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.

309. 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.

310. 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.

311. 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

312. The data source of the exports of services is the balance of payments statistics compiled by the National Bank of Hungary.

5.16.1. Transport services

313. 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.

314. 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

315. 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.

316. The re-exchange of forints not used up by non-resident customers are recorded as reverse revenues.

317. 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').

318. 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.

319. 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

320. 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

321. 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.')

322. 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.

323. Construction abroad and construction in Hungary are not distinguished.

5.16.5. Insurance services

324. 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.

325. 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.

326. Insurance damages received and paid are not recorded under this title.

327. Till 2004, insurance service data included cash data in which the National Bank was not able to separate service fees neither in exports nor in imports. Since 2005, statistics made on accrual basis have contained insurance-specific service fees.

5.16.6. Financial services

328. 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

329. 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.

330. 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

331. 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

332. 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.

333. 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'.

334. 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 service in Hungary. Special business, professional and technical service fees (charged by national security bodies and the police) are recorded under this title.

335. 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

336. 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.

337. 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

338. 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

339. In 2002, the source of imports of goods data was external trade statistics and balance of payments statistics. The statistical recording of external trade of goods 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.

340. Till 1 May 2004, exports and imports 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.

341. **Financial leasing transaction** data are collected on a separate transaction code, and accounted when products physically move.

342. **Product movements among affiliated firms** are contained by external trade data in line with specific characteristics of transactions.

343. 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.

344. All merchanting data are accounted in net value, not regarding the time interval between purchases and sales.

345. Statistical data on the imports of goods include the following items 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.

346. 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.

347. External trade in goods contains all contracted work transactions and repairs, therefore, they are excluded from services. Insurance services included revenues till 2004 and service fees since 2005. Tourism data do not contain estimations on foreign second homes owned by residents.

348. The imports of goods accounted in national accounts consist of imports included in external trade statistics and some items recorded separately.

349. 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 trade statistics.

350. 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 temporally admitted or dispatched, goods in transit, monetary gold, goods under operational lease and goods treated as part of services are excluded from external trade statistics.

351. 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.

352. Major and minor processing are not separated in statistics, therefore, all contracted works are listed among products in gross value.

353. External trade in goods statistics survey products at borders. There is no information on post-border-crossing losses occurring before/after the ownership change.

354. The classification is made according to the national version of the Combined Nomenclature on ten-digit level (CN8+2 digits for national subdivisions).

355. 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.

356. 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.

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.

357. 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.

358. 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.

5.18. Imports of services

359. 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

360. 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.

361. 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'.

362. There is no breakdown by transport modes (sea, road, railways, etc.).

5.18.2. Travel services

363. 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.

364. 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.

365. 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.

366. 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

367. 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

368. 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.')

369. 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.

370. Construction abroad and construction in Hungary are not distinguished.

5.18.5. Insurance services

371. 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.

372. 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.

373. Insurance damages received and paid are not recorded under this title.

374. 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

375. 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

376. 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.

377. 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

378. 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

379. 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.

380. 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.

381. 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.

382. 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

383. 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.

384. 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

385. 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).

386. Table 5.45 shows the "bridges" between original foreign trade data and the National Accounts concept foreign data figures for 2002.

Table 5.45 Bridge table for 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
Contribution in kind 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
Trading of goods, total (external trade statistics concept + separately recorded) *f.o.b/. c.i.f*	*8 825 917*	*9 609 672*	*-783 762*
c.i.f. /f.o.b. correction	0	-258 129	258 129
Trading of goods totals f.o.b./f.o.b	*8 825 917*	*9 351 59*	*-525 633*
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 acquits 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 is 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 output is more characteristic than over-reporting intermediate consumption. Therefore, the 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

D.112	***Wages and salaries in kind***
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 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/Output 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 output, intermediate consumption, final consumption and export and import figures.

Table 7.4 The effect of illegal activities, total, 2002 (million HUF)

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 yearly:

- the number of persons using drugs by the type of drugs,

- the quantity of purchased drugs,

- the average market 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. After eliminating the above mentioned not ordinary consumers, the remaining 180 thousand comprises about 50 thousand drug addict, 80 thousand regular consumers and about 50 thousand occasional consumers. In the further estimation we do not take into account the consumption of occasional consumers, because their consumption is highly volatile and incidental. About the half of the addict and regular consumers take pills (LSD, SPEED, Ecstasy, Amphetamine), one tenth take Marijuana and one tenth 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 regular, but not addict 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 an addict consumer's is 0.5 milligram that he/she consumes on a certain day. Thereby, that even the addict consumers don't consume it every day, plus the smaller consumption of

regular, but not addict consumers lower the digits of the average consumption – the theoretical 0.5 milligram daily dose became 0.3 milligram daily dose in the practice. Using the similar calculating method the theoretical 3-3.5 gram daily dose of marijuana will be 2 gram during the calculation of the consumption in practice.

53. Multiplying the practical daily doses by the estimated number of 130 thousand consumers we get about between 30 and 40 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 assume 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 fifth. 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.

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 as it is mentioned in several police report. For example, on several international events (like the Formula I. Race or the Festival of Sziget) a third of the detected drug consumers were foreigners.

The estimation of income paid abroad from illegal activity

57. The estimation was based on the annual reports of the Supreme Prosecutor's Office and the findings of police concerning foreign crime perpetrators.

58. 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 7.5 The number and ratio of foreign citizens out of crime perpetrators against public order

Year	Perpetrators[9] abusing with drugs	Perpetrators of crime against public order	Of which: foreigners	Ratio of foreigners among the crime perpetrators against public order, percentage	Ratio[10] 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 7.6 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 7.7 The estimation of drug consumption, 2002

Type of drugs	Estimated number of consumers	Daily portion (average)	Estimated consumption per year	Average price	Household final consumption (domestic)	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**

[9] Hungarian Statistical Yearbook 2007. Budapest, 2008. page 194

[10] We supposed, that all the crime committed by foreigners against public order is abusing with drugs

Table 7.8 The estimation of income from trade of drugs, 2002 (Current prices, million HUF)

Type of drugs	**Imports of goods**	**Exports of goods**	**Intermediate consumption**	**Value added**	**Output**	**Compensation of employees and mixed income paid to the rest of the world**
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

59. According to the Hungarian legislations, the prostitution itself is not indictable offense (in case of following certain rules) but other activities connected to them (for example, procuring prostitutes and clients, managing girls, letting rooms for these occasions, collecting defensive money) are considered illegal. The incomes deriving from these activities are not returned (declared) and taxes are not paid after them, even if they happen to be legal, so they are a part of the hidden economy.

60. 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.

61. Civil organisations representing the interests of prostitutes and sociology reports announce information about sexual services. These reports show that one-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 significant in most fields of prostitution. The sexual services 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.

62. 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.

63. 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.

64. The incomes deriving from prostitution are not equal to the revenues gaining from this activity. About a third of the revenues deriving from sexual services cover the cost connected to the service (intermediate consumption), for example hair dressers, cosmetics, taxis, clothing etc. We do not take as intermediate consumption like the money paid by the prostitutes to the procuring men, to the mediators, to the drivers or to the owners of rented rooms. They are treated as income redistribution among households, so they are not appear in the accounts. 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 remain at them, the bigger portion they have to give to their procuring men.

65. During the compilation of GDP it has to be taken into account, that some costs (intermediate consumption) of prostitutes are already counted among the household consumption, so a certain part of purchased household's consumption becomes intermediate consumption. That is why we reduced the household consumption figures with these amounts (20.7 billion HUF) and put them into the accounts as 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 (observed or non-observed), so it would be doubling to add the amount of these invoiced services as illegal incomes or consumptions again. We estimate 11.5 billion HUF imports for prostitution, which comprise mainly illegally imported magazines and films or special accessories. The estimation is based on police and custom data and other studies.

66. In contrast to the possessors of drug trade, the Hungarian criminal clans have domination over the prostitution.

Table 7.9 The estimation of consumption from prostitution, 2002

The condition of the services	Consumers		Cases of consumption		Cases of consumption		Average price	Household final 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 7.10 The estimation of income from prostitution, 2002 (Current prices, million HUF)

The condition of the services	The value of imports	Intermediate consumption	Value added	Output
	a	b	c	a+b+c
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

67. 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.

68. 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.

69. 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).

70. 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.

71. 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.

72. GDP for unregistered artistic activities and other services are calculated by expert's estimations.

73. 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

74. Estimations for entrepreneurs are included in the N1 and N6 non-exhaustiveness types.

N6. Entrepreneurs deliberately misreporting

75. In the case of entrepreneurs neither output nor intermediate consumption seems to be reliable. Therefore, the adjustment is estimated by using industry specific IC/Output 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.

76. 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

77. 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

78. 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.

79. 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.

80. 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.

81. 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.

82. 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

83. 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.

84. 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

85. 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

86. 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.

87. 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.

88. 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.

89. 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.

90. 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.

91. 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.

92. 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.

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

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

95. 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.

96. No special adjustment is made to **changes in inventories. I**t is the part of calculating the production of small enterprises.

97. 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.

98. 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

99. Concerning VAT fraud, adjustments to be made on national accounts data are laid down in Commission Decision No. 98/527/EC.

100. 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.

101. 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.

102. 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 (B.5g) 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, taxes on production and imports paid to the EU) and adding primary income received from the rest of the world (compensation of employees, property income and subsidies from the EU). Table 8.1 shows the transition from GDP to GNI in 2002 and 2004.

Table 8.1 Transition from GDP to GNI

Operation	ESA Code	Transactions and balancing items	2002		2004	
			Billion HUF	% in GDP total	Billion HUF	% in GDP total
	B.1*g	**Gross domestic product (at market prices)**	**17 148.4**	**100.00**	**20 695.5**	**100.00**
-	D.1	Compensation of employees paid to the rest of the world	117.1	0.68	146.9	0.71
-	D.4	Property income paid to the rest of the world	1 242.9	7.25	1 629.0	7.87
-	D.2	Taxes on production and imports paid to the Institutions of the EU	-	-	38.3	0.19
+	D.1	Compensation of employees received from the rest of the world	232.5	1.36	334.1	1.61
+	D.4	Property income received from the rest of the world	256.4	1.50	331.2	1.60
+	D.3	Subsidies received from the Institutions of the EU	-	-	80.5	0.39
=	**B.5*g**	**Gross national income**	**16 277.4**	**94.92**	**19 627.2**	**94.84**

8.0.0.1. Applied exchange rates in aggregation in BOP and IIP statistics

2. 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 NBH 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 NBH 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).

8.0.1. Main components

D.1 Compensation of employees

3. 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.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.

D.4 Property income

6. This category represents incomes, which are received by Hungarian owners of 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).

8.0.2. Reference framework

8.0.2.1. BOP data collection system and data sources

7. The main data source for the GNI transition items is the BOP compiled by the National Bank of Hungary (NBH) except for the compensation of employees and the EU related items. In case of these components the HCSO provide the data for the compilation of BOP.

8. In Hungary, the central bank (NBH) is responsible for the compilation and official publication of balance of payments (BOP) statistics and the international investment position (IIP) data.

9. The increase in the NBH'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 NBH 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 (International Transactions Reporting System, 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 NBH 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 NBH and the HCSO cooperated with each other to design and develop the new system. The co-operation with the HCSO in data production has also been enhanced in order to improve the non-financial parts 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 HCSO 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. The HCSO is the source of data on trade in goods and services, on compensation of employees and government and household transfers. The compilation of investment income data – integrated into the closed and consolidated reporting scheme for financial assets and liabilities (opening position, all type of flows separately and closing position) – is the responsibility of the NBH

12. The legal background are the Act on Statistics (Act XLVI of 1993) and for BOP and IIP compilation, the Act on the NBH (Act LVIII of 2001) and the related government and NBH decrees of relevance. The new data reporting obligations for 2008 were ordered in February 2007, by the Decree 3/2007. (II.21.) NBH.

13. More details are provided in the subchapters exploring the specific issues.

8.0.2.2. Residency

14. The residence concept applied in the balance of payments statistics is in conformity with BPM5. The definition is set in the related *NBH* Decrees. Reporting agents shall apply this definition in their regular reporting to the compilation of the balance of payments statistics.

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 interests 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 and living in Hungary or immigrated to the country.

Legal entities

17. In fact legal entities are considered resident if they are registered at the Registry Court (having a HCSO business register number).

18. Free zone companies and other similar categories are to be considered residents.

19. Companies registered in Hungary in accordance with company laws in force – either though 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.)

20. 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.

21. Two types of off-shore companies were distinguished for the purposes of compiling the balance of payments statistics.

22. The first group was 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 were recorded on a net basis (net of inflow and outflow) instead of gross recording of the transactions. The related FDI stock data were derived from the cumulative net transactions data.

23. The second group was 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 - were recorded in the balance of payments.

8.1. Compensation of employees (D.1)

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.

25. Seasonal or other short term workers and border workers 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 are 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 are treated as to the ROW whatever the duration. Compensation of employees also includes payments received by local (host country) staff of embassies, consulates and military bases as such entities are considered to be non-resident of the host

economy. This should also include such staff employed by foreign 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. The compensation of employees is estimated by the HCSO on accrual basis. Compensations are recorded when the work is performed. The compensation of employees includes social contributions and income taxes paid by employers and employees. The actual social contribution payable by employers is part of D. 1.

8.1.1. Description of sources and methods

27. In this estimation, data on 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 from abroad received 232 billion HUF, and foreign workers in Hungary received 117 billion HUF thus the net balance was 115 billion HUF.

Table 8.2 Compensation of employees including illegal activities, 2002.

Type	Billion HUF
Received from the Rest of the World	232.5
Paid to the Rest of the World	117.1
Net	115.4

8.1.1.1. Compensation of employees received from the Rest of the World

28. Data on the number of Hungarians working abroad – available from the national labour account compiled by HCSO and the study of the Office for European Affairs – are used for the estimation of compensation of employees received from abroad.

29. The number of Hungarian residents working abroad are estimated by the HCSO 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.

30. The Office for European Affairs, a Hungarian government body, made an estimation how many Hungarian employees work in the different countries. According to the report of the Office, about 43 thousand Hungarian workers in 2004 were recorded abroad. But the study of the Office 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 Hungarian employees abroad is estimated to be about 60 thousand people on average in 2004. For the time being, there are no official figures for the length of time of working, so the number of employees recorded by labour 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 8.3 Wages of resident workers working abroad

2002.		Austria	Germany	Italy	Great Britain	USA
Wages and salaries (D.11)	million local currency	281	229	33	18	33
Number of Hungarian employees by country	person	11 090	9 290	2 214	1 178	1 548
Exchange rate	HUF/local currency	242.97	242.97	242.97	386.65	258.00
Total wages and salaries of workers	million HUF	68 274	55 605	8 006	6 826	8 474

31. 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).

32. Labour statistics provide information on workers abroad by countries and industries. To this information Eurostat data on average monthly earnings by countries is used. For the five most important countries employing Hungarian residents (Austria, Germany, Italy, the United Kingdom and the United States) detailed calculations are made. Our assumption is that Hungarians working abroad earn less than the foreign average, around 75% of the employees of the country in question. Data on other countries were estimated by using the average of these five countries. .

Table 8.4 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

33. The estimation of compensation of employees paid to 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 is obtained by deducting from the number of work permits multiplied by 2 the number of employees who declared their personal income tax. The salaries of non-registered foreign employees are estimated by using the average salaries of legally employed workers. The above estimation is supplemented by the estimated income from illegal activities (production and distribution of drugs, and sexual services) of foreign citizens.

Table 8.5 Number of foreigners working in Hungary 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**	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

Illegal activities

34. In 2006, the estimation of production, consumption and income deriving from illegal activities was introduced in the Hungarian national accounts in compliance with the ESA'95. (3.08).

35. According to the requirements 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 in short term these activities do not change in a hectic way and various pieces of information are 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 prices due to changes in market and legal regulations, which can hardly be measured by statistical means. It is more unlikely to find basic sources of information than in the case of the first two items. Until now, HCSO did not try to estimate smuggling.

36. The starting point is 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 are 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 are used.

37. In the case of prostitution the method is similar. First estimation is made for the consumption, using the number of consumers, number of cases using average prices. There are two additional data sources: the data of the association of prostitutes and special studies. For the estimation of intermediate consumption mainly reports of the police are used.

38. The calculations go back until 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

39. The estimation is based on the annual reports of the Supreme Prosecutor's Office and the findings of police concerning foreign crime perpetrators.

40. Concerning prostitutions the balance of amount paid abroad and received from abroad is about zero. According to the data available, the number of Hungarian prostitutes working abroad and foreigners working in Hungary are almost equal. In case of drug trade the income flow to the rest of the world may be quite significant.

41. It was assumed, that the production and trade with drugs is the most common crime the foreign perpetrators commit. Actually we assumed, that all the crime committed by foreigners relate to abusing with drugs By this way we set the ratio of income paid to abroad from drug trade.

Table 8.6 The number and ratio of foreign citizens out of crime perpetrators against public order

Year	Perpetrators[11] abusing with drugs	Perpetrators of crime against public order	Of which: foreigners	Ratio of foreigners among the crime perpetrators against public order, percentage	Ratio 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

[11] Hungarian Statistical Yearbook 2007. Budapest, 2008. page 194

Table 8.7 The foreigners' share from the income of drug production and trade

Year	Production and trade of drugs, GVA 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 8.8 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

8.1.1.3. Components of compensation of employees

42. The estimation of components of compensation of employees paid to the Rest of the World (employers' social contributions, current taxes on income, social contributions) is assessed on the basis of the current Hungarian contribution rates. These rates are based on publication of Hungarian Tax and Financial Control Administration.

43. The net wages and salaries of foreign workers in Hungary in 2004 was 117.6 billion HUF.

Table 8.9 Components of compensation of employees paid to the Rest of the World

Billion HUF

ESA-Code	Item	2002	2003	2004
D.1	**Compensation of employees**	**117.1**	**137.1**	**146.9**
D.12	Employers, social contributions	12.1	13.8	14.6
D.11	**Wages and salaries**	**105.0**	**123.3**	**132.3**
D.5	Current taxes on income, wealth, etc.	8.3	8.6	8.4
D.6	Social contributions and benefits	17.6	19.9	21.0

44. In the absence of information on components of compensation of employees received from the Rest of the World, the current Hungarian contribution rates are applied, as well. Employers' social contribution is an exception calculated as 25 % of gross wages and salaries, because according to our current knowledge, international level of this contribution is lower than the Hungarian one.

Table 8.10 Components of compensation of employees received from the Rest of the World

Billion HUF

ESA-Code	Item	2002	2003	2004
D.1	**Compensation of employees**	**232.5**	**292.4**	**334.1**
D.12	Employers, social contributions	46.5	58.5	66.8
D.11	**Wages and salaries**	**186.0**	**233.9**	**267.3**
D.5	Current taxes on income, wealth, etc.	40.9	46.7	49.1
D.6	Social contributions and benefits	73.5	91.2	104.2

8.2. Taxes on products and imports (D.2)

8.2.1. Introduction

45. 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

46. 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. From 2004 onwards (EU entry), the 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

47. 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 State Treasury, which is cash basis.

Payment of duties on import – D.212 (taxes on products): data of the final consolidated accounts.

Payment of duties on sugar-levy – D.214L (taxes on products): data of the final consolidated accounts.

According to recent recordings, 75% of the liabilities of duties on import and sugar-levy of the given year are paid to the EU. 25% of the duties on import and sugar levy are recorded as P1 – rendering government services to the EU – to cover the expenses of levying taxes.

48. 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.

49. Monthly regulation of value added type taxes and accrual time of payment principle for duties on import and sugar-levy.

50. Sugar levy belongs to the traditional resources of the EU. This kind of tax is paid by producers as well as manufacturers twice a year. The payment is realized after quotas approved in the Hungarian Treaty of Accession.

8.3. Subsidies (D.3)

8.3.1. Introduction

51. 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.

52. 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.

53. 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.

54. The source of data of agricultural subsidies of EU is the final consolidated accounts of the Ministry of Rural Development and the monthly report of the Agricultural and Rural Development Office /Paying Agency/ from which cash basis data of the transfers recorded on treasury accounts can be obtained.

55. In this source of data such items are also registered, which are related to government accounts through EU lending only.

56. 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:

Agro-environmental protection program – D.392 (subsidies on production)

Single Area Payment Scheme (SAPS) – D.392 (subsidies on production)

57. 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 8.11 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

8.4. Interest (D.41)

8.4.1. Introduction

58. 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 is recorded on an accrual basis.

59. 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 was a settlement system (ITRS) until 2008, in that period they were reported on a cash basis and only adjusted for accruals after 2004. Cross-border interest flows were recorded after deduction of taxes.

Table 8.12 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.*

60. Investment income in the BOP is part of the general reporting system that was changed in the period of review (2002-May 2009) as it is described in section entitled *BOP data collection system*. The major types of investment income are dividends linked to equity and interest linked to debt.

61. 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.

62. Internal and external reference rates were defined based on local currency and foreign currency transactions.

63. 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 8.13 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	349	0.14
	Interest paid to the ROW	452 932	447 252	-5 680	-1.25
	Balance of interest	-212 221	-206 192	6 029	2.84

64. As regards the interest flows on financial leasing, respondents are required to make a split between the amortization and the income flow.

65. With regard to the interest accruing on trade credits, since then are 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

66. 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). Until 2003 all relevant transactions channelled through the resident banking sector were recorded by reporting banks under transaction codes according to an *NBH Decree*. Transaction codes were 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 were channelled through accounts with non-residents were reported directly by non-financial companies according to the *Government Decree.*

67. 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

68. 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.

69. Income on international reserves is reported by the NBH 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.

70. Incomes on trade credits and financial leasing are not recorded in the BOP.

71. In line with OECD recommendations on counteracting harmful tax practices no off-shore enterprise could be established after 31 December 2002 in Hungary and already existing off-shore enterprises could benefit from the regime only until 31 December 2005.

72. No investment income was recorded for off-shore enterprises in the BOP.

73. From January 2006, on the ground of the same economic considerations, namely

- foreign owned legal structures registered in Hungary,
- little or no employment
- few or no local operations
- acting as pass-through entity in substantial capital transactions within an enterprise group, between related parties

74. A separate identification of the sub-group of Special Purpose Entities (SPEs) is retained, but as a change to the pre-2006 practice and to bring it into harmony with the international methodology, their transactions and positions with the related investment income flows are fully recorded in the BOP and IIP. Identifying SPEs based on common set of criteria and maintaining a harmonized registry for them is jointly managed by the NBH and HCSO.

75. The weak points of the interest accounting applied up to 2003:

- Non-accrual information.
- The recording of trade credits and financial leasing operations were missing, therefore there were no recording on the related interest income either.
- Data deriving from ITRS were accounted on a net and not on a gross basis (excluding tax deductions and including interest relieves).

8.4.3. Description of sources and methods from 2004 until 2008

76. From 2004 until 2008, the interest incomes were recorded on an accrual basis in the quarterly BOP. With regard to the interest income data on accrual basis:

- The monetary institutions, including the NBH, reported their interest incomes deriving from their reserve assets as well as from their claims and liabilities on an accrual basis to the NBH's Statistics Department. The report covered all components of the financial account that was 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. were regarded. The report covered foreign assets and liabilities.

- In case of the general government sector, for the BOP Division, the Financial Accounts Division of the NBH provided data on the accrual interest income of the foreign financial liabilities, which were mainly non-resident owned government bonds and treasury papers. Regarding, among others the ROW, the accrued interest was 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 were estimated on an accrual basis by the NBH. Information from the ITRS on interest flows were combined with estimated stocks of relevant foreign financial assets and liabilities for twelve-month periods and a moving 12-month average interest yield was calculated. The latter yield was applied to end-of-month stocks of the reporting month concerned. Annual estimates were a summation of twelve months. This procedure applied for any financial instrument of relevance. The formula of the applied rate of interest for each relevant month was 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 was 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 were estimated on the basis of cumulated flows. Income on trade credits and financial leasing was in the same situation as it was before 2004, it was not recorded in the BOP, which was a weak point.

77. Since 2008, when the new BOP collection system based on direct reporting was implemented, reconciliation of flows on accrual basis (income and other flows) and stocks are required from respondents to be reported.

Table 8.14 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	11.3	11.3	-0.1
Debit	91.3	91.4	0.2
Net	-80.0	-80.2	-0.2
3.3.2. Portfolio investment income. Bonds and notes. credit	70.2	69.5	-0.7
Debit	282.5	297.9	15.5
Net	-212.3	-228.4	-16.2
3.3.3. Portfolio investment income. Money market instruments. credit	13.5	13.6	0.1
Debit	0.1	0.1	0.0
Net	13.4	13.5	0.1
3.4. Other investment income. credit	96.9	99.4	2.4
Debit	147.7	151.2	3.5
Net	-50.8	-51.9	-1.1
Income on debt. Total. credit	191.9	193.7	1.7
Debit	521.5	540.7	19.2
Net	-329.5	-347.0	-17.4

8.4.4. Description of sources and methods current procedure

78. 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.

79. In 2007, an expert group established by the HCSO and the NBH 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 NBH in 2008.

80. 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 NBH.

81. 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 (NBH)
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 (NBH)
Securities statistics (interest rates. stocks and flows of different securities. NBH)
FISIM calculation for the non-financial accounts (NBH)

82. Main advantages of the interest income matrix:

- consistent set of interest flows for the total economy and its sectors
- inclusion of all available data sources
- consistency with the FISIM calculation
- consistency with government accounts and BoP statistics (from 2008 onwards)
- full coverage of sectors and instruments on a quarterly basis
- application of accrual method (debtor approach) according to the ESA95

83. The NBH 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 NBH compiles 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 8.15 Effect of the change of new interest matrix on GNI (at current prices)

Billion HUF

	2002	2003	2004	2005	2006
Total	-23.3	-45.4	-30.0	-29.4	+26.1

8.5. Distributed income of corporations (D.42)

8.5.0. Introduction

84. Distributed income of corporations is the income to which shareholders are entitled as a result of placing funds at the disposal of corporations.

8.5.1. Description of sources and methods

85. 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 8.16 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	3.8
Income on portfolio equity. debit	16.1
Income on portfolio equity. net	-12.3
Total dividends and distributed income. credit	**8.5**
Total dividends and distributed income. debit	**332.7**
Total dividends and distributed income. net	**-324.2**

* *Data may not add up to the totals due to rounding.*

Future plan for the dividends:

86. The purpose of compiling the dividend matrix is to improve 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 the HCSO in cooperation with the NBH.

87. Steps made to improve dividend accounting:

1.) At the invitation of the HCSO, the NBH examines the possibility of compiling a matrix – in 2009, in the framework of the co-operation agreement made between the HCSO and the 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.

88. The two institutions together are going to establish the methodology of dividend accounting at the end of 2009.

89. The dividend matrix has been compiled and calculations has been analysed until the end of May 2010. The decision on implementing the output has been made at 2010 and the new method and data has been used in national accounts in September 2010 back to 1995.

8.5.2. Income on FDI equity – Description of sources and methods

FDI register

90. Since January 2008, 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. With the launch of the new data collection system settlement-based data provision by the credit institutions was terminated. Under the new regime the NBH 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.

91. 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 (NBH Decree 3/2007. (II.21.) to submit its reports directly to the NBH. If an enterprise meets the required conditions becomes the part of the monthly, quarterly or annual sample.

<u>Reporting thresholds for the quarterly FDI survey</u>

92. 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 l 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

93. 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

94. In close cooperation with the HCSO in 1999 the NBH introduced a questionnaire-based survey to monitor direct investment by residents abroad and non-residents in Hungary. The survey – replacing the ITRS data – had 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. Until 2008 no any adjustments were applied to this "all inclusive" data during the compilation. However these accounting data for profits by themselves were partially corresponding to the COPC, since they excluded depreciation, provisions for host-country income and corporation taxes and debt repayments receivable/payable, and included interest receivable/payable. On the other hand, contrary to the COPC, realized and unrealized capital gains and losses were also included. This after tax profit was used for calculating RIE in the BOP. This method has changed with the launch of the new direct reporting data collection system in 2008. Extraordinary elements of the profit and loss account are submitted by the respondents on the annual survey form, which makes the compilation of profits (and RIE) according to the COPC possible.

95. 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 NBH has the reported data on after tax profits for the previous (reference) year and on dividends for the current year. The NBH 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 NBH replaces the estimates of after-tax profit recorded and dividends declared payable with preliminary actual data derived as a result of the processed questionnaires.

96. 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.

97. As a part of the implementation of new international standards (BPM6 and BD4) by 2014, the data collection survey forms will be amended accordingly, in order to meet the requirements of the new manuals. The methodology of taking into account indirect ownership regarding equity and income will be elaborated during the preparation phase. In the new direct reporting system, since 2008, indirect FDI relationships in terms of FDI 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. As a part of the implementation of the new international standards (BPM6 and BD4), the applied methodology will be elaborated by 2012 and introduced by 2014. he

FDI in the domestic economy

98. As for the FDI in Hungary, until 2008 the sample of enterprises for the annual survey contained direct investment enterprises with direct investors' equity holdings above a threshold of HUF 300 million (EUR 1.2 million). The register was 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, the sample of enterprises (the sample size see in Table 8.17), covered 90-95 percent of the total of the relevant equity stock. The response rate was 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 8.17 Annual Inward FDI Survey: Number of Respondents

Reference period					
2002	**2003**	**2004**	**2005**	**2006**	**2007**
1 630	1 700	1 740	1 940	2 070	3 050

99. In grossing up the data for the total economy there is no change followed by the introduction of the new direct reporting system in 2008. The NBH 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.

100. 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.

101. Listed enterprises, irrespective of minimum holding criteria, are fully covered by the survey. Except building societies, the NBH 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 NBH and to the Hungarian Financial Supervisory Authority (PSZÁF).

FDI abroad

102. With regard to direct investment abroad, until 2008 the sample of enterprises for the annual survey contained enterprises having invested at least HUF 10 million (EUR 40,000) in terms of equity. The register was kept updated by using ITRS information. Credit institutions were also required to report, as the NBH had no data available from other sources on reinvested earnings and equity capital of their foreign subsidiaries. Since the reporting threshold was quite low and the outward FDI was very concentrated, in terms of equity invested abroad the coverage was considered to be close to 100%.

Table 8.18 Annual Outward FDI Survey: Number of Respondents

Reference period					
2002	2003	2004	2005	2006	2007
221	240	274	295	255	360

Concluding remarks

103. 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.

104. 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).

105. 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.

8.5.3. Quasi-corporations

106. Income from quasi-corporations such as land and buildings is included indistinguishably in distributed income as these investments are recorded under FDI. Until 2008 the information was derived from the ITRS. This was true for legal entities and for natural persons involved as owner of land and/or buildings as well. This way, coverage was guaranteed for quasi-corporations.

107. 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. In line with BPM5 dividends of quasi-corporations are recorded as withdrawal of equity.

108. Until 2008 the cross-border withdrawals from the income of quasi-corporations were measured as paid, since the source of data was a settlement system (ITRS).

8.5.4. Income on portfolio equity

109. 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). Since 2008, with the introduction of the new data collection system, income on portfolio equity in the BOP (foreign ownership of less than 10% of the equity capital) is reported according to a security-by-security system run by the NBH. Until 2008 all relevant transactions channelled through the resident banking sector were recorded by reporting banks under transaction codes according to the *NBH Decree*. Transactions that were channelled through accounts with non-residents were reported directly by non-financial companies according to the *Government Decree.* Dividends on portfolio equity were recorded in the BOP when they were paid, which was in principle a weak point, but since 2008 they are recorded on a due for payment basis.

8.6. Reinvested earnings on foreign direct investments (D.43)

8.6.0. Introduction

110. Reinvested earnings on foreign direct investments record earnings on direct investment which are retained by the enterprise.

111. 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 8.19 Reinvested earnings in balance of payments, 2002

Billion HUF

Credit	6.8
Debit	462.9
Net	-456.1

8.6.1. Description of sources and methods

112. 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).

113. The annual questionnaires serve to collect data on dividends and reinvested earnings based on the enterprises' profit and loss account. Until 2008, no any adjustments were applied to this "all inclusive" data during the compilation. However these accounting data for profits by themselves were partially corresponding to the current operating performance concept (COPC), since they excluded depreciation, provisions for host-country income and corporation taxes and debt repayments receivable/payable, and included interest receivable/payable. On the other hand, contrary to the COPC, realized and unrealized capital gains and losses were also included. This after tax profit was used for calculating RIE in the BOP. This method has changed with the launch of the new direct reporting data collection system in 2008. Extraordinary elements of the profit and loss account are submitted by the respondents on the annual survey form, which makes the compilation of profits (and RIE) according to the COPC possible.

114. Indirect links within big multinationals are only partially captured, only for FDI other capital is correct, but as regards the equity and RIE for the time being only direct links are accounted for.

However in the new direct reporting system, since 2008, indirect FDI relationships in terms of FDI 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. Nevertheless 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. As a part of the implementation of the new international standards (BPM6 and BD4), the applied methodology will be elaborated by 2012 and introduced by 2014. Profits and distributed earnings of direct investment enterprises are from the same source: the FDI survey.

115. 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.

116. The holding companies, branches (unincorporated enterprises wholly owned by foreign companies) and special purpose entities are covered by the register(s).

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

8.7.0. Introduction

117. 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.

118. The process of compilation of property income attributed to insurance policy holders payable to the Rest of the World and receivable from the Rest of the World are in development.

8.7.1. Property income payable to the Rest of the World - sources and methods

Life insurance

119. For the time being the HCSO 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

120. In the case of non-life insurance the source of the property income calculations will be the monthly payment data of the NBH (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 8.20 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

8.7.2. Property income receivable from the Rest of the World

Life insurance

121. 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

122. 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.

123. 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 8.21 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

124. 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.

8.8. Rents on land and on sub-soil assets (D.45)

8.8.0. Introduction

125. 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.

8.8.1. Description of sources and methods

126. 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. Until 2008, all relevant transactions channelled through the resident banking sector were recorded by reporting banks under transaction codes according to the *NBH Decree*. Transactions that were channelled through accounts with non-residents were reported directly by non-financial companies according to the *Government Decree*. It can be said that until2008, the use of land and exploration of sub-soil assets for a duration of less than one year was not relevant and thus there was no income flow to be estimated for rents.

127. The sources and procedures that were used permitted 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.

8.9. Conclusions

8.9.1. Strengths and weaknesses of the recent system:

128. The GNI calculation is mainly supported by a well organised BOP data collection system (until 2008 an ITRS since than direct reporting system), which is managed (including the compilation of data) by the NBH.

129. The compensation of employees is recorded on an accrual basis, including income taxes and social contributions.

8.9.2. Development of data sources for the GNI estimations:

130. In 2008, a new data collection system was launched for the BOP statistics by the NBH, 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 HCSO. The HCSO have made further efforts to supplement or replace the recently available information sources in order to meet both national accounts and BOP requirements.

131. Taxes on products and imports was included in data from 1 May 2004.

132. Subsidies were included in data from 1 May 2004.

133. Use of the COPC concept in reporting in the case of FDI data collection, amending the FDI questionnaires from 2008 onwards.

134. 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. Introduction

1. According to 448/98 Council Regulation and 1889/2002 Commission Regulation recording of financial activities was changed from first of January 2005. FISIM (Financial Intermediation Indirectly Measured) has to be calculated on a new methodology and has to be allocated to user sectors/industries. The above regulation does not require to distinguish loan and deposit transactions between financial institutions denominated in local and in foreign currency.

2. Taken into account user needs, a recommendation was recommended in October 2005 by the OECD National Accounts Working Group in order to make FISIM calculation more advanced. It was recommended to calculate separately for transactions denominated in local (HUF) and in foreign currencies (DEV).

3. FISIM calculation with two reference rates is based on loans, deposits and interest flows supplied by the National Bank of Hungary splitted into local and foreign currency. Both current and constant price FISIM time series give more realistic results in national accounts, than FISIM calculated by single internal and single external reference rates.

4. Allocation of FISIM to user sectors (Non-financial corporation, FISIM consumers classifies to Financial corporation sector, General government, Households, Non-profit institutions serving households and Rest of the World) is based on average outstanding amount of loans and deposits and related accrued interest receivable and payable by user sectors. FISIM is calculated on a quarterly basis, separately for HUF loans and deposits and DEV loans and deposits. Total FISIM were calculated as a sum of HUF and DEV FISIM by user sectors.

9.1. Data sources

5. The main data sources are:

- Balance sheet of monetary financial institutions is a joint data collection of the Hungarian Financial Supervisory Agency (HFSA) and the National Bank of Hungary (NBH). Data are broken down by counterpart sectors according to the National Accounts classification and available on a monthly basis.
- Monthly Balance of payments and IIP statistics compiled by the have a simplified (more aggregated) sectoral breakdown. Balance of payments is based on supervisory data and statistical surveys, as well.
- Balance sheets of other financial intermediaries are collected on a quarterly basis by the HFSA and the NBH.

9.1.1. Central Bank (S.121)

6. According to Council Regulation No 448/98, National Bank of Hungary (S.121) has to be excluded from the FISIM calculation.

9.1.2. Other monetary financial intermediation (S.122)

7. For Other monetary financial institutions sub-sector (S.122), the loan and deposit stocks were derived from the monthly balance sheets of financial institutions collected by the NBH. Stocks are not adjusted with loss in value and valuation differences, loans granted are measured at nominal value. For loans and deposits, a detailed breakdown by counterpart sector, maturity and type of instrument is available in the monthly balance sheets

8. NBH has no direct information on interest receivable and payable of financial institutions by counterpart sector breakdown. Interest rates were based on mainly new contractual interest rates statistics of NBH. HUF interest rates on loans and deposits of S.122 are weighted average of unsecured interbank placements. For current account interest rates one-day unsecured interbank placements interest rates are applied. For term deposits, interest rate of 1 day, 1, 3, 6, 12 month unsecured placements were weighted by their contracted stocks. For short term loans the same method is applied as for term deposits. For long term loans (if exist) interest rate of 12 months unsecured interbank placements are used. If such loan did not exist, then interest rate of short term loans are applied.

9. The stocks of unsecured interbank placements are used as weights for the calculation of average interest rate.

9.1.3. Other financial intermediation (S.123)

10. Data of Other financial intermediaries sub-sector (S.123) are taken from the quarterly balance sheets of other financial intermediaries and the financial accounts. All the stocks of small loans borrowed by investment funds including money market funds (S.123) are related to resident credit institutions and are denominated in HUF.

11. NBH has no direct information on interest receivable and payable of financial institutions by counterpart sector breakdown. HUF interest rates of long and short term deposits and interest rates of loans are calculated on interest rates of newly contracted loans and deposits. DEV interest rates are derived from HUF rates applying ECB prime rate and London Interbank Offered Rate (LIBOR)

12. The stocks of newly contracted loans and deposits are used as weights for the calculation of average interest rate.

9.1.4. Non-financial corporations (S.11), General Government (S.13), Households (S.14) and Non-profit institutions serving households (S.15)

13. Stocks of loans and deposits are taken from the balance sheets of credit institutions collected by HFSA.

14. NBH has no direct information on interest receivable and payable of financial institutions by counterpart sector breakdown. HUF interest rates of long and short term deposits and interest rates of loans were calculated on interest rates of newly contracted loans and deposits. DEV interest rates are derived from HUF rates applying ECB prime rate and LIBOR.

15. The stocks of newly contracted loans and deposits are used as weights for the calculation of average interest rate.

9.1.5. Rest of the world (S.2)

16. Stocks of loans and deposits are taken from the balance of payments.

17. Interest rates of loans granted by non-resident financial institutions and deposits in non-resident financial institutions are calculated on the basis on ECB prime rate and LIBOR.

9.2. Calculation method by user sectors

18. The table below summarises the transactions between financing and user (financed) sectors and subsectors:

Table 9.1 overview of FISIM calculation by sectors

Financing sector \ Financed sector		S.11	S.122	S.123	S.13	S.14	S.15	S.211	S.212
		Non-fin.corp	OMFI	OFI	GG	HH	NpisH	Non-res non FI	Non-res FI
S.11	Non-fin.corp	Intercompany loans excluded						Intercompany loans excluded	
S.122	OMFI	Domestic FISIM on loans and deposits	Interbank loans, deposits for calculating IRR	Domestic FISIM on loans and deposits	Domestic FISIM on loans and deposits	Domestic FISIM on loans and deposits	Domestic FISIM on loans and deposits	FISIM export on loans and deposits	Interbank loans, deposits for calculating ERR
S.123	OFI	Domestic FISIM on loans and deposits		Domestic FISIM on loans and deposits	Domestic FISIM on loans and deposits	Domestic FISIM on loans and deposits	Domestic FISIM on loans and deposits	FISIM export on loans and deposits	
S.13	GG								
S.14	HH								
S.15	NpisH								
S.211	Non-res non-FI'	Intercompany loans excluded							
S.212	Non-res FI'	FISIM import on loans and deposits	Interbank loans, deposits for calculating ERR		FISIM import on loans and deposits	FISIM import on loans and deposits	FISIM import on loans and deposits		

Cells with gray background: FISIM is not calculated for these transactions.

9.2.1. Central Bank (S.121)

19. According to Council Regulation No 448/98, National Bank of Hungary (S.121) has to be excluded from the FISIM calculation, but its output (sum of its cost) has to be accounted as intermediate consumption of S.122 and S.123. We applied this method during our calculation procedure.

9.2.2. Non-financial corporations (S.11)

20. Based on loans and deposits of non-financial corporations and their estimated accrued interest receivable and payable, FISIM can be calculated on HUF and DEV loans and deposits. Stock of loans and deposits are on monthly basis and quarterly stocks are generated by applying chronological average.

21. On the asset side, it is assumed that 50% of all transactions are related to non-resident FISIM producers. The other 50% are treated as transactions with non-resident non-FISIM producers and thus no FISIM is estimated.

22. Intercompany loans are excluded from the calculation.

9.2.3. FISIM producers (S.122 and S.123)

23. For Other monetary intermediation sub-sector (S.122), the loan and deposit stocks were derived from the balance sheets of financial institutions collected by the HFSA. 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. Repurchase agreements are accounted in all cases as loans and not as deposits. Repos and discounted bills were classified as short term instruments.

24. Financial leasing and other credit granting enterprises, investment companies, investment funds excluding money market funds and investment fund managers are taken into account in this sub-sector. Loans granted by Other financial intermediation (S.123) to Households (S.14) were considered as consumer loans, while deposits of Other financial intermediation (S.123) are placed at non-resident financial institutions FI's (S.212), loans granted by S.123 are assumed to provide to non-resident non - FI's (S.211) and loans of S.123 are borrowed from non-resident FI's (S.212).

9.2.4. General Government (S.13)

25. Based on loans and deposits of General Government and its estimated accrued interest receivable and payable, FISIM can be calculated on HUF and DEV loans and deposits. Stock of loans and deposits are on a monthly basis and quarterly stocks are generated by applying chronological average.

26. As for General government sector (S.13), the total amount of FISIM import (loans and deposits) were treated as a position against non-resident FISIM producers.

9.2.5. Households (S.14)

27. Based on loans and deposits of households and its estimated accrued interest receivable and payable, FISIM can be calculated on HUF and DEV loans and deposits. Stock of loans and deposits are on a monthly basis and quarterly stocks are generated by applying chronological average.

28. Loans granted by S.123 (Other financial intermediation) to Households sector (S.14) are considered as consumer loans and were accounted as final consumption of this sector.

29. FISIM on loans and deposits for households as owners of unincorporated enterprises were treated as intermediate consumption, while FISIM on consumer loans and on deposits as individuals are treated as final consumption of Households sector (S.14).

30. Taking into account the cost-based accounting of owner-occupied dwelling services FISIM on loans granted for dwelling owners were treated as output, intermediate consumption (production

approach to GDP) and final consumption expenditure (expenditure approach to GDP) of Households sector (S.14).

31. In the output of Households sector we record FISIM on loans attributed to owners of dwellings. In their intermediate consumption we take into account FISIM on loans as owners of dwellings and FISIM on loans and FISIM on deposits as owners of unincorporated enterprises. All other deposits are treated as deposits of individuals. Other loans of households and deposits of individuals are treated as final consumption.

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

32. Based on loans and deposits of Non-profit institutions serving households and its estimated accrued interest receivable and payable, FISIM can be calculated on HUF and DEV loans and deposits. Stock of loans and deposits are on a monthly basis and quarterly stocks are generated by applying chronological average.

9.2.7. Rest of the world (S.2)

33. Loans granted by non-resident FI's and deposits with non-resident FI's and interest rates come from the balance of payments. One loan and one deposit interest rate were applied; they were not separated by maturity (short term and long term) or by sight and term deposits.

34. In case of non-FISIM producer S.122 and S.123, 100% of their transactions are treated as deposit with non-resident FISIM-producers. These stocks are taken from the monetary statistics and the applied interest rates are taken from the balance of payments.

35. Based on HUF loans and deposits and accrued interest receivable and payable between resident financial institutions, a HUF internal reference rate was calculated separately and there was a DEV internal reference rate calculated from DEV loans and deposits and accrued interest receivable and payable between resident financial institutions as well. There were two similar external reference rates calculated for transactions between resident and non-resident financial institutions.

9.3. Calculation of reference rates

36. According to Council Regulation No 448/98 the internal reference rate is the asset side interest on 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.

37. For calculating internal reference rates, transactions between FI's contained all transactions between FISIM producers (both asset and liability side loans and deposits) are taken into account.

38. For calculating external reference rates, on asset and liability side transactions between resident and non-resident FI's, transactions between S.122 and S.123 FISIM producers and non-resident FISIM producers were taken into account.

9.3.1. Calculation of internal reference rate

39. Local currency (HUF) internal reference rate = Interest receivable on HUF loans and deposits on the asset side of resident financial institutions / stock of HUF loans and deposits on asset side of resident financial institutions.

40. Foreign currency (DEV) internal reference rate = Interest receivable on DEV loans and deposits on the asset side of resident financial institutions / stock of DEV loans and deposits on asset side of resident financial institutions.

9.3.2. Calculation of external reference rate

41. Local currency (HUF) external reference rate = Interest receivable and payable of HUF loans and deposits between resident and non-resident financial institutions on asset and liability side / stock of HUF loans and deposits between resident and non-resident financial institutions on the asset and liability side

42. Foreign currency (DEV) external reference rate = Interest receivable and payable of foreign currency loans and deposits between resident and non-resident financial institutions on asset and liability side / stock of foreign currency loans and deposits between resident and non-resident financial institutions on the asset and liability side.

Table 9.2 Calculation of HUF reference rates, 2002

FISIM producers in S122+S123 average stocks and accrued interest

	in million HUF
ASSETS	
Average outstanding amounts between FI's (Loans and Deposits)	
- between resident FI's (S122+S123)	503 612
- between resident and non-resident FI's	83 337
LIABILITIES	
Average outstanding amounts 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 FI's (S122+S123)	49 154
- between resident and non-resident FI's	6 330
INTEREST PAID	
Transactions between FIs (Loans and Deposits)	
- between resident FI's (S122+S123)	50 047
- between resident and non-resident FI's	2 423
Reference rates (%)	
Internal reference rate (49 154 / 503 612)	9.76%
External reference rate ((6 330+2 423) / (83 337+25 989))	8.01%

Table 9.3 Calculation of DEV reference rates, 2002

FISIM producers in S122+S123 : average stocks and accrued interest

in million HUF

ASSETS		
	Average outstanding amounts between FIs (Loans and Deposits)	
	- between resident FIs (S122+S123)	640 128
	- between resident and non-resident FIs	448 719
LIABILITIES		
	Average outstanding amounts between FIs (Loans and Deposits)	
	- between resident FIs (S122+S123)	623 898
	- between resident and non-resident FIs	800 541
INTEREST RECIEVED		
	Transactions between FIs (Loans and Deposits)	
	- between resident FIs (S122+S123)	22 313
	- between resident and non-resident FIs	12 957
INTEREST PAID		
	Transactions between FIs (Loans and Deposits)	
	- between resident FIs (S122+S123)	20 054
	- between resident and non-resident FIs	28 606
Reference rates (%)		
Internal reference rate	(22 313 / 640 128)	3.49%
External reference rate	(12 957 + 28 606) / (448 719+800 541)	3.33%

9.4. Calculation of total FISIM by user sectors

Total domestic FISIM is calculated according the following formulas:

FISIM on the loans granted to the domestic institutional sector = interest receivable on loans – (loan stocks x internal reference rate)

FISIM on the deposits of the domestic institutional sector = (deposit stocks x internal reference rate) – interest payable on deposits.

Total exported FISIM is calculated according the following formulas:

FISIM on the loans granted to non-residents = interest receivable on loans – (loan stocks x external reference rate)

FISIM on the deposits of non-residents = (deposit stocks x external reference rate) – interest payable on deposits.

Total imported FISIM is calculated according the following formulas:

FISIM imported for loans granted by non-resident FI's = interest receivable by non-resident FI's – (loan stocks x external reference rate)

FISIM imported for deposits in non-resident FI's = (deposit stocks x external reference rate) – interest payable by non-resident FI's on deposits of residents.

43. The above calculations are made separately for HUF and DEV loans and deposits. Total FISIM by institutional sector is obtained as a sum of HUF and DEV FISIM on loans and deposits by user sectors.

Table 9.4 Allocation of HUF FISIM to user sector of the national economy, 2002

FISIM output of S122+S123 : Breakdown by domestic sector

in million HUF

Stocks

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	*as consumers*	613 288
S142	*as owners of dwellings*	506 717
S143	*as owners of unincorporated enterprises*	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	*as individuals*	2 874 439
S142	*as individuals*	129 329
S143	*as owners of unincorporated enterprises*	66 998
S15	- Non-profit institutions serving households	98 414
TOTAL		**4 942 773**

Accrued interest

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	*as consumers*	138 300
S142	*as owners of dwellings*	71 356
S143	*as owners of unincorporated enterprises*	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	*as individuals*	170 378
S142	*as individuals*	9 060
S143	*as owners of unincorporated enterprises*	2 079
S15	- Non-profit institutions serving households	4 644
TOTAL		**262 550**

Internal reference rate **9.76%**

FISIM calculations

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
	as consumers	*P.3*	78 441
	as owners of dwellings P.1/P.2/P.3		21 899
	as owners of unincorporated enterprises P.2		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
	as individuals	*P.3*	110 177
	as individuals	*P.3*	3 563
	as owners of unincorporated enterprises	*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
S123	- Other fin. intermediaries-Not FISIM prod.	2 919
S124	- Financial auxiliaries	311
S125	- Insurance corporations and pension funds	1 367
S13	- General Government	10 908
S14	- Households	225 469
	as consumers	188 618
	as owners of dwellings	25 461
	as owners of unincorporated enterprises	11 390
S15	- Non-profit institutions serving households	5 605

Table 9.5 Calculation of exported HUF FISIM, 2002

FISIM output of S122+S123 : Exports

		in million HUF
Stocks		
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		
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 rate		**8,01%**
Export of FISIM calculations		
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 9.6 Calculation of imported HUF FISIM

Imports of FISIM by domestic sector

in million HUF

Stocks		**2002**
LOANS = ASSETS S2		
S11	- Non-financial 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
	as consumers	
	as owners of dwellings	
	as owners of unincorporated enterprises	
S15	- Non-profit institutions serving households	
TOTAL		**70 635**
DEPOSITS = LIABILITIES S2		
S11	- Non-financial 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
	as individuals	
	as individuals	
	as owners of unincorporated enterprises	
S15	- Non-profit institutions serving households	
TOTAL		**7 560**

Accrued interest

LOANS = ASSETS S2		
S11	- Non-financial 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
	as consumers	
	as owners of dwellings	
	as owners of unincorporated enterprises	
S15	- Non-profit institutions serving households	
TOTAL		**7 326**

DEPOSITS = LIABILITIES S2

S11	- Non-financial 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
	as individuals	
	as individuals	
	as owners of unincorporated enterprises	
S15	- Non-profit institutions serving households	
TOTAL		**558**

External reference rates **8.01%**

Imports of FISIM calculations

LOANS = ASSETS S2

S11	- Non-financial 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
	as consumers	0
	as owners of dwellings	0
	as owners of unincorporated enterprises	0
S15	- Non-profit institutions serving households	0
TOTAL imported FISIM		**1 671**

DEPOSITS = LIABILITIES S2

S11	- Non-financial 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
	as individuals	0
	as individuals	0
	as owners of unincorporated enterprises	0

S15	- Non-profit institutions serving households	0
TOTAL imported FISIM		**47**
TOTAL Import of FISIM		**1 717**

Table 9.7 Allocation of DEV FISIM to user sectors of the national economy, 2002

FISIM output of S122+S123 : Breakdown by domestic sector

in million HUF

Stocks		
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
	as consumers	200 635
	as owners of dwellings	9 828
	as owners of unincorporated enterprises	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
	as individuals	680 049
	as individuals	0
	as owners of unincorporated enterprises	7 948
S15	- Non-profit institutions serving households	10 183
TOTAL		1 110 416
Accrued interest		
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
	as consumers	16 289
	as owners of dwellings	501
	as owners of unincorporated enterprises	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
	as individuals	15 643
	as individuals	0
	as owners of unincorporated enterprises	162
S15	- Non-profit institutions serving households	198
TOTAL		**22 316**

Internal reference rates **3.49%**

FISIM calculations

LOANS = ASSETS S122+S123

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
	as consumers	9 295
	as owners of dwellings	159
	as owners of unincorporated enterprises	50
S15	- Non-profit institutions serving households	89
TOTAL		**13 902**

DEPOSITS = LIABILITIES S122+S123

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
	as individuals	8 062
	as individuals	0
	as owners of unincorporated enterprises	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
	as consumers	17 357
	as owners of dwellings	158
	as owners of unincorporated enterprises	165
S15	- Non-profit institutions serving households	245

Table 9.8 Calculation of exported DEV FISIM, 2002

FISIM output of S122+S123 : Exports

	in million HUF
Stocks	
LOANS	
Non-resident non-FIs	321 361
Non-resident FIs	64 777
TOTAL Exported FISIM on loans	**386 137**
-	
-	
DEPOSITS -	
Non-resident non-FIs	546 486
Non-resident FIs	202 774
TOTAL Exported FISIM on deposits	**749 260**
Accrued Interest	
LOANS	
Non-resident non-FIs	12 105
Non-resident FIs	2 086
TOTAL Exported FISIM on loans	**14 191**
-	
-	
DEPOSITS -	
Non-resident non-FIs	14 438
Non-resident FIs	6 514
TOTAL Exported FISIM on deposits	**20 952**
External reference rates	**3.33%**
Export of FISIM calculations	
LOANS	
Non-resident non FIs	1 413
Non-resident FIs	-69

TOTAL Exported FISIM on loans	**1 344**
DEPOSITS	
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, 2002

Imports of FISIM by domestic sector

in million HUF

Stocks

LOANS = ASSETS S2		
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
	as consumers	
	as owners of dwellings	
	as owners of unincorporated enterprises	
S15	- Non-profit institutions serving households	
TOTAL		**1 018 553**
DEPOSITS = LIABILITIES S2		
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
	as individuals	
	as individuals	
	as owners of unincorporated enterprises	
S15	- Non-profit institutions serving households	
TOTAL		**241 419**

Accrued interest

LOANS = ASSETS S2

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
	as consumers	
	as owners of dwellings	
	as owners of unincorporated enterprises	
S15	- Non-profit institutions serving households	
TOTAL		**42 087**

DEPOSITS = LIABILITIES S2

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
	as individuals	
	as individuals	
	as owners of unincorporated enterprises	
S15	- Non-profit institutions serving households	
TOTAL		**5 910**

External reference rates **3.33%**

Imports of FISIM calculations

LOANS = ASSETS S2

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
	as consumers	0
	as owners of dwellings	0

	as owners of unincorporated enterprises	0
S15	- Non-profit institutions serving households	0
TOTAL imported FISIM		**8 200**
DEPOSITS = LIABILITIES S2		
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
	as individuals	0
	as individuals	0
	as owners of unincorporated enterprises	0
S15	- Non-profit institutions serving households	0
TOTAL imported FISIM		**2 122**
TOTAL Import of FISIM		**10 322**

9.5. Allocation of total FISIM to industries

44. Total FISIM of Non-financial and Financial corporations is allocated to industries on the basis of their stock of loans and deposits. In the case of General government, Households and Non-profit institutions serving households sectors total FISIM is allocated by the proportion of their output before allocation of FISIM.

45. The next table shows the results of FISIM allocation 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**

46. Total FISIM output of NACE 65 industry was split to various 4 digit level FISIM producing classes based on the ratio of their loans and deposits.

9.6. Interest adjusted by FISIM allocated to user sectors

47. Interest (D.41) 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. FISIM on loans were subtracted from interest on loans and FISIM on deposits were added up to interest on deposits.

9.7. Impact of FISIM allocation on GDP and GNI

48. As could be seen in the below table, in 2002, HUF 175 849 million was allocated into intermediate consumption, HUF 231 595 million 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 %).

49. Property income (interest) received from the rest of the world increases by HUF 349 million and property income (interest) paid to the rest of the word decreases by -5 680 million HUF as a result of FISIM adjustment. The value of GNI increases due to FISIM allocation by HUF 254 696 million (1.6%).

Table 9.11 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

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.[12]

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	Sertéstenyésztés	**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 termékelőállítás	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
1320	1320	Színes fémérc bányászata	Mining of non-ferrous metal ores, except uranium and thorium ores

[12] In 2003 NACE Rev. 1.1 was fully adopted by HCSO.

1411	1411	Építési célú kő fejtése	Quarrying of stone for construction
1412	1412	Mészkő, 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	Vegyiásvány 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	Baromfihús feldolgozása, tartósítása	**Production and preserving of poultrymeat**
1513	1513	Hús-, baromfihús-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-eledel gyártása	Manufacture of prepared feeds for farm animals
1572	1572	Hobbiállat-eledel gyártása	**Manufacture of prepared pet foods**
1581	1581	Kenyér, friss tésztaféle 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	Gyapjúszövés	Woollen-type weaving
1723	1723	Fésűsgyapjúszövés	**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 textiláruk 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, szíjazat 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 szervetlen 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	Vegyi szál gyártása	Manufacture of man-made fibres
2511	2511	Gumiabroncs, gumitömlő gyártása	Manufacture of rubber tyres and tubes
2512	2512	Gumiabroncs újrafutózása, 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	Síküveggyártás	Manufacture of flat glass
2612	2612	Síküveg továbbfeldolgozása	Shaping and processing of flat glass
2613	2613	Öblösüveggyártás	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	Kerámiacsempe, 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	Szálerősítésű cement gyártása	**Manufacture of fibre cement**
2666	2666	Egyéb beton-, gipsz-, cementtermék gyártása	**Manufacture of other articles of concrete, plaster and cement**
2670	2670	Építőkő, díszítőkő 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, vasötvözet-alapanyag Gyártása (ECSC)*	**Manufacture of basic iron and steel and of ferro-alloys**

* ECSC: European Coal and Steel Community

2721	2721	Öntöttvas cső gyártása	Manufacture of cast iron tubes
2722	2722	Acélcsőgyártás	**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-vasötvözet 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	Fémtartály 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	Evőeszköz, 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
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	Szerszámgépgyártás	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-, járművillamossági 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, fényképészeti 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 kefegyártás	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	Villanyszerelés	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	Épületasztalos-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	Kávé-, 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	Vegyi 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, túristaszállás-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 lizing	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	Ingatlanberuházás, -eladás	Development and selling of real estate
7012	7012	Ingatlanforgalmazás	Buying and selling of own real estate
7020	7020	Ingatlan bérbeadása, üzemeltetése	Letting of own property
7031	7031	Ingatlanügynöki tevékenység	Real estate agencies
7032	7032	Ingatlankezelés	Management of real estate on a fee or contract basis
7110	7110	Gépjárműkölcsönzés	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 activites
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-, videogyártás	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**
01.1	*Élelmiszerek*	*Food*
	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.
01.2	*Alkoholmentes italok*	*Non-alcoholic beverages*
	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, dohányáruk és kábítószerek**	**Alcoholic beverages, tobacco and narcotics**
02.1	*Szeszes italok*	*Alcoholic beverages*
	02.1.1 Égetett szeszes italok	Spirits
	02.1.2 Bor	Wine
	02.1.3 Sör	Beer
02.2	*Dohányáruk*	*Tobacco*
	02.2.0 Dohányáruk	Tobacco
02.3	*Kábítószerek*	*Narcotics*
	02.3.0 Kábítószerek	Narcotics
03.	**Ruházat és lábbeli**	**Clothing and footwear**

03.1	*Ruházat*	*Clothing*
	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	*Lábbeli*	*Footwear*
	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	*Tényleges lakbér*	*Actual rentals for housing*
	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	*Imputált lakbér*	*Imputed rentals for housing*
	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	*Lakáskarbantartás és -javítás*	*Maintenance and repair of the dwelling*
	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	*Vízellátás és egyéb lakásszolgáltatás*	*Water supply and miscellaneous services relating to the dwelling*
	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	*Villamosenergia, gáz és egyéb tüzelőanyagok*	*Electricity, gas and other fuels*
	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	*Bútorok és lakberendezési cikkek, szőnyegek és más padlóburkoló anyagok*	*Furniture and furnishings, carpets and other floor coverings*
	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	Repair of furniture, furnishings and floor coverings

	javítása	
05.2	*Lakástextíliák*	*Household textiles*
	05.2.0 Lakástextíliák	Household textiles
05.3	*Háztartási gépek és készülékek*	*Household appliances*
	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	*Háztartási üvegáruk, edények és konyhafelszerelés*	*Glassware, tableware and household utensils*
	05.4.0 Háztartási üvegáruk, edények és konyhafelszerelés	Glassware, tableware and household utensils
05.5	*Barkács- és kerti szerszámok, eszközök*	*Tools and equipment for house and garden*
	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	*Rendszeres lakáskarbantartáshoz igénybevett termékek és szolgáltatások*	*Goods and services for routine household maintenance*
	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	*Gyógyszerek, egészségügyi termékek, gyógyászati segédeszközök*	*Medical products, appliances and equipment*
	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	*Járóbetegellátás*	*Outpatient services*
	06.2.1 Orvosi ellátás	Medical services
	06.2.2 Fogászati ellátás	Dental services
	06.2.3 Egyéb járóbetegellátás	Paramedical services
06.3	*Kórházi szolgáltatások*	*Hospital services*
	06.3.0 Kórházi szolgáltatások	Hospital services
07.	**Közlekedés és szállítás**	**Transport**
07.1	*Járművásárlás*	*Purchase of vehicles*
	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	*Személyszállító járművek üzemeltetése*	*Operation of personal transport equipment*
	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	*Közlekedési és szállítási szolgáltatások*	*Transport services*
	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	*Postai szolgáltatás*	*Postal services*
	08.1.0 Postai szolgáltatás	Postal services
08.2	*Telefon és egyéb hírközlő berendezés*	*Telephone and telefax equipment*
	08.2.0 Telefon és egyéb hírközlő berendezés	Telephone and telefax equipment
08.3	*Telefonálás és egyéb hírközlési szolgáltatás*	*Telephone and telefax services*
	08.3.0 Telefonálás és egyéb hírközlési szolgáltatások	Telephone and telefax services
09.	**Szabadidő és kultúra**	**Recreation and culture**
09.1	*Audiovizuális, foto-optikai és információ-feldolgozó berendezések*	*Audio-visual, photographic and information processing equipment*
	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 Fényképészeti, 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	*Egyéb szabadidős és kulturális tevékenységet szolgáló tartós javak*	*Other major durables for recreation and culture*
	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	*Játékok, hobbi- és sportcikkek,*	*Other recreational items and equipment,*

	kertészkedés, hobbiállat	*gardens and pets*
	09.3.1 Játékok és hobbicikkek	Games, toys and hobbies
	09.3.2 Sporteszközök, kempingcikkek és más felszer. házon kívüli szabadidős tev-hez	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	*Szabadidős és kulturális tevékenységekkel kapcsolatos szolgáltatások*	*Recreational and cultural services*
	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	*Újság, könyv, papír és írószer*	*Newspapers, books and stationery*
	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 írószer, rajzeszköz	Stationery and drawing materials
09.6	*Szervezett társasutazás*	*Package holidays*
	09.6.0 Szervezett társasutazás	Package holidays
10.	**Oktatás**	**Education**
10.1	*Iskolaelőkészítő és alapfokú oktatás*	*Pre-primary and primary education*
	10.1.0 Iskolaelőkészítő és alapfokú oktatás	Pre-primary and primary education
10.2	*Középfokú oktatás*	*Secondary education*
	10.2.0 Középfokú oktatás	Secondary education
10.3	*Középfokot meghaladó, de nem felsőfokú oktatás*	*Post-secondary non- tertiary education*
	10.3.0 Középfokot meghaladó, de nem felsőfokú oktatás	Post-secondary non- tertiary education
10.4	*Felsőfokú oktatás*	*Tertiary education*
	10.4.0 Felsőfokú oktatás	Tertiary education
10.5	*Nem besorolható szintű oktatás*	*Education not definable by level*
	10.5.0 Nem besorolható szintű oktatás	Education not definable by level
11.	**Vendéglátás és szálláshelyszolgáltatás**	**Restaurants and hotels**
11.1	*Vendéglátás*	*Catering services*
	11.1.1 Kereskedelmi vendéglátás	Restaurants, cafés and the like
	11.1.2 Munkahelyi- és diákétkeztetés	Canteens
11.2	*Szálláshelyszolgáltatás*	*Accommodation services*
	11.2.0 Szálláshelyszolgáltatás	Accommodation services
12.	**Egyéb termékek és szolgáltatások**	**Miscellaneous goods and services**
12.1	*Testápolás*	*Personal care*
	12.1.1 Fodrász-szalonok és más	Hairdressing salons and personal

	testápolással foglalkozó létesítmények	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
12.2	*Prostitúció*	*Prostitution*
	12.2.0 Prostitúció	Prostitution
12.3	*Máshova nem sorolt személyes ingóság*	*Personal effects n.e.c.*
	12.3.1 Óra, ékszer	Jewellery, clocks and watches
	12.3.2 Egyéb személyes ingóság	Other personal effects
12.4	*Szociális ellátás*	*Social protection*
	12.4.0 Szociális ellátás	Social protection
12.5	*Biztosítás*	*Insurance*
	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
12.6	*Máshova nem sorolt pénzügyi szolgáltatások*	*Financial services n.e.c.*
	12.6.1 FISIM	FISIM
	12.6.2 Egyéb máshova nem sorolt pénzügyi szolgáltatások	Other financial services n.e.c.
12.7	*Máshova nem sorolt egyéb szolgáltatások*	*Other services n.e.c.*
	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, csővezetékes 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	
Számítástechniai 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; complusory 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 Alapkutatás	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	04.3 Fuel and energy

ügyek	
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 kisegítő 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 kapcsolatos tevékenységek	10.3 Survivors
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
- 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	"Communications services" = 246 + 247
		246	Postal and courier services
		247	Telecommunications services
180	Construction services	249	"Construction" = 250 + 251
		250	Construction abroad
		251	Construction in the compiling economy
		253	"Insurance" = 254 + 255 + 256 + 257 + 258 + 259
210	Income and expenditure of resident insurance entrepreneur	**254**	Life insurance and pension funding
190/200	Insurance fee owing to Hungarian export/import goods	**255**	Freight insurance
		256	Other direct insurance
		257	Passive reinsurance
		258	Insurance services, auxiliary services
		259	Active reinsurance
220	Financial services	**260**	Financial services
230	Computer and information services	262	"Computer and information services = 263 + 264
		263	Computer services
		264	"Information services" (889+890)
		889	News agency services
		890	Other information provision services
240	Royalties and licence fees	266	" Royalties and licence fees" = 891 + 892
		891	Franchises and similar rights
		892	Other royalties and license fees
		268	"Other business services" = 269 + 272 + 273
250	Reexport and other trade related services	269	"Reexport and other trade related services" = 270 + 271
		270	Reexport
		271	Other trade related services
260	Operational leasing services	**272**	Operational leasing services
270	Other business, professional and technical services	273	"Other business, professional and technical services" = 274 + 278 + 279 + 280 + 281 + 284 + 285
		274	"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
		287	"Personal, cultural, and recreational services " = 288 + 289
280	Audiovisual and related services	**288**	Audiovisual and related services
290	Other cultural, and recreational 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 Corporate Tax was introduced: the 15% simplified corporate 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 Corporate Profit 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 used non-calendar business year during 2002
0271EVA	Corporate profit tax return of enterprises registered for the Simplified Corporate Tax Return 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 Corporate Profit Tax Return 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. [13]

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.

[13] *0343 The Simplified* Corporate Profit Tax Return
From January 1, 2003 certain corporations, whose annual gross turnover does not exceed the HUF 15 million limit, may pay the Corporate Profit Tax Return. 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 Corporate Profit Tax Return. For this reason it does not include other data, than the gross turnover and the tax data.

B/ Other data sources

Structural Business Statistics (SBS

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.

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)

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

Number of entities	Type	Term of validity	Name of enterprise types
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 using non-calendar business year
656	6	2001–	Enterprise imputed from the SBS statistics
24 356	7	2002–	Enterprise registered for Simplified Corporate Tax[14]

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 using non-calendar business year

The 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

[14] Code 8 2003– Enterprise paying Simplified Corporate Profit Tax Return

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

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 Corporate Profit Tax Return

Those enterprises, which pay Simplified Corporate Tax from the year followed the year they applied into this tax system.[15]

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

[15] *Type 8: Enterprises paying Simplified* Corporate Profit Tax
Those enterprises, which are paying Simplified Corporate Profit Tax in the year when they applied into this tax system.

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 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

Name of source: **0229 Corporate 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:
Balance sheet
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

Profit and loss statement

Net sales
of which: Sales of exports
Other revenues
Own performance capitalised
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
Social security contribution
Depreciation
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
Other supplementary variables
Number of employees
of which: Number of employees inland
Rents of agricultural land
Assets of small value
Authorized capital and its breakdown by ownership

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.

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.

Further adjustments made to the data: -

Name of the source: **0229 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:
Balance sheet
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

Profit and loss statement
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
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
Other supplementary variables
Number of employees
of which: Number of employees inland
Rents of agricultural land
Assets of small value
Authorized capital and its breakdown by ownership

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.

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.

Further adjustments made to the data: -

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

Simplified balance sheet
Assets
- Invested assets
  - Intangible fixed assets
  - Tangible fixed assets
  - Invested financial assets
- Current assets
  - of which: Inventories
    - Receivables
    - Securities, for sale
    - Liquid assets

Liabilities
- Owners' equity
  - of which: Authorized capital
    - Capital reserve
    - Simplified profit book value
- Reserve
- Provisions
- Liabilities
  - Long term
  - Short term

Profit and loss statement
Net sales
Other revenues
Purchase of materials and goods
- of which: Purchase of goods

Labour costs, total
of which: Social security contribution
Depreciation
Other production and operational costs and expenditures
Profit before taxation
Profit tax liability
Profit after taxation
Dividends and other withdrawals
Other supplementary variables
Number of employees
Rents of agricultural land
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: -

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:
Budgetary connections
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: -

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: -

Name of source: **0271 Corporate profit tax return of enterprises registered for the Simplified Corporate 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 Corporate Tax for the year 2003.
Periodicity: Annual
Variables collected:
Corporations with double entry book-keeping
Profit and loss statement
Net sales
Own-account GFCF
Other revenues

- Financial revenues
- Extraordinary revenues

Balance sheet

- Assets
  - Intangible fixed assets
  - Tangible fixed assets
  - Receivables
  - Pre-paid expenses
- Liabilities
  - Capital reserve
  - Profit book value
  - Provisions
  - Liabilities
    - Long term
    - Short term
  - Accrued expenses

Other supplementary variables

- Use of profit reserves for dividends
- Dividends and other withdrawals
- Number of employees

Corporations with single entry book-keeping

Profit and loss statement

- Net sales
- Other revenues

Balance sheet

- Assets
  - Intangible fixed assets
  - Tangible fixed assets
  - Receivables
  - Pre-paid expenses
- Liabilities
  - Capital reserve
  - Profit book value
  - Provisions
  - Liabilities
    - Long term
    - Short term
  - Accrued expenses

Other supplementary variables

Use of profit reserves for dividends
Dividends and other withdrawals
Number of employees

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 Corporate 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 Corporate Tax by the declaration No. 0343. This tax return form does not include other data than the total gross turnover and the simplified corporate 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.

Adjustments made for conceptual differences from the national accounts concepts: -

Further adjustments made to the data: -

11.2.2. Statistical data sources

- 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)

Food Balance

Name of the survey: Food **Balance** (non-financial enterprises and GG units)
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): 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 cove 60% 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

Name of the survey: **Survey of agricultural households (Food Balance, 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 cove 60% 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

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 cove 60% 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

Name of the survey: Farm Accountancy Data Network
Link to surveys undertaken at European level: EU 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)

Name of the survey: Inputs of agricultural and forestry production (non-financial enterprises and GG sector)
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: **Structural Business Survey, SBS**
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 • 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 back to the competent County Directorate of HSCO.

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.

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.

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.

Population size: 688 000

Sample size: about 24 000

Survey response rate: 75%

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:

- calculated data on the basis of monthly or quarterly data
- data of the previous year
- environmental average

When tax data are available, we use these data instead of the former imputed data.

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

Main variables collected:
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.

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
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

-

Name of the survey: 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: Retail Outlet Register (connected to 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 20th 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 are 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: **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): Business Register, 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** • 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** 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:

- 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: –

-

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: SBS
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: • 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 l the local governments
Links with other European surveys: -
Reporting units: Local governments
Main variables: • 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: • 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: • 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 8th 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. 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: 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. 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. 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. 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.
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: STS (monthly 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:

- 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 employee's 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: STS, (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 employee's 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: STS, (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 employee's 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 trade statistics of goods
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: • 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: 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≠JAA0M027+JAA0M031
	correction	then JAA0M031 = JAA0M026 – JAA0M027 (JAA0M031 must be positive or zero!)

LIST OF ABREVIATIONS

	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 Vagyonkezelő Zrt. (korábban: Állami Privatizációs és Vagyonkezelő 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
	Corporate Profit Tax Return	**TÁSA**	Társasági adóbevallás
	Simplified Corporate Tax		Egyszerűsített vállalkozási adó
	Simplified Corporate Profit Tax Return	**EVA**	Egyszerűsített vállalkozási adóbevallás
	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		Pénzintézetek
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		Háztartások végső

	Consumption		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 pozició
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 eves 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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