# **Gross National Income Inventory (ESA95)**

### **Iceland**

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## Chapter 1. Overview of the system of accounts

#### 1.1 Introduction

#### 1.1.1 Geographical coverage

In national accounts the national economy consists of units, which have the centre of economic interest located within the economic territory of Iceland. Icelandic territory comprises the area lying within Iceland's borders with the addition of Icelandic ships and aeroplanes in international traffic, Icelandic fishing boats fishing in international waters and Iceland's embassies. Conversely the embassies of foreign countries in Iceland are counted as foreign territory. The NATO base operated in Keflavik until 2006 was also defined as foreign territory.

## 1.1.2 Organisation and responsibility within the national statistical institutes

Until July 2002 the national accounts in Iceland were compiled by the *National Economic Institute* (NEI). That was an independent institute co-financed by the Central government and the *Central Bank of Iceland*. The main activities of NEI were to provide the official macroeconomic forecasts for Iceland, compiling national accounts and enterprise accounts statistics as well as to undertake some other special investigations, mostly of macroeconomic nature. The relevant legislation that established the NEI was repealed by Act No 51/2002, the NEI was closed down and the Statistics Iceland took over the compilation of national accounts on July 1, 2002.

Statistics Iceland had a ministerial status until 1 January 2008. Then a new Act on Statistics Iceland took effect, Act no 163/2007. Under this Act, Statistics Iceland is a professionally-independent institution under the aegis of the Prime Minister. Article 1 of the Act states that Statistics Iceland is the centre for official statistics in Iceland and has the leading role in the organisation, coordination and conduct thereof, and also in cooperation with international organisations concerning statistics. This Act replaces former and outdated Act on Statistics Iceland No. 24 of 1913, which entered into force on January 1, 1914. Before that act the Act on Statistical Reports No. 29 of 1895 established the initial authority of the central administration to produce and disseminate statistics on economic conditions in Iceland. The operation of Statistics Iceland is also based on the United Nations Fundamental Principles of Official Statistics.

Until July 1, 2003 the *Register of Enterprises* was a separate division within Statistics Iceland but then it was moved to the *Internal Revenue*. The *National Population Registry* was also a separate division within Statistics Iceland but on July 1, 2006 it was moved from Statistics Iceland and is now a division within the Ministry of Justice and ecclesiastical affairs. At the beginning of 2005 the wage statistics were moved to Statistics Iceland from an independent institute. In 2006 it was decided to transfer the data collection of exports and imports of services from the Central Bank to Statistics Iceland together with a development of new methods. That work is under preparation.

After these reforms during the period 2002-2007 official statistics in Iceland are now more centrally organised within Statistics Iceland than previously. Outside the domain of Statistics Iceland, monetary statistics are undertaken by the Central Bank, statistics on financial institutions undertaken by the Financial Supervisory Authority and some primary statistics on agriculture and fisheries are carried out by specialised institutions in these fields.

Statistics Iceland is now divided into three divisions:

- Economic Statistics Division
- Social Statistics Division
- Resources and Services Division

Outside of these formal divisions a special research unit was established in October 2009. This unit is responsible for economic forecasts and was transferred from the Ministry of Finance. The unit belongs directly to the Director General.

Apart from small revenue from assignments and sales of publications, Statistics Iceland is funded over the central government budget. In April 2008 Statistics Iceland employed 86 full-time equivalent employees; thereof 31 were employed in Economic Statistics Division. That division is from April 2008 divided into the following 4 departments (number of full-time equivalent in brackets):

- Business Statistics (6.0)
- External Trade (7.0)
- National Accounts and Public Finance (12.0)
- Price Statistics (6.0)

Within the department of National Accounts and Public Finance the time allocation of staff by area of responsibility is as follows:

Table 1-1 Number of persons employed, full-time equivalent

National Accounts and public finance	12.0
Head of department	1
Project manager	0.8
Household final consumption	1
Gross fixed capital formation	1
Quarterly national accounts	1
Supply and use tables	1
Production approach and business accounts	1.9
Central government	0.8
Local governments, health accounts etc.	1
Institutional sector accounts	1
Other tasks and temporarily employed	1.5

In November 2009 some provisional organisational changes were made and the department of National Accounts and Public Finance were split up in the department of Public Finance having 4 persons and the other persons belonging to the department of National Accounts.

The role of SI in external trade is confined to exports and imports of goods, but the Central Bank compiles exports and imports of services and the balance of payments statistics. In 2006 it was decided that statistics on exports and imports of services were to be transferred to Statistics Iceland. That transfer together with some revision of methods has been prepared in 2007 and 2008. The service trade statistics following the revised system are scheduled to be published from the third quarter of 2009.

#### 1.1.3 Main approaches used

The main feature of Icelandic national accounts is their reliance on administrative data. Most frequently these data are collected for purposes other than statistical ones, like taxation. Direct

inquiries only exist in exceptional cases and the processing of tax assessment data both on a sample basis and using the total population is the most common procedure.

Of the three basic approaches to estimating Gross Domestic Product the expenditure approach has been the dominant one in Iceland during the last five decades. The production approach has been applied simultaneously from 1973 onwards, and the importance of that approach is gradually increasing. Both methods were applied more or less independently with the consequences that a statistical discrepancy occurred, as described in chapter 6. That discrepancy was presented as a balancing item on the output side which meant that the level of GDP was determined by the expenditure approach. From 1997 the two methods were reconciled, by using supply and use tables, and the statistical discrepancy eliminated.

Higher priority for the expenditure approach over the production approach can be explained by several factors. One of them is a long historical tradition. Another and a more important explanation can be the fact that the expenditure estimates are available much sooner and are also more directly useful for forecasting purposes than output estimates. It could also be mentioned that the Icelandic economy is relatively open, with imports in the range of 40% of GDP. Both the figures on exports and imports are available monthly and the reliability of the data is considered to be very high.

The third approach to estimate GDP, the income approach, has not yet been implemented in Iceland. However, Statistics Iceland is now working on institutional sectoring although it is not the intention of Statistics Iceland to estimate GDP independently using the income approach.

## 1.2 The revisions policy and the timetable for revising and finalising the estimates

Revisions, in other words altered data relating to a period which has already been published, are a natural part of national accounts work. A distinction is made between two kinds of revisions:

- Current or routine revisions
- Major or occasional revisions

The current revisions of annual figures are normally released twice a year. In short the cycle of current revisions can be described as follows:

- Version 1, named provisional data, is now published around 5 March of the following year (t + 65 days). The 4<sup>th</sup> quarter of that year is published on the same day.
- Version 2, named preliminary data, is published around 5 September (t+8 months) and the 2<sup>nd</sup> quarter of the year on the same day.
- Version 3, not explicitly marked, is published around 5 March a year later (t+14 months)

The annual figures in the first publication, Version 1, are partly a simple sum of the year's four quarters based on the quarterly national accounts and only according to the expenditure approach.

This description refers to the expenditure approach only. The production approach is lagging behind in time and the version 1 of disaggregated production approach is published at the same time as the version 3 of the output approach. Version 2 of the production approach is published together with version 5 of the expenditure approach at 5 March two years later (t+26 months).

Supply and use tables in Iceland have not yet been incorporated in the regular procedure of national accounts. They have been constructed more on an occasional basis. However it is the intension of Statistics Iceland to incorporate such tables into the regular procedure and complete them before the presentation of version 3.

Strictly speaking Statistics Iceland never considers national accounts figures to be final.

Other revisions, covering longer periods, named occasional or major revisions may arise for a number of reasons. The most common reasons are new sources, new methods or classifications, amended procedures for the application of ESA95 and the like. Such revisions relate to a longer period and are generally undertaken at less frequent intervals.

In the past Iceland has not had any strict revision policy for the timing of occasional revisions, in contrast with current revisions. During the last two decades several revisions were undertaken as described in section 2.1.2.

#### 1.3 Outline of the production approach

#### 1.3.1 The reference framework

In the Icelandic national accounts the production approach plays a secondary role to the expenditure approach, which is the main approach used. The construction of production accounts in Iceland stretches back to 1973 and from that time GDP has been estimated from both the production and expenditure approaches, which are independent of each other as far as sources permit.

The compilation of national accounts in Iceland is characterised by an intensive use of registers. From the very beginning the production accounts have been derived from one major source, i.e. the company accounts which are collected from the tax authorities. These accounts are derived from one of the administrative registers, the Enterprise Accounts Register. The other registers are more like supporting registers to the Enterprise Accounts Register.

The following are the most important registers used for constructing production accounts:

- 1. Register of Enterprises, (for short Business register)
- 2. Enterprise Accounts Register (EAR)
- 3. VAT Register
- 4. Payroll Register
- 5. Pay-as-you-earn Register

Of these registers Enterprise Accounts Register (EAR) is the most important one. There are advantages and disadvantages with this source. The main advantages are that the accounts are easily accessible from the tax authorities; this is very cost-effective way of collecting data. The standardized accounts are now available in a computerised form for almost all the enterprises which have to deliver data in this form and cover all legal units except financial institutions such as banks and insurance corporations. Compared with previous methods the sample size by industries has increased considerably and the manual processing of a much smaller sample is not needed any more. Previously the sample size was near 50% but now it often reaches 85-90%. The grossing-up errors are therefore a minor problem.

However, disadvantages of this new source also exist. The most serious one is that this source is *enterprise oriented*. In good co-operation with tax authorities an attempt was made to get some additional key indicators by establishment from this new source but it turned out to be unsuccessful and therefore this source is entirely enterprise oriented. One possible solution is to get some additional information, either directly from the enterprises or from the tax authorities if the enterprises send detailed data to tax authorities together with the standardised, computerised form. Solutions of this kind have already been applied in the case of fishing and fish processing industries where additional information is collected both directly from the enterprises and the tax authorities. So in the case of these industries, the statistical unit is the establishment. It is not yet decided how

far in this direction Statistics Iceland is going but anyway a sole use of an enterprise oriented register seems to be unacceptable especially in the light of recent developments where enterprises are getting bigger and bigger and becoming more diversified.

Another drawback of the EAR has to do with the standardized disaggregation of individual cost items. These are the same for all industries. Although the disaggregation is rather detailed, problems arise in the cases of some special cost elements which are uncommon or do not even exist in most industries but are of considerable importance in few industries. Examples of this kind are oil usage in the fishing and transport industry. Problems of this kind need a special investigation, similar to the first one.

#### 1.3.2 Valuation

Statistics Iceland has attempted to follow the main guidelines of valuation given in ESA 95.

This means that economic activities should be valued mainly in terms of market prices, i.e. according to the value by which flows and stocks are actually exchanged or could be exchanged for cash. If market prices are not immediately available, then the market prices for the corresponding goods, services or assets are to be used.

For example, output of owner-occupied dwellings should be valued in accordance with the rent levels of equivalent rental dwellings. When prices for the corresponding products are not available, namely for general government non-market services produced, they should be valued in terms of total costs of production.

According to ESA95, output is to be valued at basic prices which mean the prices receivable by the producer from the purchaser minus any tax payable on that unit plus any subsidy receivable on that unit.

To follow these guidelines it is necessary to make some amendments in valuation from the company accounts to the production accounts as described further in section 3.2.

## 1.3.3 Transition from private accounting data to national accounting concepts

The EAR contains aggregated company accounts. These accounts cover almost all business industries but exclude government services and most of the financial enterprises. The Register is almost of complete coverage so only a minor grossing-up is needed. However, other adjustments are necessary to adapt these accounts to national accounts definitions. Two types of adjustments can be distinguished:

- 1. Individual items in the Register have to be reclassified following the concepts in the production accounts of ESA95 as presented in Table 3-2.
- 2. Several items of the output and intermediate consumption are recorded in a quite different way in production accounts than in the company accounts. These items are described in sections 3.3.2 and 3.3.3.

On the output side, five important adjustments are made from the company accounts to production accounts. These are concerned with:

- Output of wholesale and retail trade
- Changes in stocks of finished goods
- Income in kind

- Output of insurance
- Extraordinary income

In company accounts various items on the expense side are not recorded in line with national accounting practices and some adjustments are needed. The most important ones are:

- The recording of insurance services
- Goods purchased for resale
- The purchase of software
- The threshold value for capital goods
- Income in kind
- Renting of fishing quotas
- Taxes less subsidies on production

#### 1.3.4 The roles of direct and indirect estimation methods

A direct estimation method means that on the basis of exhaustive accounting statistics for the industry in question, output and intermediate consumption are obtained by statistical processing of the underlying business accounts.

In the Icelandic national accounts the compilation of production accounts is chiefly based on such direct estimation methods. Thus, company accounts are collected from tax authorities and central and local government accounts are collected directly from these authorities.

In some exceptional cases production account items are constructed entirely by using indirect estimation methods. These are in the following industries and sub-industries:

- Own-account construction and repair, within activity division 45;
- Residential construction and repair on own-account, activity 45.49;
- Dwelling service production and renting of machinery and equipment, activity 70.20; these
  industries accounted for approximately 10% of gross factor income in 2005. The construction of the production accounts for these industries is described in detail under the relevant
  sections below.

#### 1.3.5 The roles of benchmarks and extrapolations

The compilation of Iceland's national accounts relies mainly on source statistics drawn up each year. With the exception of NACE 70.20.1, the consumption of dwelling services, the role of benchmarks and extrapolations in the current national accounts compilation is quite limited and they are applied in industries which are neither covered by the standardized company accounts nor direct access to other sources of company accounts like financial institutions. These are the most important activities where benchmarking is used as the main method:

- NACE 70.20.1 Consumption of dwelling services (actual and imputed rentals)
- NACE 80 Education
- NACE 85 Health and social work
- NACE 91 Activities of membership organizations
- NACE 92 Recreational, cultural and sporting activities

Benchmarking is only used for that part of the above activities which does not belong to government activity. With the exception of NACE 92, only the minority of these activities is non-governmental and owned and operated by private or NPISH units. The share of these activities in GDP just exceeded 14% in 2005.

#### 1.3.6 The main approaches taken with respect of exhaustiveness

Adjustments for exhaustiveness in the production approach are described in section 1.7 below along with some other adjustments.

#### 1.4 Outline of the income approach

The income approach defines the calculation of GDP as the addition of its various components, consisting of compensation of employees, gross operating surplus and other taxes on production minus other subsidies on production.

In Iceland's national accounts, GDP is not independently estimated using the income approach and there are no intentions to do so. The reason is that there do not exist any independent estimates of operating surplus other than that surplus derived from the output approach after all correction of the business accounts and the balancing procedure. Therefore, the individual cost components of the income approach are derived from the production approach where these components can be distinguished. By doing this, the operating surplus becomes a residual instead of being calculated directly as the income approach assumes.

Although it is not the intention of Statistics Iceland to estimate GDP independently using the income approach, SI is now working on institutional sectoring following the recommendations of ESA95.

#### 1.5 Outline of the expenditure approach

#### 1.5.1 The reference framework

So far the expenditure approach has played the most important role in national accounts in Iceland. There is a much longer tradition in compiling national accounts according to the expenditure approach than the production approach. Figures are available according to the expenditure method back to 1957, directly estimated, but indirectly back to 1945. The output estimates are only available from 1973 onwards.

For historical reasons the emphasis has been on the demand side and this is still the case. Even more important is the fact that reliable estimates on the expenditure side are available much sooner than those on the output side. This emphasis on the expenditure side is reflected by the fact that until the year 1997, the level of GDP was entirely determined from the expenditure side and the statistical difference between these two methods appeared as a balancing item on the output side. Now supply and use tables have been constructed three times, i.e. for the years 1992 and 1997 and 2002.

Prior to the balancing procedure which is the final step an attempt is made to independently estimate the individual components of the expenditure side. Various sources of information are used. Although most of the items on the expenditure side are estimated from independently collected source data there are many examples where the data sources are the same as on the output side. In some cases the individual expenditure items are directly collected from the output figures according to the production approach. Examples of these sources are various personal services, such as hair dressing etc.

Similarly to the production approach, the administrative registers play a vital role in the expenditure approach. The most important sources and registers are:

- Customs database
- Household expenditure survey (HES)
- Land Registry of Iceland
- Enterprise Accounts Register (EAR)
- VAT Register
- Direct information on domestically produced goods
- Financial accounts of central and local governments

#### 1.5.2 Valuation

The use of products is valued at purchasers' prices. In most cases final consumption components are estimated directly from the point of purchaser and therefore these components are valued at purchasers' prices. Final consumption expenditure includes value added tax and other product taxes, but not subsidies. The products acquired by instalment payments or an equivalent credit system are recorded on their date of purchase.

Gross fixed capital formation includes value added tax insofar as it is not tax deductible. As a general rule investments are recorded according to the date of the transfer of ownership of the assets. There are a few exceptions to this rule in the national accounts. First, financial leasing should be recorded as an investment by the industry using it, even if there is no change of legal ownership. Secondly, own account investments are recorded when they are produced. Thirdly, residential construction is recorded in the year the construction is registered at the Land Registry of Iceland. It is assumed that this represents the year of production but not necessarily a transfer of ownership. The fourth exception concerns uncompleted fixed assets. In this case as in other fixed capital formation in industries the main sources of data are the financial accounts of enterprises. There the uncompleted fixed assets are recorded as investment without a transfer of ownership. Examples of this kind are electrical power plants. The same treatment is followed in national accounts.

Changes in inventories are valued at the average price for each quarter of the year, and the changes are then summed up. Exports and imports of goods are valued at their f.o.b. value, i.e. their value when they leave the exporting country. Exports of services are valued at basic prices and imports of services at purchasers' prices.

## 1.5.3 Transition from private accounting and administrative concepts to national accounting concepts

In calculating household final consumption expenditure a use is made of the Customs database which contains the fob and cif value of exported and imported goods. To reach the market value or purchases' prices of imports one has to add import duties, trade and transport margin and VAT to the cif value. Of these items the trade and transport margin is the most uncertain item and has to be balanced with the output of relevant activities.

In calculating gross fixed capital formation the single most important source of information is the EAR. That Register is also used in constructing production accounts. In section 3.3.1 a conversion table is shown where the individual items on the current account are reclassified following the national accounts principles. When the Register is used for calculating fixed capital formation some adjustments are also necessary where the bookkeeping principles and the national accounts principles.

ples differ. The impact on intermediate consumption is in opposite direction. The two most important examples of this are the purchase of software and the threshold value for capital goods.

In calculating government final consumption expenditure, use is made of the financial accounts of local and central government. In these accounts there are several examples of items which are recorded as current operating expenses but should be capitalised in national accounting. Examples of these kinds are purchases of producers' durables and major and minor repair. All such expenditures are expensed in the State Account but in the national accounts a distinction has to be made between fixed capital formation and intermediate consumption. Corrections of this kind are made when the government accounts are adjusted to the national accounts principles.

#### 1.5.4 The roles of direct and indirect estimation methods

By far the largest share of expenditure-based GDP is calculated using a direct estimate of purchasers' acquisitions less disposals. The most important exceptions are household expenditure on services, where in the absence of company accounts, a use is made of the household expenditure survey and grossing up of these items. That source amounted to 9% of total household final consumption expenditure in 2005.

Imported consumer goods are a vital source for estimating household final consumption. In most cases these estimates are direct but in the case of goods of multi-purpose use the households' share of the goods is estimated by means of percentages which make the methods indirect.

Indirect estimates are also generally used when estimating final consumption expenditure of NPISH. In this case, estimations are made indirectly on the basis of central and local government accounts, which provide data on grants to such institutions

#### 1.5.5 The roles of benchmarks and extrapolations

The role of benchmarks and extrapolations in the current national accounts is quite limited. The most important exception is the consumption of dwelling services (actual and imputed rentals) where levels are based on a special rent survey carried out by Statistics Iceland in 1999. These levels were extrapolated backward to 1990 and forward to most recent years taking into account the price changes of the most relevant subgroups of CPI and the changes in actual number of dwellings received from the Land Registry of Iceland. In 2005 the share of dwelling services in private final consumption amounted to 15.4%.

Another important exception relates to the calculation of major repair and renovations of residential buildings. The level of this investment was based on a basis of special research by the Building Research Institute for one year and extrapolations for other years. This amounted to roughly 4% of total residential construction in 2005.

Although the role of benchmarks and extrapolation is quite limited in current national accounts these methods have been heavily used in all major or occasional revisions. The latest revision of this type was completed in September 2005. Then, breaks in time series for both household final consumption and gross fixed capital formation in 1997 and 1990 were eliminated by means of extrapolations.

## 1.6 The balancing or integration procedure, and main approaches to validation

From 1973 onwards both the expenditure and output methods were applied. However, the history of the balancing procedure is much shorter because most of the time these methods were applied more or less independently. The difference, the statistical discrepancy, was explicitly presented and

no actual balancing procedure was undertaken. The difference varied considerably from year to year. The difference was biggest in 1977 -1986 at around 6-7% of GDP. In more recent years the difference was in the range of 2-4%. The expenditure approach always produced the higher estimates. The statistical discrepancy year by year is presented in Chapter 6 below.

In an attempt to eliminate this difference it was decided in early 1996 to prioritise the construction of supply and use tables in Iceland. This work had been started several times but was never completed. In 1997 Eurostat made an assessment on the quality of national accounts in Iceland, based on a report from the National Economic Institute and after visiting Iceland. One of the concluding remarks from Eurostat was the importance of constructing supply and use tables and regularly balancing the output and expenditure approaches. Eurostat also supported this work financially.

This first balancing procedure was completed in July 1999 and the year 1992 was the only year available of balanced supply and use tables. At that time the National Economic Institute considered this first table as a special research project and for the time being the institute decided not to incorporate these results into the published series of national accounts. It was considered necessary to postpone the implementation until the work has been repeated for more years and the results compared and checked carefully and consistent time series constructed. The implementation of ESA95 was also in the final stage at that time with foreseeable changes on GDP and its main aggregates.

The work on the supply and use tables continued after the completion of 1992. The next year chosen was the year 1997. That year was completed in early 2002, both according to the former ISIC classification and the Icelandic version of NACE, rev. 1, named ÍSAT 95.

The work on the supply and use tables for the year 1997 confirmed earlier suspicions of overestimation of household final consumption. Therefore household final consumption was lowered by some 4.9 billion kronur or 1.7%. This was done on a selective product basis, based on indications from the supply and use table.

The balancing procedure was facilitated by new and downwardly revised figures on gross fixed capital formation as described in section 5.10 below. That resulted in more than 6 billion kronur of reduction or 6% of GFCF.

After the reduction of household final consumption and gross fixed capital formation the remaining balance amounted to less than 1% of GDP. That balance was eliminated by reducing the intermediate consumption of all industries on a proportional basis. By doing that the statistical discrepancy was eliminated for the year 1997. Supply and use tables are now constructed on an annual basis. After the completion of the table for 1997, a new table was constructed for the year 2001 and the results were incorporated into the balancing procedure of the major revision in September 2005. Since 2001 the supply and use tables have been constructed annually.

An annual construction of supply and use tables can be considered as a big step forward. However, it is a matter of concern that the completion of the annual table is lagging behind in time and therefore the result so far can only be used for backward revision but the result has not yet been incorporated into current estimates at a regular basis. Statistics Iceland intends to speed up this process so the supply and use tables can be used as a central and an integrated part of the current national accounts estimates and for the balancing procedure of all the estimates. In the meantime other and less sophisticated methods have to be applied for balancing, mainly be distributing the discrepancy proportionally on intermediate consumption by industry. The size of this discrepancy is shown in chapter 6.

#### 1.7 Overview of the allowances for exhaustiveness

The most important data source in constructing production accounts in Iceland is the Enterprise Accounts Register which consists of company accounts of all legal enterprises in standardized form. The question of exhaustiveness can therefore be directed to the question of exhaustiveness of tax data compared with other data sources like surveys. In view of this the advantages and disadvantages of the use of the company accounts are discussed in chapter 7 and following points covered:

- The quality of the basic available information
- The coverage, including underreporting
- The treatment of income in kind in tax sources

In evaluating the quality of the tax data one should bear in mind that the compilation of operating accounts and production accounts by Statistics Iceland is based on the Enterprise Accounts Register which is now of almost a complete coverage. Therefore, the problem of sampling error which existed until 2001 when unincorporated enterprises were covered in the Enterprise Accounts Register has now almost disappeared. The coverage of the data is also considered to be high.

The question of underreporting of the tax data has been raised regularly by the tax authorities. During the last two decades at least three committees were established to evaluate the magnitude of the tax evasion. The main result of the latest committee in 2004 was that the tax evasion in the form of underreporting of income and turnover eligible to VAT has decreased in recent years. However, the committee was of the opinion that advanced and organized tax evasion has increased especially in connection with external transactions. The size of the tax evasion is estimated as 8.5% to 11.5% of the total tax revenue of central and local governments. This corresponds to 3.2% to 4.3% of GDP. In evaluating the exhaustiveness of GDP from these results, carefulness is needed. The reason is that some tax evasion has already been incorporated in the regular national account work like the treatment of hidden activity in repair of residential construction, restaurants etc. Due to that the result of the tax evasion committees did not have any direct impact on the national accounts estimates.

In the case of the expenditure approach the data sources are also considered to be fairly exhaustive. Calculations are based on complete data for final consumption expenditure with respect to exports and imports of goods, government final consumption expenditure and a substantial part of gross fixed capital formation.

Co-ordination and balancing of the production and expenditure approaches by supply and use tables lag behind the regular production of the annual national accounts. This is caused by the late results of the first estimates of the production approach prior to the balancing procedure. Now it is planned to shorten the processing period of the production approach and have it ready 15 months after the end of the reference year. Then the September version of national accounts in year t+2 will contain a balanced GDP figures for that year.

One of the main approaches taken with respect to exhaustiveness in household expenditure is a regular comparison between the household expenditure survey results and the estimated household final consumption expenditure in national accounts. That comparison is presented in section 5.7.5. Chapter 7 below makes a further reference to exhaustiveness in the case of both household budget surveys, payments in kind with a corresponding impact on household final consumption and hidden activity.

#### 1.8 The transition from GDP to GNI

As the name indicates, gross national income (GNI) is an income concept, but it is calculated on the basis of gross domestic product (GDP). GNI is calculated by adjusting GDP for primary income

flows to and from the rest of the world. Primary income consists, on the one hand, of tax and subsidy transactions to and from the EU and, on the other hand, compensation of employees, interest, dividends, reinvested profits from direct investment in the rest of the world, property income attributed to insurance policyholders and, finally, rents.

The Statistics and IT Department of the Central Bank of Iceland collects data on these income components for the balance of payments statistics. The data are collected on a quarterly basis.

The data on compensation of employees are mainly derived from bank reports on foreign transactions, i.e. settlement statistics. Direct information was also collected from the NATO base at Keflavik Airport on compensation of employees of Icelandic residents working at the base because it was defined outside Icelandic domestic territory. The base was closed down in autumn 2006. The Central Bank of Iceland has estimated that in 2002, approximately ¾ of the total compensation of employees from abroad came from direct enquiry to employers but the rest and all payments to abroad come from the settlement statistics. After the closure of the NATO base, information on the compensation of employees to and from abroad are entirely derived from the settlement statistics.

The data on interest flows are collected from banks, Central government, the electricity power companies, transportation companies and several holding companies. These are the main debtors of foreign loans and they are surveyed quarterly on interest payments and at the end of each year for position and actual payments.

Information is collected on new loans, interest rate and the duration of the loans. From these information and similar information from previous years the actual payments are calculated.

Interest on foreign long-term borrowing has been calculated on their due for payment date but from 2005 onwards the interest has been reported on an accrual basis.

The distributed income of corporations is dividends but withdrawals of quasi-corporations are neglected. The dividends received by corporations from abroad or payable abroad are obtained on the basis of an annual survey to enterprises. Settlement statistics are also used. Both sources record these flows at the date of payment.

This item also includes reinvested interest and dividend income in mutual funds which issue accumulation units. Due to increased liberalisation of capital movement to and from Iceland for more than a decade, it is getting more and more popular to invest in foreign securities. Portfolio investments in equities, especially in mutual funds, are proportionately very important. Many of these funds pay little or no dividends to their owners. Instead, a considerable part of their profit is simultaneously reinvested and the shareholders are getting most of their return in the form of an increased market price of the equity. This increase is a combination of holding gain and property income. The problem then arises how to distinguish between these two. Doing nothing means that very little or no property income at all is recorded from abroad from mutual funds of this character. That is apparently an underestimate. Under Commission Decision 97/157/EC, EURATOM, reinvested earnings in such funds are considered to be property income for the owners of the investment certificates. Statistics Iceland prefers to interpret that decision in such a way that the property incomes of these funds consist of interest, dividends, and rental on fixed assets etc. but excluding realised as well as unrealised holding gain or losses. The Central Bank of Iceland follows the IMF's Balance of Payment manual and interprets its now more or less in the same way. However the Central Bank emphasizes the practical differences of implementing the Commission Decision. The result has been that so far no correction is made for reinvested interest and dividend in mutual funds and what is recorded are only the actual payments between countries.

Reinvested earnings of foreign companies constitute that part of a company's results which are not distributed to the shareholders but are retained in the company. These earnings are calculated by the Central Bank of Iceland as the difference between the company's total profit after tax and the

distributed profit. An attempt is made to exclude any capital gains or losses from the company's profit.

In estimating the reliability on the balance on the current account as described above, it should be equal to the balance on the financial and capital account since a current surplus is deployed either on the outward investment or debt reduction, while a deficit needs to be met by foreign borrowing or asset depletion. Because each item of the real and financial flows is measured independently, error or omission in measurement of the current or financial data will cause imbalance in statistics. These errors and omissions are presented quarterly but as a residual aggregate, i.e. a net figure, so errors in individual items of the balance of payments may cancel each other out if they have opposite signs. Thus the errors and omissions item is not an absolute indicator of the data quality. In 2005 the errors and omissions amounted to 26.941 million ISK or 2.6% of GDP. The error was positive in the sense that the inflow on the capital and financial account was lower by this amount than necessary to finance the deficit on current account. In 2004 the errors and omissions were negative by almost the same amount.

#### 1.9 FISIM: calculation, allocation and impact on GNI

The allocation of FISIM was completed and incorporated in the published national accounts in March 2006. The allocation of FISIM was estimated back to 1980. An attempt was made to follow the FISIM regulation as far as possible but due to a shortage of relevant data several shortcuts and approximations had to be made.

The calculation of reference rate is crucial in the calculation of FISIM. In selecting an internal reference rate for the Icelandic national accounts, three options were considered:

- Interbank lending rate (REIBOR)
- Interest on certificates of deposit in the Central Bank
- The Central Banks Repo rate, i.e. policy rate.

After a careful consideration of these three options they were all abandoned and a decision was made to use the average of active lending and borrowing rates calculated by the Financial Supervisory Authority (FSA). One question was whether the reference rate should be in the middle between lending and borrowing rates or closer to one of them. Here it should be noted that information was not available on which was more pronounced, downward or upward pressure on interest rates. The reference rate was, therefore, set as the average of lending and borrowing rates as calculated by the FSA. Two exceptions were made from this general method of using the average and that was in the case of the Housing Fund and for external loans.

Data on deposits and loans are also necessary for calculating FISIM. The breakdown of these items is adequate except the classification of deposits by activity which were only available from 2003 onwards.

When reference rates have been determined and information is available on the stocks of deposits and loans it is possible to calculate FISIM. As the reference rate is placed in the centre between lending and deposit rates, FISIM becomes the product of the average loan stock for each year and one half of the interest differential in percentage points. The average loan stock for each year is calculated as the average of the beginning and end-year values. FISIM is calculated for liabilities and assets in the degree of detail feasible. The sum shows FISIM as a whole and it can be compared with the previous approach under which FISIM was calculated as the interest differential of deposit money banks as recorded in their annual accounts. The results for 1996-2003 showed that for most years the difference is within 5 percent, although two years, 1996 and 2003, represent exceptions.

- The classification of interest earning assets and liabilities of financial institutions is used to estimate what share of FISIM that should be allocated to households and the government sector, i.e. as government final consumption. The share allocated to households is in turn broken down into 70 percent for housing investment, 25 percent for private consumption, and 5 percent for the intermediate consumption of the self-employed. The share of FISIM allocated to public consumption is estimated based on the loan classification of financial institutions. FISIM for imports and exports are estimated as described above.
- What remains of FISIM is allocated to intermediate consumption by activity, based mainly on relative gross factor income.

The allocation of FISIM lead to some increase in GDP as expected. On the whole, GDP for each year increased by about 1 percent in current prices. Private consumption shows the largest increase, or more than 1.2 percent.

#### 1.10 Supervisory and control systems in place

Iceland subscribed to the International Monetary Funds' Special Data Dissemination Standard (SDDS) on June 21, 1996 and started posting its metadata on the Dissemination Standard Bulletin Board (DSBB) on April 16, 1998. Iceland has been in observance of the SDDS since June 30, 2004 meeting the specifications for coverage, periodicity and timeliness and using flexibility option on the timeliness and periodicity for the production index and the producer price index. From the point of view of IMF, Iceland meets generally their requirements regarding advance release calendar. In February 2005 a staff mission from International Monetary Fund visited Iceland and wrote a *Report on the Observance of Standards and Codes* referred to as the ROSC mission. In that report an assessment was made of the data quality of national accounts among other datasets as consumer and producer price indices, government finance, monetary and balance of payment statistics. The assessment was based on IMF's Data Quality Assessment Framework, July 2003 (DQAF). In the assessment, four-point rating scale was used for the following elements:

- Quality
- Accuracy and integrity
- Methodological soundness
- Accuracy and reliability
- Serviceability
- Accessibility

Each of these elements had several subgroups so the total number of elements rated was 22. In the rating of national accounts Statistics Iceland got top rating "practice observed" for 12 elements and second rating, "practice largely observed" for 10 elements. No elements of national accounts got the lower ratings, named "practice largely not observed" and "practice not observed".

Various things are done to increase the quality of the staff. When hired at Statistics Iceland, employees are informed of the rules and duties pertaining to confidential information and its treatment. Employees are also informed of the European Statistical Code of Practice, United Nations' Fundamental Principles of Official Statistics as well as of the International Statistical Institute's Declaration on Professional Ethics. The staff routinely participates in external seminars, expert groups, and task forces established by regional and international statistical bodies, including Eurostat and the Organisation for Economic Cooperation and Development (OECD). In addition, staff undertakes occasional study trips to other statistical agencies in the Nordic region and participates in network groups of the Nordic statistical agencies.

The national accounts staff members conduct regular discussions with users in the Central Bank of Iceland and the Ministry of Finance, who are engaged in developing and maintaining the forecasting model for the Icelandic economy. From the beginning of 2010 that unit of the Ministry of Finance has been transferred to Statistics Iceland making all communication easier. In the beginning of 2005 Statistics Iceland established a *User group for the NA* comprising representatives of users in the Central Bank, the Ministry of Finance, the major commercial banks, labour unions, the Federation of Employers, and the economic faculties of three universities. Normally the user group meets once or twice a year and discusses some methodological issues and other important issues like future developments and priorities within national accounts.

Processes are in place to monitor adequately the quality of compiled and disseminated statistics. Checks of coverage, classification, and missing data are undertaken regularly. In addition, the internal consistency of source data and consistency across source datasets are monitored. All deviations in the source data are noted and investigated. Statistics Iceland has established agreements with data producers in the public sector to ensure that source data are received on a timely basis.

To provide detailed information for users there are structured metadata descriptions about statistical products available at Statistics Iceland website. For the National Accounts the information covers both annual and quarterly data. The content is divided in the following categories:

- 0. Administrative Information about the Statistical Product
- 1. Contents
- 2. Time
- 3. Accuracy
- 4. Comparability
- 5. Accessibility

Within each heading there are also standard sub headings available.

Iceland is one of three European Free Trade Area (EFTA) States that is a Contracting Party to the EEA Agreement. Article 76 of this Agreement gives the basis for statistical cooperation and provides, among other things, that the contracting parties shall develop and use harmonized methods, definitions, and classifications. Under this EEA cooperation, common methodology, quality standards, and monitoring of outputs and outcomes are specified in many statistical fields. This gives a further impetus to the focus on quality at Statistics Iceland.

When data are published Statistics Iceland emphasises an equal access for everyone. The data are presented according to a preannounced schedule available on the Statistics Iceland's website. Prior to their release two governmental units were given an access to the main aggregates of annual and quarterly data on national accounts. These were the economic divisions of the Central Bank and the Ministry of Finance. The reason for this exception was the use of these units of the data for developing forecasts which were due for dissemination shortly after the release of the national accounts data. From the beginning of October 2009 the unit of the Ministry of Finance, responsible for economic forecasts, was transferred to Statistics Iceland and therefore the Ministry did not require the access any more. Shortly after that the Central Bank changed its publication cycle of forecasting and did not need the pre-access anymore. Therefore, now the situation is such that no one outside Statistics Iceland has a pre-access to annual or quarterly data on national accounts.

# Chapter 2. The revisions policy and the timetable for revising and finalising the estimates

#### 2.1 The revisions policy

Revisions, in other words altered data relating to a period which has already been published, are a natural part of national accounts work. A distinction is made between two kinds of revisions:

- Current or routine revisions
- Major or occasional revisions

The main reason for current revisions is to incorporate newly available information collected by statistical offices. Annual data are more and more subject to a strong demand for reduction in the delay of publication (timeliness). Very often the first releases of annual data are based on a restricted set of information that is gradually completed later. The trade-off between timeliness and completeness of basic sources is one of the major causes of revision of annual data.

Current revisions are normally released twice a year. On the other hand occasional revisions are released at a longer and more infrequent interval. A useful distinction is made between two kinds of occasional revisions:

- Occasional statistical revisions
- Occasional conceptual revisions

#### 2.1.1 Current revisions

The first national accounts, following the expenditure approach only, for a given calendar year are at present published around 5 March of the following year. In short, the cycle of current revisions can be described as follows:

- Version 1, named provisional, is published around 5 March of the following year (t + 2 months). The 4<sup>th</sup> quarter of that year is published on the same day.
- Version 2, named preliminary, is published around 5 September (t+8 months) and the 2<sup>nd</sup> quarter of the year on the same day.
- Version 3, not explicitly marked, is published around 5 March a year later (t+14 month)

The annual figures in the first publication, Version 1, are partly a simple sum of the year's four quarters based on the quarterly national accounts and only following the expenditure approach. At that time some preliminary indicators are also available from the production approach but only in volume terms, not in current prices.

The September version, Version 2 or the preliminary figures is based on more complete source data, such as final VAT figures for the previous year, final government accounts, more exhaustive information on gross fixed capital formation from company accounts etc. Fully finalised data sets are not available until later.

The Version 3, released one year after the version 1, is considered as final. At that time the first preliminary estimates from the EAR are available and these results are mainly used to revise gross

fixed capital formation in the individual industries. There has been a considerable delay in processing the EAR and thereby the construction of the production approach to GDP but since 2005 Statistics Iceland has succeeded in speeding up this process and thereby to complete the version 1 of disaggregated production approach at the same time as the version 3 of the output approach. Version 2 of the production approach is accompanied with version 5 of the expenditure approach at 5 March two years later (t+26 months). The level of GDP is determined by the expenditure approach and the discrepancy between the expenditure and output approach is distributed proportionally on the intermediate consumption of industries. New versions of the output approach do not necessarily have impact on the level of GDP, only the size of the discrepancy distributed proportionally on the intermediate consumption.

Although the version 3 of the expenditure approach is considered to be final, minor changes are allowed later on when first versions of later years are published. Supply and use tables in Iceland have not yet been incorporated in the regular procedure of national accounts. They have been constructed more on an occasional basis. However, it is the intension of Statistics Iceland to incorporate such tables into the regular procedure and complete them before the presentation of version 3.

Strictly speaking Statistics Iceland never considers national accounts figures to be final.

Table 2-1 presents the numerical impact of the various revisions from the first estimates of GDP figures of 2003 in the March version 2004. The changes of these estimates in the September and March versions of the following years are presented for 2003 and the consecutive years.

Table 2-1 Numerical impacts of current revisions of GDP

Million ISK	2003	2004	2005	2006	2007
Date of release					
19.3.2004	806,439				
9.9.2004	810,844				
14.3.2005	797,487	858,921			
13.9.2005	811,199	885,009			
14.3.2006 <sup>1</sup>	827,863	916,765	995,991		
13.9.2006	830,621	915,286	1,012,201		
14.3.2007	839,708	926,459	1,021,510	1,141,747	
12.9.2007	841,477	929,376	1,023,526	1,162,930	
13.3.2008	841,483	928,656	1,026,251	1,167,684	1,279,379
11.9.2008	841,322	928,889	1,026,397	1,167,887	1,293,167
Change from first to the latest estimate	4.3%	8.1%	3.1%	2.3%	1.1%

<sup>&</sup>lt;sup>1</sup> Include allocation of FISIM.

Table 2-2 gives a summary of the timing of the revisions of the expenditure and production approaches and a short description of the main new data sources available and used at the revision date each time.

Table 2-2 The timing of revisions and new data sources each time

	Expenditure	Production	
	approach	approach	
A. Timing of individual versions			
1. March, t+2 months	Version 1		
2. September, t+8 months	Version 2		
3. March, t+14 months	Version 3	Version 1	
4. September, t+20 months	Version 4		
5. March, t+26 months	Version 5	Version 2	

	Expenditure	Production
	approach	approach
B. The data sources used at each version		
6. Version 1	Sum of quarters	Prelim. EAR
7. Version 2	Final VAT data	Final EAR
	Final governm. Acc.	Some minor adjustments
8. Version 3	GFCF from prelim EAR	
9. Version 4	Some minor adjustments	
10. Version 5	GFCF from final EAR	

#### 2.1.2 Occasional revisions (Major revisions)

Occasional revisions may arise for a number of reasons. The most common reasons are new sources, new methods or classifications, amended procedures for the application of ESA95 and the like. Such revisions relate to a longer period and are generally undertaken at less frequent intervals.

In the past Iceland has not had any strict revision policy for occasional revisions, in contrast with current revisions. During the 1980s and 1990s several revisions were undertaken. However some of them were very limited in scope. Of these revisions two coincided with base-year changes. Since 1985 the following occasional revisions have been undertaken:

- In 1985, SNA 1968 was introduced and later on backward calculations were made to 1957.
- In 1992, new price indices for imports and exports were introduced together with some other changes. Backward calculations were made to 1980. In the same year the base year was changed from 1980 to 1990 without any backward calculation prior to 1990. These changes did not have any impact on current price figures, just constant prices. However, at the same time new figures on household final consumption for the years 1989-1990 were released and they were 2-3% higher than previous estimates.
- In 1994, several revisions were made. Gross fixed capital formation in dwellings was revised
  upwards considerably for the whole period from 1945. Imputed pension liabilities in the Central
  government sector were introduced and figures revised backwards to 1980. The treatment of the
  NATO base at Keflavik Airport was changed in such a way that the base was defined as an extra
  territorial area outside the Icelandic territory and figures revised backwards to 1980. Some other
  minor changes were also introduced.
- In August 2000, ESA95 was introduced and time series calculated backwards to 1990. On the whole, GDP estimates changed relatively little in this revision. The increases or decreases were around ½ 2 percent each year. For the earlier years GDP rose marginally or by 0.2-1.2 percent, but for the later years they lowered by 0.5-2 percent. Most changes occurred the latest two years where comparisons were made with more preliminary figures. On its own the introduction of the new standard was estimated to have raised GDP estimates by 1½ -1¾ percent each year with other factors moderating the overall impact of this.
- In September 2002, the output and expenditure approaches were reconciled for the first time by making use of supply and use tables for the year 1997. Owing to this balancing procedure the household final consumption was revised downward by 1.7% for the year 1997 and gross fixed capital formation in industry were revised downward by 6% mainly due to new data source, the Enterprise Accounts Register, which was then introduced for the first time. No backward calculations were undertaken at that time mainly due to lack of resources. The consequences were a break in all time series at current prices having the 1997 as an overlap year.
- In August 2004, Statistics Iceland published revised capital stock data for the years 1997-2003. This revision was mainly based on the new data source, the Enterprise Accounts Register (EAR) available from 1997. The revision had no impact on GDP but led to some reduction of the consumption of fixed capital in market activity and thereby net national income.

- In September 2005 Statistics Iceland completed a major revision of national accounts stretching back to 1990 and in some cases back to 1980. The revision covered following items:
  - Annual chain linking was introduced, replacing 1990 constant prices
  - Breaks in time series at current prices were eliminated in the expenditure approach back to 1980
  - New supply and use calculations for the year 2001 were implemented in the balancing procedure
  - New versions of the COICOP and COFOG classifications were implemented for household final consumption and government outlays
  - The former Icelandic activity classification in use up to 1997 was reclassified according to the present Icelandic version of NACE, rev. 1, back to 1973. Thereby continuous time series of the output approach were constructed on A6, A17 and A60 level.
- In March 2006 the allocation of FISIM was completed according to the European Commission Regulation and Eurostat recommendations as far as data sources allowed. The impact of this allocation on the annual level of GDP was around 1% increase. For the period 1996-2003 a rather detailed calculations of FISIM were undertaken but rough estimates were carried out back to 1980 in order to avoid breaks in time series.

This description shows that due to these occasional revisions there still remain a few breaks in the time series in current prices. In the expenditure approach there is a break for the years 1980 and 1957. In the output approach there is a break in 1997 and 1990 at current prices. That approach stretches back to 1973.

From the description above it can be concluded that occasional revisions have been undertaken rather frequently in Iceland in recent years. So far Statistics Iceland has not taken any firm position concerning the timing of occasional revision in future. In this case Statistics Iceland will take notice of the result of Eurostat's attempt in trying to harmonize the timing of occasional revisions among the Member States and try to follow such harmonization if Member States can reach an agreement on that.

#### 2.1.3 Backward revisions

Backward revisions are definitely also a part of the revision policy. That has always been the case, both previously at the National Economic Institute and in recent years at Statistics Iceland. Particularly this refers to the emphasis both institutes have laid on long time series at constant prices and volume indices. After the implementation of every occasional revision during the last three decades or more volume indices were revised backward almost simultaneously by chain linking time series of previous periods to the revised series.

More flexibility has been accepted in the backward revision policy at current prices. Then backward calculations were undertaken only a few years backward with the consequences that overlapping years occurred presenting both revised and unrevised values at current prices for the overlapping years. These breaks in time series caused considerable inconvenience for users and also some confusion as various users used different methods with their chain linking. Owing to that Statistics Iceland decided to eliminate these breaks in time series in September 2005 as a part of the occasional revision at that time. Since then breaks in time series at current prices have been eliminated back to 1980 in the expenditure approach. Before that time, overlapping years back to 1980 were 1997 and 1990. However, overlapping still exist in the production approach having the overlapping years 1997 and 1990 at current prices but no overlapping at constant prices.

## Chapter 3. The production approach

#### 3.0 GDP according to the production approach

In Icelandic National Accounts the production approach plays a secondary role to the expenditure approach which is the main approach used. The construction of production accounts in Iceland stretches back to 1973 and from that time GDP has been estimated from both the production and expenditure approaches and independent of each other as far as sources permit.

The accompanying table shows the gross value added at basic prices by industry in 2005 as well as the percentage share of each industry.

Table 3-1 Gross value added at basic price by industry, 2005

	Value added	% of
	Million ISK	Total
1. Agriculture, hunting, forestry and fishing (A+B)	53,544	6.17
A. Agriculture, hunting and forestry	12,578	1.45
A-01 Agriculture and hunting	12,546	1.44
A-02 Forestry, logging and related service activities	32	0.00
B. Fishing, operation of fish hatcheries and fish farms	40,965	4.72
B-05 Fishing	40,385	4.65
2. Industry, including energy (C+D+E)	116,944	13.47
C. Mining and quarrying	867	0.10
C-14 Other mining and quarrying	867	0.10
D. Manufacturing	88,294	10.17
D-15 Manufacture of food products and beverages	30,170	3.47
D-15.2 Processing and preserving of fish and fish products	17,634	2.03
D-15.1, 15.3-15.9 Other manufacture of food products and beverages	12,537	1.44
D-16 Manufacture of tobacco products	_	_
D-17 Manufacture of textiles	1,274	0.15
D-18 Manufacture of wearing apparel; dressing; dyeing of fur	732	0.08
D-19 Tanning, dressing of leather; manufacture of luggage	58	0.01
D-20 Manufacture of wood, products of wood, except furniture	1,792	0.21
D-21 Manufacture of pulp, paper and paper products	648	0.07
D-22 Publishing, printing, reproduction of recorded media	9,278	1.07
D-23 Manufacture of coke, refined petroleum products	_	_
D-24 Manufacture of chemicals and chemical products	5,002	0.58
D-25 Manufacture of rubber and plastic products	2,442	0.28
D-26 Manufacture of other non-metallic mineral products	6,352	0.73
D-27 Manufacture of basic metals	9,019	1.04
D-28 Manuf. of metal products, ex. machinery and equipment	7,018	0.81
D-29 Manufacture of machinery and equipment n.e.c.	4,228	0.49
D-30 Manufacture of office machinery and computers	-0	-
D-31 Manufacture of electrical machinery & apparatus n.e.c.	1,131	0.13
D-32 Manufacture of radio, television and communication equipment	43	0.00
D-33 Manufacture of medic. & precision instrum., watches & clocks	1,793	0.21
D-34 Manufacture of motor vehicles, trailers and semi-trailers	303	0.03
D-35 Manufacture of other transport equipment	4,075	0.47
D-36 Manufacture of furniture; manufacturing n.e.c.	2,413	0.28
D-37 Recycling	524	0.06

E. Electricity, gas and water supply	27,783	3.20
E-40 Electricity, gas steam and hot water supply	25,586	2.95
E-41 Collection, purification and distribution of water	2,197	0.25
3. Construction (F)	82,428	9.49
F. Construction	82,428	9.49
F-45 Construction	82,428	9.49
4. Wholesale & retail trade, hotels & restaurants, transport & communication (G+H+I)	162,787	18.75
G. Wholesale and retail trade; repair of vehicles & household goods	94,549	10.89
G-50 Sale, maintenance and repair of motor vehicles	16,026	1.85
G-51 Wholesale & commission trade, except of motor vehicles	36,191	4.17
G-52 Retail trade & repair of household goods, ex. motor vehicles	42,331	4.87
H. Hotels and restaurants	13,388	1.54
H-55 Hotels and restaurants	13,388	1.54
I. Transport, storage and communication	54,851	6.32
I-60 Land transport; transport via pipelines	8,372	0.96
I-61 Water transport	3,649	0.42
I-62 Air transport	10,959	1.26
I-63 Supporting transport activities; travel agencies	12,581	1.45
I-64 Post and telecommunications	19,290	2.22
5. Financial, real-estate, renting and business activities (J+K)	229,915	26.48
J. Financial intermediation	76,588	8.82
J-65 Financial intermediation, ex. insurance & pension funding	66,913	7.71
J-66 Insurance & pension funding, ex. compulsory social security	7,068	0.81
J-67 Activates auxiliary to financial intermediation	2,606	0.30
K. Real estate, renting and business activities	153,327	17.66
K-70 Real estate activities	87,991	10.13
K-71 Renting of machinery and equipment	2,136	0.25
K-72 Computer and related activities	13,623	1.57
K-73 Research and development	4,326	0.50
K-74 Other business activities	45,250	5.21
6. Other service activities (L-P)	212,477	24.47
L. Public administration; compulsory social security	49,737	5.73
L-75 Public administration; compulsory social security	49,737	5.73
M. Education	45,764	5.27
M-80 Education	45,764	5.27
N. Health and social work	83,735	9.64
N-85 Health and social work	83,735	9.64
O. Other community, social and personal service activities	32,552	3.75
O-90 Sewage & refuse disposal, sanitation & similar activities	2,972	0.34
O-91 Activities of membership organization n.e.c.	8,246	0.95
O-92 Recreational, cultural and sporting activities	16,801	1.93
O-93 Other service activities	4,533	0.52
P. Private households with employed persons	689	0.08
P-95 Private households with employed persons	689	0.08
Total, basic prices	858,095	98.82
Correction item, taxes and subsidies on product	10,262	1.18
Gross value added, basic prices	868,357	100.00
Plus: Taxes on product	167,532	19.29
Less: Subsidies on product	9,492	1.09
Gross value added, market prices	1,026,397	118.20
For comparison: GDP, expenditure approach Statistical discrepancy	1,026,397	118.20
Statistical discrepancy		

#### 3.1 The reference framework

#### 3.1.1 The production approach and production boundary

The purpose of the production approach is to cover and describe production as economic activity. The basic elements are output and intermediate consumption and value added as the balancing item, recorded in the production accounts. Production is defined by reference to the production boundary, which is defined according to international standards. In summary production includes production of goods and services supplied or intended for supply to units other than their producers together with those used up in the production process. Also included are own-account production of goods retained by their producers for their own final consumption or gross fixed capital formation and own-account production of housing services produced by owner-occupiers.

Excluded from the production boundary are domestic and personal services produced and consumed within the same household.

The treatment of the hidden economy is of special concern but generally it can be stated that the hidden economy, defined as both illegal activity and legal activity but concealed from public authorities, should in principle be included within the production boundary. An example of such activity is given in section 3.12 Construction and section 7.3 Hidden activity.

#### 3.1.2 The administrative registers

One of the main characteristics of the compiling of national accounts statistics in Iceland is an intensive use of administrative registers. Direct data collection by using questionnaires plays a minor role. Of the individual registers used the following are the most important ones in estimating production accounts:

- 1. The Enterprise Register, (Business Register)
- 2. Enterprise accounts register (EAR)
- 3. VAT Register
- 4. Payroll Register
- 5. Pay-as-you-earn Register

Below each of these registers will be described briefly.

#### The Enterprise Register (Business register)

The official name of this register is now the Enterprise Register but in order to avoid confusion with the Enterprise Accounts Register, the Enterprise Register will be called the Business Register in the following. The Business Register is the only one of above named registers with a legal status. The other registers can more or less be considered as tax files and are constructed for that purpose but often statistical purposes are also kept in mind. What is of great importance here is that identification numbers from the Business Register are common to other registers or tax files. The Business Register is administered on the basis of legislation, originally from 1969.

The Business Register was founded by Statistics Iceland in 1969 and maintained there until 1 July 2003 when it was transferred to the Internal Revenue. From a statistical point of view the quality of the Business Register is not satisfactory and because of this there is some ongoing work within Statistics Iceland to establish a statistical business register which will draw on the Business Register and bring in other information (for example data from the Payroll Register). Each enterprise in Iceland has a unique identification code, which facilitates the comparison of data records.

Act on the Enterprise Register entered into force on 1<sup>st</sup> July 2003 when the register was transferred from Statistics Iceland to the Internal Revenue. The main provision of that law is the following:

- a) The Internal Revenue shall maintain a Register of individuals, corporations and other bodies which are engaged in business activities, as well as of public agencies, institutions and societies that are engaged in such activities that warrant their registration.
- b) The Register shall be maintained and brought up to date continuously.
- c) The central government administration and other public agencies shall utilize the Register and its basic documentation in their administration activities. The Register shall also be utilized for statistical purposes.
- d) The Register shall contain the names and addresses of enterprises, their identification (enterprise) number and industrial classification code as well as other particulars on the operation and economies of enterprises which are deemed to be necessary for official use, for enterprises or public use.
- e) Enterprises that are engaged in more than one branch of industry or operate at more than one location may be registered accordingly, with each branch or location being identified as a specific operating unit.
- f) Each enterprise shall be assigned its own and unique identification (enterprise) number.
- g) It is stated in the law that enterprises are obliged to inform the Business register of the start or closure of operation as well as of changes in location and other particulars registered.
- h) For the utilization of the Register for statistical purposes, the Register is obliged to supply Statistics Iceland with all relevant information. Such information is privileged and subject to confidentiality.
- i) Excepting confidential information, the Register shall furnish those so desiring with information which is registered for any given enterprise.

The law on the Register of Enterprises provides a framework for its operation rather than setting down minute instructions. The maintenance of the Register has also been subject to substantial changes over the years and the Register has developed alongside other administrative and statistical tools. Basically it can be stated that its role as an administrative register has strengthened and that it occupies a central place in that respect. Its utilization for statistical purposes has, on the other hand, been more limited than provided for in the legislation. Only to a small extent is it used directly as a source for statistical information mainly extracted through direct use of tax files. However, the utilization of tax files depends heavily on the unique identification number system of the Register as well as on its total coverage of enterprises. Statistical information about a given enterprise can be collected from any number of files in this identification system without any danger of confusion. In addition to this, the Register is also used to some extent as a sampling frame.

Some of the provisions of the legislation have not been fully carried out. Most importantly, the authority provided for in the law of obliging the enterprises to furnish Statistics Iceland with information on changes in their operations has never been utilized. The need for such a regulation has, however, diminished over the years because of the availability of new sources which were enterprise oriented like the Payroll Register and in most recent years the Pay-as-you-earn Register. Secondly, the authority for the registration of economic units rather than legal entities is not utilized at present. Initially, the enterprises in the Register were broken down into units according to industrial branches and/or location but unfortunately that practice was later abandoned.

The Business register contains the following items:

- Identification number
- Name of the enterprise
- Activity code, ISAT 95 which is the Icelandic version of NACE rev.1; 5 digits
- Postal address, PO box no. if applicable
- Telephone number

- Fax
- Communal code of the postal address, the locality of the enterprise and the domicile of the enterprise
- Legal form of the enterprise contains at least following legal forms, but in recent versions even more disaggregation exist:
  - o sole proprietorship
  - o partnership or unincorporated enterprises
  - o limited liabilities
  - o co-operative societies
  - o institutes and enterprises owned by central government
  - o institutes and enterprises owned by local governments
  - o other government units
  - o non-profit institutions serving households or corporations
- VAT -number

The Business register also contains a few other items, not as relevant. From a statistical point of view the register had some drawbacks. Two can be mentioned. The first one was that with few irrelevant exceptions the register excluded the individuals operating units in their own names. These individuals are now included in the Business register and from 2001 these units were also included in the EAR. The second drawback is that the Business register is enterprise oriented not establishment oriented. That means that enterprises operating in more than one activity are recorded only once and that is in the biggest of the activities the enterprise is involved in.

Nevertheless, the register has another feature of great importance because the harmonized identification numbers used in the three other registers mentioned above, i.e. the Enterprise Accounts Register, the VAT Register and the Payroll Register are all harmonized and derived from the Business Register. The classification by legal form also facilitates the institutional sectoring in national accounting but it also provides an insight into various other presentations by legal type.

The Business register is updated daily and Statistics Iceland always has access to the newest version. Because of the widespread use of the Business register for official use, in banking and between businesses it is in the businesses interest that the register is kept up-to-date. So even if the legal obligation of enterprises to furnish the Internal Revenue with information on changes in their operations has never been enforced this should not be a problem. Because of the cost of registering a new enterprise there has been a tendency that enterprises which are not anymore in operation are kept on the register and classified as non-operating. They thus have the possibility to resurface again in some year's time without paying again registration fees. For this reason the Business register cannot be used to identify "deaths of units". For national accounting purposes this should not be a problem because information from the tax authorities is used for identifying enterprises in operation.

#### The Enterprise Accounts Register (EAR)

The Enterprise Accounts Register (EAR) is the newest of these registers. From 1997 onwards it has been compulsory for incorporated enterprises to return standardized annual accounts to the tax authorities. From 2001, a similar obligation has been extended to cover unincorporated enterprises. The EAR is now the most important one in construction of production accounts. Previously, the National Economic Institute (NEI) drew a sample from the annual accounts of enterprises in individual industries. The sample size varied by industries - on average the size was approximately 50% of total activity but much less in terms of the number of enterprises. The sampling frame was the Payroll Register.

As soon as the sample was drawn the annual accounts of the relevant enterprises were collected. Direct access of Statistics Iceland to the tax files is protected by law and, together with good cooperation with the tax authorities; this made all collection of data very easy. In most cases data were collected from the tax authorities although in some cases the accounts or additional information were collected directly from the enterprises. These accounts were then manually processed and brought into a standardized and computerized form for further processing. The samples in individual branches of industry were then grossed-up mainly by using the Payroll Register which has total coverage.

In many cases problems arose where an enterprise was involved in more than one activity and therefore it did not meet the criteria for an establishment. Sometimes the accounts contained enough descriptive data so they could be split up by establishment. The splitting was applied if the activities were of considerable size. Otherwise these enterprises were omitted from the sample. The importance of splitting was gradually downgraded during the last few years and in selecting the sample, the emphasis was increasingly laid on enterprises of one dominating activity.

With very few exceptions the financial year of the enterprises is the same as the calendar year so no serious problems will occur concerning periodization of the accounts.

The present Icelandic Business Accounting Standards are based on legislation on the Financial Reporting and Accounting code. That legislation was based on an early version of the International Accounting Standards (IAS), but the legislation has not followed recent changes in IAS. International accounting standards following the EEA regulations became obligatory in Iceland in 2005.

After the introduction of The Enterprise Accounts Register from 1997 onwards the methods described above have been changed considerably. During the last few years this new register has been gradually developed and extended to cover unincorporated enterprises. Each year the updating of the activity codes is a complicated and troublesome undertaking but in deciding whether a unit is active or not in a particular year it is sufficient to check if it appears in the tax files.

There are advantages and disadvantages with this new source, mostly advantages.

The main advantages are that standardized accounts are now available in a computerized form for almost all the enterprises which have to deliver data in this form and that they cover all legal units except financial institutions such as banks and insurance corporations. Therefore the coverage of each industry has increased considerably compared with the previous methods and the manual processing of a much smaller sample is not needed any more. Previously, i.e. up to 1997, the sample size of most of the industries was near or above 50% of the wage bill but from 1997 and onwards the coverage from administrative sources often reached 85-90%. After the Register covered unincorporated enterprises in 2001 it is almost of total coverage. Grossing-up is not systematically biased concerning cost structure as might have been the case when unincorporated enterprises were not covered. However, some uncertainty still exists in estimating the magnitude of the grossing up. The grossing up differs by industry. Sometimes the value of exports is used or production statistics when available but most frequently the Pay-as-you-earn Register is utilized. This is further explained industry by industry in sections 3.7-3.22 below.

However, disadvantages of this new source also exist. The most serious one is that this new source is enterprise oriented. At the early development of the Register an attempt was made, in good cooperation with tax authorities, to get some additional key indicators by establishment from this new source but it turned out to be unsuccessful. One possible solution is to get some additional information either from the enterprises directly or from the tax authorities in cases when the enterprises send detailed data to tax authorities together with the computerized form. Solutions of this kind have already been applied in the case of fishing and fish processing industries where additional information was collected both directly from the enterprises and the tax authorities. It is not yet decided how far in this direction Statistics Iceland is going but anyway the sole use of an

enterprise oriented register seems to be unacceptable especially in the light of recent developments where enterprises are getting bigger and begoming more diversified.

Another drawback of the EAR is the standardized disaggregation of individual cost items which are the same for all industries. Although the disaggregation is rather detailed, problems arise in the cases of some special cost elements which are uncommon or do not even exist in most industries but are of considerable importance in few industries. Examples of this kind are oil usage in the fishing and transport industry. Problems of this kind need a special investigation similar to that described above for fishing and fish processing. Additional information of this character is in particular needed for construction of supply and use tables and inter-industry relationship.

The disaggregation of the revenue and the operating cost items in the EAR is rather detailed as further described in section 3.3 below where a special conversion table shows how the individual revenue and cost items of the Register are regrouped following the ESA95 classifications.

#### The Financial Supervisory Authority

Contrary to most other activities the Enterprise Accounts Register is not the main source of information for the activity J, Financial intermediation. Most of the companies in this activity are subject to government supervision and therefore the company accounts are compiled and processed by the Financial Supervisory Authority. This supervision covers financial intermediation, insurance and pension funds. The accounts are of almost total coverage so hardly any grossing up is needed. However the output of the financial intermediaries has to be adapted to the definitions of national accounts.

#### The VAT Register

The third register mentioned above is the VAT Register. Except for a few and irrelevant exceptions this register has a complete coverage of all market activity both for branches of industry covered as well as units within each branch. The threshold for exemption from VAT is an annual turnover of 500 000 Icelandic kronur, at the present price level, for those units selling goods and services liable to VAT. Figures from this register are available bi-monthly, approximately  $2\frac{1}{2}$  months after the end of the reference period. They are based on VAT returns from enterprises to the tax authorities. These returns contain figures on turnover subject to VAT, by various tax rates, as well as data on VAT-exempt activity, data on exports etc.

There are three VAT tax brackets:

- 1. 24.5% tax rate
- 2. 7% tax rate
- 3. 0% tax rate

In addition to this there are activities which are exempt from VAT like personal transport and market and non-market health activity. Such activities have to pay VAT on their intermediate consumption without any refunding of VAT. On the other hand some transactions like export of goods and services are in the 0% tax bracket which means that no VAT is levied on such sale and VAT on intermediate consumption is refunded.

The general tax rate is the 24.5% rate. The second rate, the 7% rate, refers, among others, to food, books and newspapers, radio and TV subscription and accommodation.

The usefulness of the VAT register for national accounts purposes is severely limited by the fact that all information in this register is enterprise oriented so establishments cannot be distinguished from that source. Therefore all figures on total turnover by branch according to the VAT-register do correspond to the totals derived from the EAR. The tax authorities cross check the turnover in the VAT Register, enterprise by enterprise, with comparable turnover in the EAR. This comparison is incorporated in the EAR. Therefore, a full consistency is ensured on an enterprise level. However

there are several examples of a discrepancy in activity classification between these two registers. An attempt is made to eliminate such discrepancy. The VAT-register is of complete coverage and it was widely used for grossing-up processes until the EAR covered unincorporated enterprises in 2001. After that improvement of the EAR the importance of the VAT Register has decreased in this sense.

As mentioned above the threshold for exemption from VAT is 500 000 Icelandic kronur. So far the Statistics Iceland is not taking account for this and thus no imputations are made. This can be justified by the fact that for tax reasons there is a great tendency from the owners of tiny businesses to register such businesses as limited liability and thereby they are included in the EAR.

Although the VAT-register has not been as useful a source as originally planned, it is nevertheless used or at least the percentage change in the levels in certain branches is monitored. These changes are compared with changes from other sources when a final decision is made on the total level of output in certain branches of industry.

#### The Payroll Register

The fourth register mentioned above is the Payroll Register. The identification numbers used in the Payroll Register are derived from the Business Register. The Payroll Register is available for each calendar year. It is based on annual tax returns from every single employer and from the tax authority's point of view it is used as a check on the amount of wages the enterprises are paying and what the employees are receiving. The register data are collected through a form which the enterprises are obliged to fill in and send one copy to the tax authorities and another to employees.

Originally, i.e. from 1980 to 1991 the register contained various information of special interest for statistical purposes. The information was available for every single enterprise and employee. Of the variables of interest, the following can be mentioned:

- The identification number of the enterprise as quoted in the Business Register
- The identification numbers of the persons employed, including self employed, as quoted in the *National Registry*
- The value in kronur of payments of wages and salaries
- The number of annual working weeks
- The activity classification according to three digit activity classification used in Iceland until 1997

The last item was of vital importance because it enabled subdivision of enterprises by establishment. From this source data was derived on total employment and wages paid in each activity. These figures were of total coverage and they worked as a sampling frame when a sample of enterprise accounts was drawn from the tax files. The Business Register, on the other hand, has the main drawback of not being establishment oriented; it only enables activity classification of enterprises by main activity. The activity classification in the Payroll Register was carried out by the tax authorities who also checked the number of working weeks. The reason for that was that both items were used for the levying of certain taxes. Due to changes in the tax system these two items were not used any more as a tax base from 1991. Therefore the tax authorities discontinued the work on activity classification and checking the number of work weeks. During the period 1991-1997 these problems were solved temporarily by selecting the enterprises previously involved in more than one activity and classifying each person by activity in these enterprises. This temporarily solution was supposed to correct the Payroll Register and make it comparable to previous years.

The Payroll Register has not been used for the last few years for national accounting purposes. However it contains some important information on items like:

- Imputed benefits to employees for the usage of business cars
- Mileage allowances and related deductible expenses to employees for using their own cars
- Payments of food allowances, most often in the case of absence of work canteens

Instead of making use of the Payroll Register these items have been extrapolated during the last few years by means of changes in values of similar items from the EAR and the tax returns of individuals.

#### The Pay-as-you-earn Register (PAYE Register)

From 1998 onwards the Payroll Register was replaced by a new statistical source - the Pay-as-you-earn Register (PAYE Register). The Pay-as-you-earn tax system was introduced in 1988. Ten years later, i.e. in 1998 the importance of these tax data for statistical purposes increased considerably when the tax authorities started to collect some important new data. After these changes the following data are now required by the tax authorities for every single employee and self-employed person on a monthly basis:

- The percentage of full time equivalence
- The 5-digit activity classification of the employee according to ISAT 95, the Icelandic version of NACE rev.1
- Wages and salaries subject to Pay-as-you-earn tax

The processing of this new register for statistical purposes is not yet completed and results from this source only have been published on a much aggregated level like number of persons employed on a two digit level of NACE rev.1. Some problems have arisen such as the distinction between wages and salaries and various transfer payments. Problems have also arisen in counting the labour force in full-time equivalents because this type of information has been sparsely provided by employers. Although only some aggregated results have been published already, this source has been used internally at Statistics Iceland for data from 1998 onwards.

This source does not allow direct information on hours worked as desired, only percentage of full time equivalence. This has to be accepted until items like number of hours worked will replace the percentage of full time equivalence in the Register.

Provided that these problems are resolved and the operation runs properly, this source will provide more reliable figures on the actual employment as well as the activity for each employee, whether or not it is different from the main activity of the enterprise. Therefore it is hoped that this register is going to facilitate the transition from enterprise oriented statistics as derived from the EAR and VAT Register to establishment based statistics with more homogenous production units. Provided that the employment data will be classified sufficiently by establishments within enterprises this distinction can be utilized both for identifying relatively homogeneous enterprises usable as a basis for grossing up as well as the grossing-up factor.

In view of this the PAYE Register will be become a very important source as soon as it can be utilized. It is the intension of Statistics Iceland to emphasize the work necessary to finalize the processing of this Register and put it into regular use in statistics. Otherwise the only possibility for more adequate establishment statistics would be the costly solution of a direct collection of data from enterprises engaged in many activities.

#### 3.2 Valuation

The main guidelines for the valuation in national accounting are as follows:

Following the requirements of ESA 95 economic activities should be valued mainly in terms of market prices, i.e. according to the value by which flows and stocks are actually exchanged or could be exchanged for cash. If market prices are not immediately available, then the market prices for the corresponding goods, services or assets are to be used.

For example, output of owner-occupied dwellings should be valued in accordance with the rent levels of equivalent rental dwellings. When prices for the corresponding products are not available, namely for general government non-market services produced, they should be valued in terms of total costs of production.

According to ESA95, output is to be valued at basic prices which mean the prices receivable by the producer from the purchaser minus any tax payable on that unit plus any subsidy receivable on that unit.

Intermediate consumption should be valued at purchasers' prices. Intermediate consumption includes transport costs, trade margins and taxes on products, like import duties and excise duties and value-added tax, insofar as it is non-deductible. Output should be valued at basic prices, i.e. it includes subsidies on products but not taxes on products, transport costs or trade margins.

Economic activities should be recorded mainly on the accrual principle.

These are the main guidelines and Statistics Iceland has attempted to follow them as far as possible. As described before, the production accounts are derived from one major source, the Enterprise Accounts Register, which are in fact the company accounts in a standardized form after some adjustments following requirements from the tax authorities. The valuation of total revenue and expenditure in these accounts follows the accounting standards in Iceland and those are more or less in conformity with international accounting standards. In these standards the treatment of taxes and subsidies is a matter of concern from the national accounts point of view. In the annual accounts of the companies, and thereby in the Enterprise Accounts Register, VAT is treated net which means that only non-deductible VAT is recorded in the profit and loss accounts and that method corresponds broadly to the national accounts definitions. In other cases such as in the treatment of subsidies on products different methods sometimes occur in the annual accounts and in such cases the treatment is adjusted in line with national accounts recommendations in order to reach values at purchasers' prices or basic prices.

Output for own final use is valued at the basic prices of similar products sold on the market. Most important here are agricultural products consumed on the farms. On the other hand, other non-market output is valued at the total costs of production minus sales.

Addition to work-in-progress should be valued in proportion to the estimated current basic price of the finished product following ESA 95. Here it is questionable what the actual bookkeeping practices are but most likely the companies are valuing work-in-progress proportionally to the cost of production not the basic value. If that is the case then the work-in-progress might be underestimated by the mark-up between costs and the basic prices.

Some other amendments in valuation are necessary to make from the company accounts to the production accounts. At least the following items are worth mentioning:

• Taxes on production and subsidies on production. From the governments accounts the total value of taxes on production and subsidies on production are derived. These figures are compared with the same items observed from the production accounts in individual activities. Every year the figures by activity are considerably lower than the figures from the government accounts which are considered to be the correct one. The difference, unallocated by activity, is

added to the total value added of the economy and thereby reaches the value added at basic prices.

- Changes in inventories. Special consideration is needed in evaluating changes in inventories. The normal accounting principles will incorporate holding gains or losses and therefore adjustments are needed to remove these effects. The methodology used to derive these estimates is fully described in chapter 5.13
- Purchases of insurance services. In enterprise accounts purchases of insurance services are
  recorded gross, i.e. the gross premium is recorded as costs but in the production accounts
  adjustments are made so that the gross premium is replaced by the net premium, defined as
  premium less claims. Net premium is estimated on an average basis from the annual accounts of
  the insurance corporations.
- *Purchases of financial services*. In business accounting interest expenditure is treated as other expenses but in national accounting financial services is estimated separately; see FISIM calculations in Chapter 9 below.

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

## 3.3.1 Conversion table from Enterprise Accounting Register to ESA95 classifications

As previously described the EAR contains aggregated company accounts. These accounts cover almost all business industries but exclude government services and most of the financial enterprises. The EAR is almost of complete coverage so only a minor grossing-up is needed. However other adjustments are necessary to adapt these accounts to national accounts definitions. Two types of adjustments can be distinguished:

- 1. Individual items in the Register have to be reclassified following the concepts in the production accounts of ESA95 as described in this section
- 2. Several items of the output and intermediate consumption are recorded in a quiet different way in production accounts than in the company accounts. These items are described in sections 3.3.2 and 3.3.3.

Below is a conversion table where individual items on the EAR are reclassified in line with the ESA95 classification.

Table 3-2 Conversion table from items on The Enterprise Accounts Register to the ESA95 Classification

Name of items in The Enterprise Accounts Register	ESA95 Classification
Revenue	
Sales liable to 24,5% VAT	P.1
Sales liable to 7% VAT	P.1
Sales exempt from VAT	P.1
Activity exempt from VAT	P.1
Sales profit	Omitted; B.2
Other income	P.1
Operating costs	
Raw material, domestic purchases	P.2
Raw material imported	P.2
Various material used up by the production process	P.2
Purchase of domestic goods for resale	-P.1
Purchase of imported goods for resale	-P.1
Purchase of goods and labour services for resale	P.2

Rent of property for industrial use	P.2
Property maintenance	P.2
Operation of property, n.e.c.	P.2
Sales cost	P.2 or -P.1
Operation of transport equipment	P.2
Purchase of transport services	P.2
Travel expenses	P.2
Miscellaneous services	P.2
Administration and office cost excl. wages etc.	P.2
Operational and financial leasing	P.2
Small assets, not capitalized	50% P.2; 50% P.5
Maintenance	P.2
Employees' allowances	D.1
Bad debts write-off	Omitted;B.2
Miscellaneous expenses	P.2
Stocks of finished goods at the beginning of the year	-P.1
Stocks of other goods at the beginning of the year	P.2
Stocks of finished goods at the end of the year	P.1
Stocks of other goods at the end of the year	-P.2
Wages and salaries	D.1
Travel allowances	50% P.2; 50% D.1
Mileage allowances	60% P.2; 40% D.1
Pension payments	omitted; B.2
Social contributions other	D.1
Other wages	D.1
Imputed owners' income	Omitted;B.2
Imputed payments in kind	D.1
Gifts, donations to charities etc.	Omitted;B.2
Losses of property sales	Omitted;B.2
Depreciation	K.1
Operation costs of cars for business use	P.2
Fringe benefits to customers	P.2

#### Notes:

P.1	Output	B.2	Operating surplus
P.2	Intermediate consumption	D.1	Compensation of employees
P.5	Gross fixed capital formation	K.1	Consumption of fixed capital

It is assumed that the item "other income" above excludes non-P1 elements such as interest receipts provided that the enterprises follow the classification of items according to tax authority's instructions. Holding gains from sale of assets are also excluded from other income but there might be some insurance claims included. The magnitude of this will be investigated and appropriate corrections be made.

In the Enterprise Accounts Register, the accrual principle is strictly followed, both on the income and cost side. In activity NACE F, Construction, there might be some special problems to adapt that principle accurately when the construction activity lasts longer than one accounting period. No adjustments are made for this in NA.

In the EAR a distinction is unfortunately not made between operational and financial leasing and these two items are grouped together. However, this does not mean that the enterprises are not making any distinction in their books. Most of the firms are capitalising items bought on financial leasing although some exceptions exist where such contracts are not capitalised and the annual payments recorded as intermediate consumption. Therefore this item can be considered as mainly covering operational leasing but financial leasing in exceptional cases where the firms are not making proper distinction between these two.

In addition to this breakdown, there are some other correction items of revenue and costs which are irrelevant for statistical purposes such as accelerated depreciation for taxation, deferred taxation on gain on sale of assets etc. The EAR also contains a detailed balance sheet and gives a very detailed

breakdown of the acquisition less disposal of fixed assets. The use of the register for that purpose is also of vital importance. This will be described in sections 5.11 and 5.12 below.

#### 3.3.2 Output in ESA95 versus revenue in company accounts

On the output side various important adjustments are made from the company accounts to production accounts. These are concerned with:

- Output of wholesale and retail trade
- Changes in stocks of finished goods
- Income in kind
- Output of insurance
- Various borderline cases
- Extraordinary income

According to ESA95 the output of *wholesale and retail trade* is defined as the trade margin which is the difference between the actual or imputed price realized on a good purchased for resale and the price that would have to be paid by the actual distributor to replace the good. This means that the output as defined in national accounts of these industries is the turnover according to company accounts less the value of goods purchased for resale. The output in national accounts is therefore considerably lower than the turnover in company accounts which is recorded on a gross basis.

Changes in stocks of finished goods are recorded on the output side of the company accounts. Stocks are valued at the prices of the beginning and the end of the year and therefore a component of holding gains is included. This has to be removed from the production accounts. It is done by revaluing the stocks at the beginning and the end each year at the annual average prices of that year. The difference, normally negative is added to the sale of the year to reach at the output (production) of the year. It should be emphasised that these price adjustments are entirely recorded on the output side of the production side although the calculations are made both for stocks of finished goods and other goods. Therefore some of these adjustments refer to intermediate consumption. However, this simplification has no impact on GDP. This methodology is described in detail in section 5.13 below.

*Income in kind* is described in more detail in section 7.3 and the estimates made are applied consistently in both the production and expenditure approaches to GDP. Examples of this type on the output side are travel tickets supplied by airlines to their employees at considerably reduced prices.

The *output of insurance* in ESA95 is different from company accounts in the sense that in ESA95 the output is defined as the difference between the premiums received and claims paid plus total premium supplements which are equal to the income from the investment of the insurance technical reserves.

In the case of *various borderline cases* included in production it should be mentioned that it is accounted for production of agricultural products for own-account and domestic and personal services produced by employing paid domestic staff. Sometimes gross fixed capital formation is undertaken on own-account. In such cases no direct action is taken but similarly to many other cases bookkeeping practices are followed. Voluntary activities that result in goods, like building of churches, clubhouses and such are indirectly included by making use of quantity-times-price approach from the Land Registry of Iceland and similar estimates. No direct action is taken to cover items like literary and artistic originals. On the other hand software is explicitly estimated.

On the income side of company accounts there is one item, *extraordinary income*. Included here are various items not elsewhere classified, occurring irregularly and not considered to be a part of

regular operation or output according to national accounts definitions. An example of items to be classified here, following the guidelines from Internal Revenue, is capital gain from sale of shares. Another example is incomes from renting or a sale of fishing quotas. These transactions are classified as income in business accounts and the Enterprise Accounts Register but they are definitely not output following national accounts definitions.

## 3.3.3 Intermediate consumption in ESA95 versus operating expenses in company accounts

In company accounts various items on the expense side are not recorded in line with national accounting practices and some adjustments are needed. The most important ones are:

- The recording of insurance services
- Goods purchased for resale
- The purchase of software
- The threshold value for capital goods
- Income in kind
- Renting of fishing quotas
- Taxes less subsidies on production
- Financial leasing
- Payments for life insurance
- Minor or major repairs

Each of these items will be discussed in a turn.

In company accounts the purchase of insurance services is recorded gross, which equals the total amount of premium paid. What should be measured in national accounts is the service charge, i.e. the premium received less claims paid. Premiums paid were identifiable from the business accounts up to 1997, but after the introduction of the EAR this item could not by identified anymore from that source. When premiums are replaced by the service charge in the production accounts the premiums from 1996 are used as a distribution factor by industries. Claims are not identifiable in the business accounts. When ESA95 was implemented in Iceland in the year 2000 corrections were made industry by industry to eliminate this overestimation of the insurance service paid. From the insurance company accounts the service charge is estimated as the difference between the actual insurance premiums and the actual claims. In addition "supplementary premiums" are added to actual premium. These supplementary premiums consist of the returns which the insurance corporations earn from insurance technical reserves. In national accounts these amounts are counted as a flow of property income to insurance policy holders who use the amount to buy insurance services. Information is available on the premiums paid by the individual industries for some previous years; the latest year is 1996. For the period 1997 to 2002 the figures are extrapolated according to changes in gross premium of similar type but from 2003 onwards percent changes of output in the insurance industry are utilized for extrapolating the service charge. The premiums paid were replaced by the service charge, industry by industry, by using the premiums paid as a distribution factor. That resulted in a reduction of the estimation of intermediate consumption of 9.6 billion kronur in 2005. Insurance claims received by enterprises are in most cases recorded on the balance sheet of the enterprises. Claims received as a compensation for losses on real estate and stocks are entirely recorded on the balance sheet except in the exceptional cases where claims are higher than the losses occurred. In that case the difference is recorded as extraordinary income or expenses on the profit and loss account. One type of insurance and of minor importance is the loss of profit indemnity. Claims received in such cases are recorded among regular income on the profit and loss account.

In section 3.3.2 changes in output of *wholesale and retail trade* are described where output was defined as the turnover following the company accounts' terminology less the value of goods purchased for resale. The intermediate consumption of these industries was consequently reduced with no impact on the GDP.

With the introduction of ESA95, *purchase of software* is defined as gross fixed capital formation instead of intermediate consumption as in the previous system. The value of software is now estimated separately as an item of fixed capital formation, see section 5.11. However, similar changes have not occurred in the bookkeeping practices of companies and the methods may vary considerably. In company accounts there is a tendency to record as current expenditure major repair of existing software although this expenditure lasts for more than one year and exceeds the threshold value for capital goods according to the tax laws. The threshold value is 250.000 Icelandic kronur for the year 2005.

Because of the lack of knowledge of the actual bookkeeping practices in Iceland, the assumption is made that the expenditure on software were expensed in the company accounts and not capitalized. Due to that and in order to ensure consistency between output and expenditure approach, the total amount of software estimated as fixed capital formation on the expenditure side in the national accounts was allocated to individual activities and the company expenses were reduced subsequently to derive intermediate consumption. The allocation by industries was based on the percentage distribution by industries of the total purchase of computers, printers and similar equipment as recorded in the EAR for each year. The total amount allocated in that way was 3.7 billion kronur in 2005.

The value of the amount estimated is undoubtedly a subject of uncertainty. Therefore a further investigation was considered to be necessary and a special survey was carried out in early 2003. The result of that survey is presented in section 5.11 below.

The *threshold value for capital goods* has a more general coverage than just for computer software. According to Icelandic tax law the threshold value determines the maximum value for individual items to be accepted as current expenditure. Items above that limit must be capitalized, that is recorded as fixed capital formation. This limit exceeds the ESA95 guidelines which use 500 Euros in 1995 prices as the limit. Until the utilization of the EAR from 1997 onwards no attempt was made to adjust the production accounts to ESA95 and the bookkeeping practices. The EAR makes some adjustments possible because one of the items specified in the Register under operating expenses is named "small assets, not capitalized". Items recorded under this category are small equipments and tools. According to Icelandic tax laws the threshold value is approximately five times higher than the reference value in ESA95. Therefore it is assumed that a considerable part of these items should be capitalized and not expensed. In an absence of firm data it is estimated that half of the value of these items should be capitalized instead of expensed. The impact of this adjustment is a reduction of intermediate consumption of market producers by 3.6 billion kronur in 2005.

Comparing these methods for treating threshold values with the methods applied in the expenditure approach, as described in sections 5.10 and 5.11, some inconsistency appears. The reason is that when the import statistics are used for estimating the value of imported capital goods no threshold values are used. This discrepancy is of a special importance for the preliminary estimates of the value of fixed capital formation where a direct use is made of the import figures. However, it can hardly be stated that the import figures are systematically overestimating the capital formation. Another source of error is how to distinguish capital goods from intermediate consumption or other use.

Generally, enterprises do not keep separate records of transactions such as *income* in kind but include them either in various expenses or do not record them at all. The market value of these transactions has to be added to compensation of employees and output. Estimation of these transactions is described more fully under exhaustiveness in section 7.3 but the adjustments made

for more appropriate treatment of income in kind consists in a transfer of a few cost items from various cost to compensation of employees. These are items such as

- Usage of business cars owned by the employer for private purposes
- Mileage allowances paid to employees for using their own cars for business purposes but the usage might be both for business and private purposes
- Travel tickets supplied by airlines to their employees free or at considerably reduced prices
- Travel allowances paid to employees as a certain amount per day and exceeding the actual
  cost
- Employees allowances as defined in the Enterprise Accounts Register, including various income in kind such as operating cost of canteens, recreation or holiday facilities etc.

*Renting of fishing quotas* is classified as ordinary expenses in business accounting and in Enterprise Accounts Register. From national accounts point of view these expenses are not intermediate consumption but rather property income for the receiver and most likely a rent.

Taxes on production and subsidies on production are worth mentioning. Business accounts do not give separate figures for these items. Only one fifth of the taxes on production are directly identified in industries. The most important is the group Dwelling services, (NACE 70.20). In other cases these items are most often classified among various operating expenses, subsidies as negative expenses, in company accounts, i.e. intermediate consumption, and these items have to be rearranged and classified among the components of value added. In the final balancing procedure between the output and expenditure approaches the total amount of these items as recorded in the government accounts are considered to be definitive. The difference between these amounts and the amount observed in the individual activities is recorded as a balancing item in estimating total value added from the production approach. The amount observed in the individual activities is lower than the governments accounts show and therefore the balancing item is positive. Intermediate consumption is reduced consequently because it is supposed that these items were included among operating expenses in the company accounts.

In ESA 95 a distinction should be made between *financial leasing* and operational leasing. Unfortunately no such distinction is made in the Enterprise Accounts Register and both these items are recorded under the same heading, cf. Table 3-2. So far Statistics Iceland has not made any attempt in trying to make such distinctions and the entire item is recorded as intermediate consumption. However, this does not mean that the enterprises are not making any distinction in their books. Most of the firms are capitalising items bought on financial leasing although some exceptions exist where such contracts are not capitalised and the annual payments recorded as intermediate consumption.

In some other borderline cases it is assumed that generally accepted bookkeeping practices are followed. Examples of this kind are *payments for the use of intangible non-produced assets* like patented assets and trademarks. It is assumed that such items are excluded from intermediate consumption. In the case of *intra enterprise transactions*, these transactions between establishments might be netted out in some cases. In other and more important cases like fishing and fish processing where such transactions are common, special corrections are made for NA purposes to register these transactions gross.

*Payments for life insurance* should be excluded from intermediate consumption and recorded as compensation of employees. Most likely this is not so in the company accounts and so far Statistics Iceland has not taken any steps to make corrections.

The distinction between *minor or major repairs* is rather straightforward because the main principles are the same in national and business accounts. However, it could not be neglected that some flexibility might occur in business accounts. For tax reasons there might be tendency to postpone tax payments by defining repair narrowly but on the other hand listed companies often

prefer favourable profit outcome for the stock market and therefore want to capitalize as much as possible of repair. The overall impact is unclear. Here it is also worth mentioning the owner occupied dwelling services. This is a relatively big activity and the repair is playing important role but here the EAR is of no use as a source. Previously the repair in this activity was estimated as 20% of output. Later, or in 1999 a model was constructed based on a special research of the Building Research Institute. That research and a later investigation connected with the construction of supply and use table for 2005 have confirmed the previous estimates as a fair approach.

The numerical value of the main items mentioned above can be summarized in table 3-3. A more complete picture is given of the numerical changes from the main source to the final estimate of output and intermediate consumption. There income in kind is also covered.

Table 3-3 A summary of the transitions from the accounting practices in Enterprise accounts to ESA95 national accounting concepts (income in kind excluded, see section 7.3), 2005

	Million ISK
Net recording of insurance services, reduction of intermediate consumption	9,583
Purchase of software, capitalized instead of expensed, reduction of intermediate consumption	3,737
Threshold value for capital goods, reduction of intermediate consumption	3,629
Taxes on production included in companies´ operating expenses, reduction of intermediate cons.	20,474
Subsidies on production included in companies' operating expenses, increase of intermediate cons.	-10,212
Total	27,212
Total as a % of GDP	2.7

#### 3.3.4 Value added

Provided that the output and intermediate consumption as described in section 3.3.2 and 3.3.3 above are properly calculated, then the difference, the value added, will also be accurate. What remains is the grossing up of the Register. Previously, i.e. up to 2001, some problems arose because the EAR only contained incorporated enterprises, not unincorporated enterprises. That caused some problems because the cost structure of these two groups were different for instance in the treatment of remuneration to self-employed persons. In unincorporated enterprises account this item is included in the item wages and salaries. That is not in accordance with national accounts definition where this kind of remuneration should not be classified as wages and salaries but as a component of the operating surplus/mixed income. Therefore a reclassification was made between the two components of value added, the compensation of employees and operating surplus to keep up with ESA95 definitions. This remuneration was derived directly from the Pay-as-you-earn Register and the breakdown is available on an enterprise basis.

From 2001 and onwards problems of this kind do not arise anymore because the EAR includes unincorporated enterprises and it is now almost of a total coverage. Only a minor grossing up is necessary.

In some cases the individual components of value added need some modifications to keep up with national accounts definitions. Changes of this type have no impact on the total value added only its composition. One example of this kind is the consumption of fixed capital. This will be further described in section 4.12. Here only one item will be mentioned and that is the depreciation of purchased fishing quotas. This item is recorded as depreciation in business accounts and Enterprise Accounts Register but should be omitted in national accounting with the consequences that operating surplus increases to the same amount.

#### 3.4 The role of direct and indirect estimation methods

A direct estimation method means that on the basis of exhaustive accounting statistics for the industry in question, output and intermediate consumption are obtained by statistical processing of the underlying business accounts.

In the Icelandic national accounts the construction of production accounts is chiefly based on such direct estimation methods, that is, company accounts are collected from tax authorities and central and local government accounts are collected directly from these authorities. In the case of company accounts the methods have changed from 1997 onwards as described in section 3.1.2 above. From 1997 onwards companies deliver to the tax authorities their annual accounts in a standardized and computerized form. Therefore, the coverage of industry has increased considerably compared with the previous methods and the manual processing of a much smaller sample is not needed anymore. The grossing-up errors are therefore a minor problem and the VAT Register is now mainly used for grossing up. Prior to that time, with a much smaller sample size, more indirect estimates were applied and various sources were considered and year-on-year changes were compared between sources.

In some exceptional cases production account items are constructed entirely using indirect estimation methods. These are in the following industries and sub-industries:

- Own-account construction and repair, within activity division 45;
- Residential construction and repair on own-account, activity 45.49;
- Dwelling service production and renting of machinery and equipment, activity 70.20; these industries accounted for approximately 10% of gross factor income in 2005. The construction of the production accounts for these industries is described in detail under the relevant sections below.

### 3.5 The roles of benchmarks and extrapolations

The compilation of Iceland's national accounts relies mainly on source statistics drawn up each year. The role of benchmarks and extrapolations in the current national accounts compilation is therefore quite limited and they are applied in industries which are neither covered by the standardized company accounts nor direct access to other sources of company accounts like financial institutions. These are the most important activities where benchmarking is used as the main method:

- NACE 80 Education
- NACE 85 Health and social work
- NACE 91 Activities of membership organizations
- NACE 92 Recreational, cultural and sporting activities

Benchmarking is only used for that part of the above activities which does not belong to government activity. With the exception of NACE 92, only the minority of these activities is non-governmental and owned and operated by private or NPISH units. The share of these activities in GDP just exceeded 5% in 2005.

The production accounts of these activities are derived from a relatively small sample of annual accounts for one benchmark year, the latest years being 1995 and 1996. The grossing-up is based on the Pay-as-you-earn Register for every year and later years were projected by using the same cost structure as applied in the benchmark year. Statistics Iceland considers these methods as unacceptable and is planning to collect information on a regular basis directly from some of the most important of these units. The main problem of benchmarking here is the lack of standardized company accounts easily accessible from the tax authorities like in the normal procedure where the Enterprise Accounts Register is utilised. The grossing-up procedure is not a problem. The use of the PAYE Register is adequate. More time consuming and costly is the collection of a sufficient number of accounts from various units often not taxable, like many NPISHs. The collection and processing of these units is on the agenda without a fixed time schedule. The methods have not yet been decided but most likely benchmarking will continuously be used for these activities.

In one other aspect, benchmarks have a more important role to play, and that is in chaining older unrevised series to new revisions. An example of this type is the implementation of ESA95 which covered the period back to 1990. That implementation was completed in August 2000 and proper backward calculations were not completed until September 2005 when the former activity classification was reclassified according to the present one. Before that time benchmarking was used for volume estimates.

# 3.6 The main approaches taken with respect to exhaustiveness

Adjustments for exhaustiveness in the production approach are described in chapter 7 along with some other adjustments.

#### 3.7 Agriculture, hunting and forestry (NACE Rev.1; A)

In national accounts the activities of NACE A are split into 14 industries and in total these industries make a contribution of 1.5 percent to GDP. The size of each of these industries varies considerably as the table below shows:

Table 3-4 Output, intermediate consumption and value added in agriculture, 2005

Million ISK		Intermediate	Value added,
	Output	consumption	basic prices
01+02 Agriculture and forestry	29,249	16,666	12,578
As % of total economy	1.54	1.61	1.47
01 Agriculture, hunting and related service activities	29,036	16,486	12,546
01.1 Growing of crops; market gardening; horticulture	3,681	2,234	1,445
01.11 Growing of cereals and other crops n.e.c.	825	538	287
01.11.1 Growing of cereals and other crops, except potatoes	54	29	24
01.11.2 Growing of potatoes	772	508	263
01.12 Growing of vegetables, horticultural specialties and nursery prod.	2,856	1,697	1,158
01.12.1 Growing of vegetables and nursery products	1,728	1,024	704
01.12.2 Growing of flowers and pot plants	1,128	673	454
01.13 Growing of fruit, nuts, beverage and spice crops	_	_	_
01.2 Farming of animals	22,131	12,354	9,774
01.21-22 Farming of cattle, dairy farming; farming of sheep and horses	16,871	8,805	8,066
01.23 Farming of swine	2,735	1,842	893
01.24 Farming of poultry	1,973	1,376	597
01.25 Other farming of animals	552	331	218
01.25.1 Farming of mixed livestock	_	_	_
01.25.2 Farming of fur animals	552	331	218
01.25.9 Farming of animals n.e.c.	_	_	_
01.3 Growing of crops combined with farming of animals (mixed farming)	_	_	_
01.4 Agricultural service activities, except veterinary activities	3,191	1,875	1,315
01.41 Agricultural service activities	2,901	1,660	1,240
01.41.1 Crop-growing service activities	302	135	167
01.41.2 Landscape gardening	2,599	1,525	1,073
01.42 Animal husbandry service activities, except veterinary activities	290	216	74
01.5 Hunting, trapping and game propagation incl. related service activity.	34	22	12
02 Forestry, logging and related service activities	213	181	32
02.0 Forestry, logging and related service activities	213	181	32
02.01 Forestry and logging	200	177	23
02.02 Forestry and logging related service activities	13	3	10

The value added in agriculture amounts to 1.5 percent of GDP. The table above shows that roughly 80% of the value added in agriculture has its origin in farming of animals, NACE 01.2. Horticulture is of increasing importance but fur farming fluctuates considerably.

In constructing production accounts in agriculture the procedure is to some extent similar to that previously described in sections 3.1 to 3.6 above. Most of the industries in agriculture are characterized by small unincorporated enterprises. Therefore the EAR was of a limited use up to 2001 when unincorporated enterprises were covered by the Register besides incorporated ones. At present the main data sources used for constructing production accounts are two:

- In "traditional farming", i.e. the industries 01.21 and 01.22, farming of cattle, sheep and horses, a use is made of detailed and specialized business accounts compiled and processed by the Agricultural Economic Institute (AEI)
- In other activities within agriculture a use is made of both data from the Agricultural Economic Institute and the Enterprise Accounts Register

A register of agricultural units exist for traditional farming because of a complicated quota system which is applied in that type of farming. The Agricultural Economic Institute draws a sample from that register. For statistical purposes the sample might be biased in favour of bigger farms. In 2005 the Agricultural Economic Institute utilized business accounts from 309 units, mostly in traditional farming as a sample of its calculations. This sample size amounted to 26.6% of all milk received by dairies and 12.7% of lamb meat production that year. In other activities the EAR is the main data source and almost of a complete coverage.

Incorporated enterprises in agriculture are included in the EAR like other incorporated enterprises. Statistics Iceland collects these company accounts and after minor editing and rearranging of these accounts, they are delivered to the Agricultural Economic Institute which combines them with accounts from unincorporated enterprises and constructs a larger sample of accounts in activities other than traditional farming.

From these sources Statistics Iceland grosses up the sample based on production statistics from the Farmers Association of Iceland. These production statistics are of complete coverage and of much better quality than available in most industries other than fishing and fish processing. The Farmers Association compiles statistics of the quantity and value of all agricultural products. In most cases the Farmers Association is the primary collector of the data but sometimes the Association gets the data from other collectors. The data are collected on a monthly basis and cover sales, production and inventories. The Farmers Association estimates sale of products from agricultural holdings to processing plants as well as direct sale to retail trade and consumers. The prices of products delivered to processing plants were until recently centrally determined for milk, sheep and horse products. Increased flexibility has been gradually implemented in price determination of these products as has been the common practice in poultry, pig farms and horticulture for years. The overwhelming part of fur farming is exported and consequently no problems of valuation occur.

In estimating the quantity figures, the official figures are considered relatively reliable in most cases. However, up to 2004 an attempt was made to increase the coverage by rough estimate for underreporting. This was of a special importance in the case of lamb and beef. During the last few decades, the National Economic Institute and later on Statistics Iceland made rough estimates in unofficial co-operation with the Farmers Association of Iceland, previously the Agricultural Production Board. These estimates, which in fact were guess work, resulted in a small increase of annual production to cover both goods produced for own final use on the agricultural holdings as well as deliberate underreporting. As an indicator of the size of this revision the figures for production of lamb meat was in recent years revised upwards by 5 percent, mutton was increased by 20%, and beef and chicken by 10%. Other meat of lower quality was revised upward by 12% and even up to 20% in some cases. What was especially accounted for here was both underreporting and black market but also the own consumption of farmers and their families. However, the revision owing to own consumption ought to be diminishing because of the

decreasing number of people living on farms. From 2004 and onwards such estimates of underreporting are not used any more. Instead the grossing up is based on direct use of the VAT register. Thus the methods have in fact deteriorated in recent years but Statistics Iceland intends to revise and improve this statistics in cooperation with the institutions compiling the primary statistics.

As far as exports are concerned, figures are usually considered to be very reliable. Exception is exports of stallions and saddle horses. Most of them are exported to Western Europe and for years there was a rumour of serious underreporting of that value. That rumour was verified by looking at the extremely low unit prices in the exports statistics. In 1997 the registered export value fob of export of horses amounted to 211 millions of kronur but the actual figure might be three times higher according to a study made by the Agricultural Economic Institute. Reliable sources mean that in the last few years this underreporting in exports has diminished considerably. More effective import control in some western European countries plays an important role here. Other items in the farming of horses, such as domestic sale of saddle horses, are even of greater concern as regards underreporting, judging from estimates in a report made by the Agricultural Economic Institute in 1998. No correction has yet been introduced in national accounting in order to capture these estimates.

There exist enterprises rendering services such as hiring out agricultural machines against payment and with permanent operators. These enterprises are also involved in land draining and improvement and they are classified in construction, industry 01.41. To the extent this activity is carried out as a secondary activity of farmers themselves it is included in the farmers accounts, if reported. This activity is of minor importance. Other secondary activity of farmers and of increasing importance is tourism activity, such as renting summer residences, horses etc. So far it has been assumed in the Icelandic national accounts that all such activity is properly registered either as a secondary activity on the farm or as a separate activity. It depends on the activity classification of the farm whether this is a valid assumption. In some cases the farms are not any more engaged in agricultural production and therefore classified in activity NACE 55.23 Other provision of lodgings n.e.c. If the tourism is a secondary activity of the farm then it is assumed that it is properly recorded as an "other income" of the farm. However it can be questioned if the sample in "traditional farming" is correctly representing farm tourism taking into account that the sample is drawn and processed by the Agricultural Economic Institute which is more connected with agriculture than tourism.

In the case of the agricultural output of non-farm based agricultural enterprises it can be stated that such activity is covered in the production accounts of agriculture if the production statistics is delivered to the Farmers Association. In such cases double counting cannot be avoided but this is considered to be of trivial importance.

No correction has been made but further investigation is needed. Statistics Iceland is now working on a special project in constructing tourism satellite accounts. The first preliminary results published in October 2008 do not give any clear indication of secondary income from tourism in agriculture.

The output in agriculture as described above is applied to gross up the production accounts as they are estimated from the annual accounts. The grossing up of the production accounts implies that one cannot be sure whether the principle of the "national farm" is followed or not. The reason is the treatment of intermediate deliveries between agricultural establishments; for example sales of chickens, eggs for improvement of the stock and hay. As long as intermediate deliveries or work-in-progress are included in other income of the sample, it obviously will be grossed up and increase the output of agriculture so it will exceed the national farm principle. Another possibility is that work-in-progress of the sample is included in the finished product as seems most likely. In that case the output of agriculture will correspond to national farm principle. However, the value added of the production account may then be underestimated because the degree of processing is too low. What really matters here is that the volume of intermediate deliveries between agricultural holdings

is small in Iceland as compared with the neighbouring countries. Thus, it can be concluded that the output in agriculture in Iceland can be defined as being close to the national farm principle. In recent years there have been no changes in these estimates so in fact Iceland has not modified present methods in light of the fact that according to the new Economic Accounts for Agriculture the principle of the national farm has been abandoned.

Finally in this section, activity 02, forestry, logging and related service activity, is hardly worth mentioning. This activity is mainly characterized by individuals engaged in forestry. The activity is overwhelmingly depending on capital transfers from the government to individuals. For similar reasons the growth of multi-annual agricultural products is not a problem in Icelandic NA. Provided that the accrual principle is followed in agriculture like other activity output of this kind, like changes in livestock, should be covered continuously in changes in inventory.

#### **3.8 Fishing (NACE Rev.1; 05)**

Group 05, fishing, consisting of fishing boats, trawlers and fish farming are split into 11 industries. Of these three branches, fish farming is still of minor importance and represents less than 1 percent of the group. For decades fishing has been an important industry in Iceland and in 1995 it amounted to 3.8 percent of GDP. However, its share has been decreasing.

The total value of the catch is compiled by the *Directorate of fisheries*, former *Fisheries Association of Iceland*. The Directorate compiles figures on quantity and value of the total fish catch of all Icelandic fishing vessels independently of whether the catch is landed domestically or abroad. Samples are not used. The quality of the figures is considered to be very high. That can be explained by the fact that approximately 96 percent of the value of the marine production is exported and figures on exported goods are generally very reliable. Anyway, that has been the general view of both the compilers and users of these statistics. As an exception from this general view it can be mentioned that early in the year 2003 a discrepancy was observed in the exports of fish products of freezer trawlers directly landed at foreign ports during the year 2002. Then it was observed that a few exporters did not return custom declarations to the customs authorities for some of the months of the year. This underreporting amounted to 900 millions of kronur or 0.7% of the total export of marine products of 128.600 millions of kronur. This was considered to be an exceptional case that year due to a mistake but not a deliberate intention of the exporters. Nevertheless, this shows that the exports need to be checked as carefully as carefully as other external trade.

In the case of domestic landed catch it can easily be verified if the relationship between the value of the catch bought by each processing plant and the export value of production looks reasonable. Such checks are undertaken regularly by the Directorate of Fisheries where a comparison is made of fish catch of every single boat and freezer trawler and the exported fish products from the corresponding producing unit. Because of the prevailing quota system in Iceland this comparison is essential for checking the registered catch and the quota allocated to the same trawler or boat.

Two other aspects of fish catch statistics are problematic. These are:

- Catch thrown away in the waters
- Domestic consumption of fish

It is a rather general opinion that fishermen throw away in the fishing waters a considerable catches instead of bringing them to port. That has to do with the existing quotas system which prohibits vessels from landing fish below a specified size. The system also decides the maximum total catch by species and the total catch of each vessel. Therefore there is an intensive to throw away less valuable catch and small fish in order to maximize the value of permitted quantity of catch each vessel is allowed to land. Large figures are mentioned in this connection, approaching 30 to 40 thousand tons according to the latest investigation. This amount can be compared with the total

catch of 480 thousand tons of demersal species. Although this is a serious problem in determining the fishery policy, it is not of a special concern in presenting national accounts which excludes such catch because it has a zero value. Nevertheless, this should be kept in mind when balance sheets, including non-produced assets, are to be produced.

Another aspect of fish catch statistics worth mentioning is the domestic consumption of fish and fish products. Here the most serious underreporting may exist although it is of minor importance compared with the size of the total catch. The total value of raw fish consumed domestically is close to 1 percent of the current estimates of total raw fish value. The proportion of domestic consumption is higher or around 4 percent of processed fish. This figure is derived from household private consumption and production for export of fish products. This comparison already indicates some discrepancy but a further comparison is needed.

According to the catch statistics compiled by the *Directorate of fisheries* the consumption of raw fish is equivalent to 25-30 kg per capita per year. These figures are included in catch value used to gross up the production accounts. Other sources indicate some higher figures. In household final consumption expenditures the total consumption of raw and processed fish is at present estimated around 3.5 billion ISK and 10% lower in HES.

Catch statistics from the Directorate of fisheries are utilized to estimate the output of the fishing industries. Similarly to other groups the production accounts in this group are constructed from the EAR. That register is almost of a complete coverage and it is grossed up by the ratio of total value of catch derived from the Directorate of fisheries and the most corresponding revenue items from the EAR.

The role of the EAR has been somewhat less important in the case of fishing compared with other industries because some additional information is compiled for fishing. There are various reasons for this. Fishing plays an important role in the economy and the structure of the enterprises in fishing and fish processing has for decades developed in the direction of vertical integration, where fishing and fish processing are carried out within the same enterprise. Simultaneously there has been a demand for establishment oriented data. In previous decades the reason was a centrally determined raw fish price where the price of all raw fish was decided by an official committee. In the last decade this form of price determination has been eliminated but the demand for establishment oriented data remains, especially for evaluation of various alternatives in fishery policy. Due to this the enterprise oriented data which can be derived from the EAR is insufficient and additional establishment oriented data has been collected directly from many of the large enterprises, and from the tax authorities a sample of small enterprises has been drawn. In this data collection the emphasis is both on establishments and on a more detailed and specialized cost structure than can be derived from the standardized accounts in the EAR.

Fish farming is mostly undertaken by incorporated enterprises not involved in other branches of the industry. Therefore the EAR can be used as the main source for production accounts. The company accounts found in the Register are grossed up by using the total value of production. That value is derived from export of the products of fish farming and the estimates of domestic use made by the *Institute of Freshwater Fisheries*.

In Table 3-5 an overview is given of activity 05.

Table 3-5 Output, intermediate consumption and value added in fishing, 2005

Million ISK		Intermediate	Value added,
	Output	consumption	basic prices
05 Fishing, operation of fish hatcheries and fish farms;			_
service activities incidental to fishing	75,553	34,569	40,965
As % of total economy	3.99	3.34	4.77
05.01 Fishing	72,204	31,819	40,385
05.01.1 Operation of trawlers	9,378	3,866	5,513

05.01.2 Operation of freezer trawlers and other fish-processing vessels	29,562	12,051	17,510
05.01.3 Operation of fishing vessels over 10 GRT,			
except trawlers and fish-processing vessels	28,580	13,629	14,951
05.01.4 Operation of fishing boats	4,685	2,273	2,411
05.01.5 Operation of whalers	_	_	_
05.02 Operation of fish hatcheries and fish farms; fresh-water fishing	2,457	2,426	13
05.02.1 Hatchery production	261	287	-27
05.02.2 Onshore and cage fish farming	2,117	2,030	70
05.02.3 Ocean ranching	1	-1	1
05.02.4 Marine farming	67	102	-36
05.02.5 Fresh-water management and fishing	11	7	4
05.03 Service activity incidental to fishing	892	325	567

Fresh-water fishing other than fish farming should be mentioned. This activity covers river and lake fishing of trout and salmon. At present the selling of fishing licenses in rivers is in the hands of fishing associations and normally there is one particular association for each of the main fishing rivers. The fishing associations are formed by the farmers or the land-owners to whom the fishing rights belong. The purpose of these associations is both to sell fishing licenses and cultivate the river and in most cases these associations are also involved in related accommodation for the anglers. In the present activity classification, ISAT 95, the Icelandic version of NACE, rev.1, these associations are registered in the branch 70.20.3, letting of land and land rights. As far as these associations are registered as market oriented enterprises, their annual accounts are derived from the EAR and treated in the usual way. Otherwise these associations are non-profit unit and not an independent tax payer and the profit if any is distributed among owners. The treatment of that distribution at the receiving end, which most often is farmers, might be a cause of concern. The distributed earnings can be registered in two different ways in the farmer's accounts, ruling out the possibility of non-reporting:

- As other income
- As property income

If these earnings are registered as other income, they are automatically included in the operating surplus of the activity of the owner, i.e. agriculture in most cases. On the other hand, if these earnings are registered as property income they will disappear from the production accounts and therefore they are not counted in GDP. This problem only refers to unincorporated units which are not independent tax payers and therefore not covered by the EAR. However, this is of trivial importance.

One final point should also be mentioned on the distinction between property income and income from services rendered. In some cases the income from fresh-water fishing can be considered as income from non-produced assets where the owner is receiving income without any use of produced assets or intermediate consumption. In this case this income can be treated in a similar way to rents on land, i.e. property income and should not be included in production activity. It is impossible to guess to what extent this is the case in fresh-water fishing at present. However, it is undeniable that the branch started this way and some of the rivers or highland lakes are still of this character.

## 3.9 Mining and quarrying (NACE Rev.1; C)

Activity C is of minor importance in Iceland. In the three digit classification it consists of mainly two activities - quarrying of sand and clay and other mining and quarrying. The meaning of the first one is self-evident but the second activity in Iceland consists of quarrying and processing of diatomite which was closed down in 2004. So far no mineral exploration is carried out in the country. The nearest parallel is drilling and search for hot water resources. Such expenses are treated as gross fixed capital formation.

Table 3-6 Output, intermediate consumption and value added in mining and quarrying, 2005

Million ISK		Intermediate	Value added,
	Output	consumption	basic prices
14 Other mining and quarrying	2,254	1,384	867
As % of total economy	0.12	0.13	0.10
14.1 Quarrying of stone	-	_	_
14.2 Quarrying of sand and clay	2,150	1,273	874
14.21 Operation of gravel and sand pits	2,150	1,273	874
14.22 Mining of clays and kaolin	-	_	_
14.3 Mining of chemical and fertilizer minerals	43	43	1
14.4 Production of salt	_	_	_
14.5 Other mining and quarrying n.e.c.	61	69	-8

The methodology used to derive the estimates for each sub-industry is exactly the same as for manufacturing. The description is outlined in section 3.10.2 below.

#### 3.10 Manufacturing (NACE Rev. 1; D)

The description of manufacturing is here splitt up into two sections, the fish processing and the remaining part of manufacturing. The reason is that methods differ to some extend owing to the fact that better information is available on fish processing than the other part of manufacturing.

## 3.10.1 Processing and preserving of fish and fish products (NACE Rev.1; 15.2)

In national accounts the activities of NACE 15.2 are split into 7 industries. Due to the high importance of these activities the sub classification here is very detailed and contrary to many other activities a breakdown by activity down to 5-digit level is utilized here.

Table 3-7 Output, intermediate consumption and value added in preserving of fish and fish product, 2005

Million ISK		Intermediate	Value added,
	Output	consumption	basic prices
15.2 Processing and preserving of fish and fish products	82,302	64,667	17,634
As % of total economy	4.35	6.25	2.05
15.20 Processing and preserving of fish and fish products	82,302	64,667	17,634
15.20.1 Processing of frozen marine products	37,815	25,516	12,299
15.20.2 Processing and preparation of salted fish products, except herring	18,849	16,376	2,473
15.20.3 Processing and preparation of salted herring	_	_	_
15.20.4 Processing and preparation of whole stockfish	_	_	_
15.20.5 Processing and preparation of dried fish fillets	_	_	_
15.20.6 Preparation of fresh marine products	12,292	11,511	782
15.20.7 Manufacture of fish meal and crude fish oils	11,000	9,310	1,689
15.20.8 Canning and preserving of marine production;			
preparation of consumer-ready marine production etc.	1,548	1,221	327
15.20.9 Processing and preserving of fish and fish products n.e.c.	799	733	64
15.22 Processing and preserving of whale products	_	_	_

The value added in fish processing amounted to 2.1 percent of GDP in 2005. The share of fishing and the fish processing industry in merchandise exports highlights even better the importance of these industries in the economy. In 2005 the share in merchandise exports was 57 percent but this share is gradually declining due to the increasing importance of power intensive industries. The table above shows that freezing and salting of fish is of vital importance. This importance varies from year to year due to heavy fluctuations in some branches, particularly in manufacturing of fish oil and fish meal.

The output value of fish processing is mainly obtained on the basis of statistics on exports of goods as described in section 5.15 below. These statistics are considered to be of high quality. Similarly to other activities the production accounts are based on the Enterprise Accounts Register as a base but the export value of fish products is used for grossing up together with changes in stocks of these products. Such method is of higher quality than in most other activities.

However, for the same reasons as mentioned above in fishing, there exists a great demand for establishment based statistics for fish processing. Therefore, the Enterprise Accounts Register which is enterprise oriented is an insufficient source and there is a great need for additional data from either the tax authorities or directly from the enterprises. Up to 2004 this information was collected by drawing a big sample of relatively homogenous establishments directly from the enterprises. The sample was processed and then grossed up according to the export statistics. The size of the sample in the various industries exceeded 50% of the production in most activities, in some cases, like fish meal and oil factories, it was above 90%.

There are historical reasons for this special treatment of fish processing. Prior to the existence of the Enterprise Accounts Register, sample sizes of 60-70 percent and up to 90-95 percent were common compared with around 50% sample size in most of the other activities at that time. Apart from the importance of this industry in export earnings, amounting to up to <sup>3</sup>/<sub>4</sub> of the export of goods, the reason for such a big sample was also justified by the centrally determined raw fish prices set by the *Fisheries Price Fixing Board*. The National Economic Institute was involved in compiling data for the price decision and if the Board did not reach a solution the director of the Institute played a key role in price determination. This process has been replaced by founding the raw fish price auctions. Large samples facilitated the work of price determination and made the results more reliable. A breakdown of enterprises by type of processing (establishment) was also crucial for these purposes. From a national accounts point of view this had positive consequences for increasing quality.

As described above the value of exported fish products is used as the grossing up factor. The most uncertain factor in grossing up in this is the treatment of domestic sale of products. The reason is that in many cases an adequate distinction is not made between export income and domestic sale in the Enterprise Accounts Register with the consequences that the grossing up factor and value added is underestimated. No special research has been carried out in order to quantify this difference. One possibility of doing this is to isolate the item sales exempt from VAT from other income components before grossing up. An indicator of the upper limit of this uncertainty might be that processed fish amounts to 1 percent of the production for export of fish products in the relevant calculations.

For historical reasons it is worth mentioning that up to 1992 a notional activity was established within fish processing. That was Price Equalization Fund. The impact of the Equalization Fund has been neutralized since 1993 but the mechanism still exists. Therefore the fund is not shown in the table. The purpose of the fund is to equalize the fluctuations of the income of the processing plants due to fluctuations of the price of fish products on foreign markets. A special reference price was defined and payments into the fund are made if market prices increase and payments out of the fund are made when market prices fall. A special production fund is constructed to cover the activity of that fund. The output of the account is the payments into the fund. Simultaneously these payments have been subtracted from the outputs of the corresponding branches. Payments out of the fund are not recorded in the production accounts. This treatment of price equalization is similar to retained earnings which are treated as a part of the operating surplus of the accrual year. An alternative treatment of the Price Equalization Fund was to record payments into the fund as taxes on products and payments out of the fund as subsidies. That did not become the outcome.

## 3.10.2 Manufacturing excluding processing and preserving of fish and fish products (NACE Rev.1; D, except 15.2)

In national accounts the activities of NACE D, excluding processing and preserving of fish and fish product are split into 157 industries. The share of this group in GDP amounted to 8.2 percent in 2005. The size of each of these industries is given below. Such a detailed activity breakdown can be misleading but it should be kept in mind, as emphasised in previous sections, that the activity breakdown is based on enterprise oriented statistics, not establishment oriented, having the consequences that many of these activities are heterogeneous in character.

Table 3-8 Output, intermediate consumption and value added in manufacturing, excluding preserving of fish and fish product, 2005

Million ISK		Intermediate	Value added,
	Output	consumption	basic prices
Total of NACE, D, excluding 15.2	230,963	160,009	70,661
As % of total economy	12.20	15.47	8.23
15 Manufacture of food products and beverages, excluding 15.2	57,134	44,537	12,537
15.1 Production, processing and preserving of meat and meat products	17,938	14,990	2,922
15.11 Production and preserving of meat	4,751	4,763	-24
15.12 Production and preserving of poultry meat	2,801	2,066	733
15.13 Production of meat and poultry meat products	10,386	8,161	2,214
15.3 Processing and preserving of fruit and vegetables	939	641	297
15.31 Processing and preserving of potatoes	438	287	150
15.32 Manufacture of fruit and vegetable juice	-	_	_
15.33 Processing and preserving of fruit and vegetables n.e.c.	501	354	147
15.4 Manufacture of vegetable and animal oils and fats	1,981	1,580	398
15.41 Manufacture of crude oils and fats	_	_	_
15.42 Manufacture of refined oils and fats	1,519	1,280	236
15.43 Manufacture of margarine and similar edible fats	462	300	162
15.5 Manufacture of dairy products	12,313	10,001	2,299
15.51 Operation of dairies and cheese making	11,127	9,087	2,028
15.52 Manufacture of ice cream	1,186	914	271
15.6 Manufacture of grain mill products, starches and starch products	724	594	129
15.61 Manufacture of grain mill products	724	594	129
15.62 Manufacture of starches and starch products	_	_	_
15.7 Manufacture of prepared animal feeds	4,616	3,873	739
15.71 Manufacture of prepared feeds for farm animals	4,554	3,838	711
15.71.1 Manufacture of prepared feeds for farm animals	3,758	3,195	559
15.71.2 Manufacture of prepared fish feeds	561	505	56
15.71.3 Manufacture of seaweed meal	234	138	96
15.72 Manufacture of prepared pet foods	63	35	28
15.8 Manufacture of other food products	11,004	6,924	4,074
15.81 Manufacture of bread, fresh pastry goods and cakes	5,059	2,866	2,191
15.82 Manuf. of rusks and biscuits, preserved pastry goods and cakes	4	1	3
15.83 Manufacture of sugar	_		_
15.84 Manufacture of cocoa; chocolate and sugar confectionery	2,529	1,643	883
15.85 Manufacture of macaroni, noodles, couscous			
& similar farinaceous products	50	43	7
15.86 Processing of tea and coffee	415	231	184
15.87 Manufacture of condiments and seasonings	458	313	144
15.88 Manuf. of homogenized food preparations and dietetic food	_	_	_
15.89 Manufacture of other food products n.e.c.	2,489	1,826	663
15.9 Manufacture of beverages	7,618	5,934	1,678
15.91 Manufacture of distilled potable alcoholic beverages	_	_	_
15.92 Production of ethyl alcohol from fermented materials	_	_	_
15.93 Manufacture of wines	_	_	_
15.94 Manufacture of cider and other fruit wines	_	_	_
15.95 Manufacture of other non-distilled fermented beverages	_	_	_
15.96 Manufacture of beer			

15.97 Manufacture of malt	_	_	_
15.98 Production of mineral waters and soft drinks	7,618	5,934	1,678
17 Manufacture of textiles	4,728	3,445	1,274
17.1 Preparation and spinning of textile fibres	580	458	121
17.2 Textile weaving	_	_	_
17.3 Finishing of textiles	_	_	_
17.4 Manufacture of made-up textile articles, except apparel	705	484	220
17.40 Manufacture of made-up textile articles, except apparel	705	484	220
17.40.1 Manufacture of tents, sails, etc.	510	374	135
17.40.2 Manufacture of made-up textiles and furnishing articles	176	99	77
17.40.9 Manufacture of other made-up textile articles n.e.c.	19	12	7
17.5 Manufacture of other textiles	3,031	2,234	792
17.51 Manufacture of carpets and rugs	_	_	-
17.52 Manufacture of cordage, rope, twine and netting	2,999	2,199	795
17.52.1 Manufacture of cordage, rope, twine, etc.	1,758	1,378	376
17.52.2 Manufacture of fishing nets	1,241	821	418
17.53 Manufacture of non woven and articles made from			
Non woven, exc. Apparel	_	_	-
17.54 Manufacture of other textiles n.e.c.	32	35	-3
17.6 Manufacture of knitted and crocheted fabrics	111	59	52
17.7 Manufacture of knitted and crocheted articles	301	210	90
17.71 Manufacture of knitted and crocheted hosiery	34	14	19
17.72 Manufacture of knitted and crocheted pullovers,			
cardigans and similar articles	267	196	70
18 Manufacture of wearing apparel; dressing and dyeing of fur	2,189	1,450	732
18.1 Manufacture of leather clothes	_	_	-
18.2 Manufacture of other wearing apparel and accessories	1,696	1,053	637
18.21 Manufacture of work wear	1,245	759	482
18.22 Manufacture of other outerwear	119	81	38
18.23 Manufacture of underwear	_	-0	0
18.24 Manufacture of other wearing apparel and accessories n.e.c.	331	214	117
18.3 Dressing and dyeing of fur; manufacture of articles of fur	493	397	95
19 Tanning and dressing of leather; manufacture of luggage, handbags,			
saddles, harness and footwear	194	135	58
19.1 Tanning and dressing of leather	45	21	23
19.2 Manufacture of luggage, handbags and the like, saddlery and harness	144	106	37
19.3 Manufacture of footwear	5	7	-2
20 Manufacture of wood and of products of wood and cork, except			
furniture; manufacture of articles of straw and plaiting materials	4,910	3,113	1,792
20.1 Sawmilling and planking of wood, impregnation of wood	219	203	16
20.2 Manufacture of veneer sheets; manufacture of plywood, lamina			
board, particle board, fiber board and other panels and boards	_	_	_
20.3 Manufacture of builders' carpentry and joinery	4,248	2,628	1,615
20.30 Manufacture of builders' carpentry and joinery	4,248	2,628	1,615
20.30.1 Manufacture of prefabricated buildings or elements thereof,			
of wood combined with other materials	1,327	890	435
20.30.9 Manufacture of other builders carpentry and joinery n.e.c.	2,921	1,737	1,181
20.4 Manufacture of wooden containers	130	100	30
20.5 Manufacture of other products of wood; manufacture of articles of			
cork, straw and plaiting materials	313	182	130
20.51 Manufacture of other products of wood	313	182	130
20.52 Manufacture of articles of cork, straw and plaiting materials	_	_	_
21 Manufacture of pulp, paper and paper products	1,686	1,035	648
21.1 Manufacture of pulp, paper and paperboard	_	-	_
21.11 Manufacture of pulp	_	_	_
21.12 Manufacture of paper and paperboard	_	_	_
21.2 Manufacture of articles of paper and paperboard	1,686	1,035	648
21.21 Manufacture of articles and containers of paper and paperboard	1,353	774	577
21.22 Manuf. of household and sanitary goods and of toilet requisites	248	208	40

21.22 Manufacture of paper stationary	84	53	30
21.23 Manufacture of paper stationery 21.24 Manufacture of wallpaper	04	-	30
21.24 Manufacture of wanpaper 21.25 Manufacture of other articles of paper and paperboard n.e.c.	_	_	_
22 Publishing, printing and reproduction of recorded media	25,614	16,312	9,278
22.1 Publishing	16,776	11,624	5,134
22.11 Publishing of books	2,522	1,806	712
22.11.1 Publishing of books in own print shop	63	42	22
22.11.2 Publishing of books without operating own print shop	2,458	1,765	690
22.12 Publishing of newspapers	7,557	4,468	3,082
22.12.1 Publishing of newspapers in own print shop	7,535	4,453	3,075
22.12.2 Publishing of newspapers without operating own print shop	22	15	7
22.13 Publishing of journals and periodicals	1,818	1,371	447
22.14 Publishing of sound recordings	2,600	2,128	469
22.15 Other publishing	2,280	1,851	424
22.2 Printing and service activities related to printing	8,838	4,688	4,144
22.21 Printing of newspapers	5	3	2
22.22 Printing n.e.c.	7,305	3,890	3,410
22.22.1 Offset printing	6,230	3,240	2,986
22.22.2 Sieve printing	399	260	138
22.22.9 Other printing n.e.c.	676	389	286
22.23 Bookbinding and finishing	162	75	86
22.24 Composition and plate-making	1,194	590	604
22.25 Other activities related to printing	171	131	41
22.3 Reproduction of recorded media	-	-	- -
24 Manufacture of chemicals and chemical products	13,295	8,271	5,002
24.1 Manufacture of basic chemicals	2,414	1,494	918
24.11 Manufacture of industrial gases	1,040	481	560
24.12 Manufacture of dyes and pigments 24.13 Manufacture of other inorganic basic chemicals	_	_	_
24.14 Manufacture of other organic basic chemicals	_	_	
24.14 Manufacture of other organic basic chemicals 24.15 Manufacture of fertilizers and nitrogen compounds	831	620	211
24.16 Manufacture of plastics in primary forms	543	394	148
24.17 Manufacture of synthetic rubber in primary forms	- -	_	_
24.2 Manufacture of pesticides and other agro-chemical products	_	_	_
24.3 Manuf. of paints, varnishes & similar coatings, printing	1,025	728	295
24.4 Manuf. of pharmaceuticals, medicinal chemicals and	1,020	, 20	2,0
botanical products	7,870	4,572	3,282
24.41 Manufacture of basic pharmaceutical products	_	_	_
24.42 Manufacture of pharmaceutical preparations	7,870	4,572	3,282
24.5 Manufacture of soap and detergents, cleaning and polishing			
preparations, perfumes and toilet	1,444	1,079	362
24.51 Manuf. of soap and detergents, cleaning and			
polishing preparations	1,215	915	298
24.52 Manufacture of perfumes and toilet preparations	229	164	64
24.6 Manufacture of other chemical products	542	398	144
24.61 Manufacture of explosives	_	_	-
24.62 Manufacture of glues and gelatines	_	_	_
24.63 Manufacture of essential oils	_	_	_
24.64 Manufacture of photographic chemical material	_	_	_
24.65 Manufacture of prepared unrecorded media	_	_	-
24.66 Manufacture of other chemical products n.e.c.	542	398	144
24.7 Manufacture of man-made fibres	_	_	_
25 Manufacture of rubber and plastic products	7,512	5,058	2,442
25.11 Manufacture of rubber products	1,159	829	327
25.11 Manufacture of rubber tires and tubes	772	_ E	- 017
25.12 Rethreading and rebuilding of rubber tires	773	554 274	217
25.13 Manufacture of other rubber products	386	274 4 220	110
25.2 Manufacture of plastic products	6,353	4,229	2,115
25.21 Manufacture of plastic plates, sheets, tubes and profiles	1,296	940	354

25.22 Manufacture of plastic packing goods	1,914	1,255	656
25.23 Manufacture of builders' ware of plastic	289	203	85
25.24 Manufacture of other plastic products	2,854	1,831	1,019
25.24.1 Manufacture of plastic products for use in fisheries	1,313	876	435
25.24.9 Manufacture of other plastic products n.e.c.	1,541	955	584
26 Manufacture of other non-metallic mineral products	17,678	11,304	6,352
26.1 Manufacture of glass and glass products	1,170	701	468
26.11 Manufacture of flat glass	_	_	_
26.12 Shaping and processing of flat glass	828	532	295
26.13 Manufacture of hollow glass	_	_	_
24.14 Manufacture of glass fibres	_	_	_
26.15 Manuf. and processing of other glass inc. technical glassware	343	169	173
26.2 Manufacture of non-refractory ceramic goods, other than for			
construction purposes; manufacture of refractory ceramic products	50	39	11
26.21 Manufacture of ceramic household and ornamental articles	50	39	11
26.22 Manufacture of ceramic sanitary fixtures	_	_	_
26.23 Manufacture of ceramic insulators and insulation fittings	_	_	_
26.24 Manufacture of other technical ceramic products	_	_	_
26.25 Manufacture of other ceramic products	_	_	_
26.26 Manufacture of refractory ceramic products	_	_	_
26.3 Manufacture of ceramic tiles and flags	_	_	_
26.4 Manuf. of bricks, tiles and construction products, inc. baked clay	_	_	_
26.5 Manufacture of cement, lime and plaster	1,091	793	295
26.51 Manufacture of cement	1,091	793	295
26.52 Manufacture of lime	_	_	_
26.53 Manufacture of plaster	_	_	_
26.6 Manufacture of articles of concrete, plaster and cement	9,720	5,772	3,936
26.61 Manufacture of concrete products for construction purposes	2,590	1,127	1,461
26.62 Manufacture of plaster products for construction purposes	_	_	_
26.63 Manufacture for ready-mixed concrete	7,125	4,644	2,472
26.64 Manufacture of mortars	_	_	_
26.65 Manufacture of fibre cement	_	_	_
26.66 Manufacture of other articles of concrete, plaster and cement	5	2	3
26.7 Cutting, shaping and finishing of stone	665	394	271
26.8 Manufacture of other non-metallic mineral products	4,981	3,605	1,372
26.81 Production of abrasive products	_	_	_
26.82 Manufacture of other non-metallic mineral products n.e.c.	4,981	3,605	1,372
26.82.1 Manufacture of rock wool	883	488	394
26.82.2 Manufacture of roof paper	5	3	1
26.82.9 Manufacture of other non-metallic mineral products n.e.c.	4,094	3,114	977
27 Manufacture of basic metals	43,664	34,605	9,019
27.1 Manufacture of basic iron and steel and of ferro-alloys (ECSC)	_	_	_
27.2 Manufacture of tubes	_	_	_
27.3 Other first processing of iron and steel and production			
of non-ESCE ferro alloys	6,032	5,417	601
27.31 Cold drawing	_	_	_
27.32 Cold rolling of narrow strips	_	_	_
27.33 Cold forming or folding	118	55	63
27.34 Wire drawing	_	_	_
27.35 Other first processing of iron and steel n.e.c.;			
production of non-ECSC ferro-alloys	5,914	5,362	538
27.4 Manufacture of basic precious and non-ferrous metals	37,313	28,969	8,319
27.41 Precious metals production	_	_	_
27.42 Aluminium production	37,313	28,969	8,319
27.43 Lead, zinc and tin production	_	_	-
27.44 Copper production	_	_	-
27.45 Other non-ferrous metal production	_	_	_
27.5 Casting of metals	319	219	99
27.51 Casting of iron	102	42	60

27.52 Casting of steel	_	_	_
27.53 Casting of light metals	214	177	37
27.54 Casting of other non-ferrous metals	2	0	2
28 Manufacture of fabricated metal products, except machinery and			
equipment	16,975	9,941	7,018
28.1 Manufacture of structural metal products	2,111	1,440	668
28.11 Manufacture of metal structures and parts of structures	51	25	27
28.12 Manufacture of builders' carpentry and joinery of metal	2,060	1,415	641
28.2 Manufacture of tanks, reservoirs and containers of metal;			
manufacture of central heating radiators and boilers	529	252	277
28.21 Manufacture of tanks, reservoirs and containers of metal	393	140	253
28.22 Manufacture of central heating radiators and boilers	136	111	25
28.3 Manuf. of steam generators, except central heating hot water boilers	_	_	_
28.4 Forging, pressing, stamping and roll forming of metal;	45	20	20
powder metallurgy	47	20	28
28.5 Treatment and coating of metals; general mechanical engineering	13,442	7,733	5,698
28.51 Treatment and coating of metal	1,128	751 6,982	376 5,322
28.52 General mechanical engineering	12,314		,
28.6 Manufacture of cutlery, tools and general hardware 28.61 Manufacture of cutlery	67	43	24
28.62 Manufacture of tools	15	12	3
28.63 Manufacture of locks and hinges	52	31	21
28.7 Manufacture of other fabricated metal products	778	454	323
28.71 Manufacture of steel drums and similar containers	-	-	323
28.72 Manufacture of light metal packaging	_	_	_
28.73 Manufacture of wire products	213	167	45
28.74 Manuf. of fasteners, screw machine products, chain and springs	_	_	_
28.75 Manufacture of other fabricated metal products, n.e.c.	564	287	278
29 Manufacture of machinery and equipment n.e.c.	10,888	6,614	4,228
29.1 Manufacture of machinery for the production and use of mechanical	,	3,323	-,==-
power, except aircraft, vehicle and cycle engines	86	49	36
29.11 Manufacture of engines and turbines,			
except aircraft, vehicle and cycle engines	_	_	_
29.12 Manufacture of pumps and compressors	77	46	31
29.13 Manufacture of taps and valves	_	_	_
29.14 Manufacture of bearings, gears, gearing and driving elements	8	4	5
29.2 Manufacture of other general purpose machinery	2,925	1,821	1,102
29.21 Manufacture of furnaces and furnace burners	_	_	_
29.22 Manufacture of lifting and handling equipment	445	283	162
29.23 Manufacture of non-domestic cooling and ventilation equipment	1,722	1,131	591
29.24 Manufacture of other general purpose machinery n.e.c.	758	407	349
29.3 Manufacture of agricultural and forestry machinery	90	63	26
29.31 Manufacture of agricultural tractors	47	31	16
29.32 Manufacture of other agricultural and forestry machinery	43	32	10
29.4 Manufacture of machine-tools	_	-0	0
29.5 Manufacture of other special purpose machinery	7,632	4,550	3,039
29.51 Manufacture of machinery for metallurgy	213	167	45
29.52 Manuf. of machinery for mining, quarrying and construction	17	8	9
29.53 Manuf. of machinery for food, beverage and tobacco processing	6,941	4,138	2,791
29.53.1 Manufacture of machinery for fish processing	1,865	1,267	595
29.53.2 Manuf. of computerized machinery for fish processing	5,076	2,871	2,196
29.53.9 Manuf. of machinery for beverage and tobacco processing	- 10	- 14	_
29.54 Manuf. of machinery for textile, apparel and leather production	19	14	5
29.55 Manufacture of machinery for paper and paperboard production	305 136	169 55	107 81
<ul><li>29.56 Manufacture of other special purpose machinery n.e.c.</li><li>29.6 Manufacture of weapons and ammunition</li></ul>	136	55 122	20
29.7 Manufacture of weapons and animum on 29.7 Manufacture of domestic appliances n.e.c.	142	8	6
29.71 Manufacture of electric domestic appliances 29.71 Manufacture of electric domestic appliances	14	8	6

30 Manufacture of office machinery and computers	7	8	-0
30.0 Manufacture of office machinery and computers	7	8	-1
30.01 Manufacture of office machinery	_	_	_
30.02 Manuf. of computers and other information processing equipm.	7	8	-1
31 Manufacture of electrical machinery and apparatus n.e.c.	2,774	1,639	1,131
31.1 Manufacture of electric motors, generators and transformers	322	209	112
31.2 Manufacture of electricity distribution and control apparatus	1,152	665	486
31.3 Manufacture of insulated wire and cable	_	_	_
31.4 Manufacture of accumulators, primary cells and primary batteries	102	53	49
31.5 Manufacture of lighting equipment and electric lamps	140	94	45
31.6 Manufacture of electrical equipment n.e.c.	1,057	618	438
31.61 Manuf. of electrical equipment for engines and vehicles n.e.c.	_	_	_
31.62 Manufacture of other electrical equipment n.e.c.	1,057	618	438
32 Manufacture of radio, television and communication			
equipment and apparatus	114	70	43
32.1 Manufacture of electronic valves and tubes and			
other electronic components	_	_	_
32.2 Manufacture of television and radio transmitters,			
apparatus for line telephony and line telegraphy	83	53	30
32.3 Manufacture of television and radio receivers,			
sound or video recording or reproducing apparatus	31	17	14
33 Manufacture of medical, precision and optical instruments,			
watches and clocks	4,327	2,528	1,793
33.1 Manuf. of medical and surgical equipm. and orthopaedic appliances	3,659	2,119	1,536
33.2 Manuf. of instruments and appliances for measuring, checking,			
testing, navigating and other purposes, except industrial process			
control equipment	650	401	248
33.3 Manufacture of industrial process control equipment	18	8	10
33.4 Manufacture of optical instruments and photographic equipment	_	_	_
33.5 Manufacture of watches and clocks	_	_	_
34 Manufacture of motor vehicles, trailers and semi-trailers	922	618	303
34.1 Manufacture of motor vehicles	_	_	_
34.2 Manufacture of bodies (coachwork) for motor vehicles;			
manufacture of trailers and semi-trailers	765	501	264
34.3 Manuf. of parts and accessories for motor vehicles and their engines	157	117	39
35 Manufacture of other transport equipment	8,715	4,629	4,075
35.1 Building and repairing of ships and boats	5,266	2,895	2,366
35.11 Building and repairing of ships	5,266	2,895	2,366
35.12 Building and repairing of pleasure and sporting boats	_	_	_
35.2 Manufacture of railway and tramway locomotives and rolling stock	-	_	-
35.3 Manufacture of aircraft and spacecraft	3,350	1,694	1,650
35.4 Manufacture of motorcycles and bicycles	_	_	_
35.5 Manufacture of other transport equipment n.e.c.	99	40	58
36 Manufacture of furniture; manufacturing n.e.c.	6,129	3,708	2,413
36.1 Manufacture of furniture	4,126	2,498	1,623
36.11 Manufacture of chairs and seats	237	153	84
36.12 Manufacture of other office and shop furniture	457	303	154
36.13 Manufacture of other kitchen furniture	2,664	1,594	1,067
36.14 Manufacture of other furniture	748	429	317
36.15 Manufacture of mattresses	19	18	1
36.2 Manufacture of jewellery and related articles	611	372	237
36.21 Striking of coins and medals	_	_	_
36.22 Manufacture of jewellery and related articles n.e.c.	611	372	237
36.3 Manufacture of musical instruments	31	12	18
36.3 Manufacture of sports goods	1	1	1
36.4 Manufacture of games and toys	154	112	41
36.6 Miscellaneous manufacturing n.e.c.	1,206	713	493
36.61 Manufacture of imitation jewellery	_	_	_
36.62 Manufacture of brooms and brushes	133	92	41

36.63 Other manufacturing n.e.c.	1,073	621	451
37 Recycling	1,511	987	524
37.1 Recycling of metal waste and scrap	1,137	752	385
37.2 Recycling of non-metal waste and scrap	375	236	139

In constructing production accounts for manufacturing the Enterprise Accounts Register is the single most important source of information. This source is not of total coverage so some grossing up procedures is necessary. Various sources are used for grossing up:

- The value of agricultural products, such as processed milk and meat, is collected from the Farmers Association and the Icelandic Dairy Association. These figures are of complete coverage and they are used for grossing up the corresponding industries.
- Monthly statistics on production and sale of aluminium and ferro-silicone are of complete coverage and this statistics is used together with Enterprise Accounts Register.
- Annual manufacturing sales statistics, available from 1996 onwards, is used as a supporting source for some industries.
- The year on year percentage change in turnover of a paired sample of the same companies in each industry is often used as a check in comparing levels with other sources. This method however does not solve the problem of actual size, i.e. level.
- In all other cases the VAT Register is the primary source for grossing up.

The annual manufacturing sales statistics by products is based on the annual PRODCOM list as stipulated in the PRODCOM regulation. These statistics are very useful in constructing supply and use tables and allocating output between final use and intermediate consumption where applicable. In exceptional cases this source is also helpful when it is needed to disaggregate turnover in one enterprise between manufacturing and wholesale. In general, this source is hardly an additional source in estimating the level of industries because the VAT Register is most frequently used for grossing up the sales statistics when correcting for non-response. Therefore, a direct use of VAT Register is more straightforward for grossing up.

The accuracy of the production accounts in manufacturing depends heavily on the grossing up procedure. Before the final decision of the size of output is taken a systematic comparison is made of the results from various sources such as the compensation of employees in the production account and wages paid in that particular branch according to the Pay-as-you-earn Register. For various reasons some difference can be tolerated because of the more narrow definition of wages compared with compensation of employees.

Other problems also arise. These have to do with different industry classifications. Due to some inaccuracy in classifying enterprises, different classification of enterprises by branch occurs in the three registers used here. These registers are the Pay-as-you-earn Register, the VAT Register and the Business Register. The last register is used as a first stage in classifying establishments in the sample of operating accounts by industries. This discrepancy in classification is a source of uncertainty and here it is difficult to decide which classification is the right one because of the lack of production statistics or other information in identifying the activity. Here it has also to be kept in mind that both the VAT Register and the Business Register are enterprise oriented, not establishment oriented.

Problems of this kind have caused some uncertainty in grossing up but a research carried out before 1997 when the Payroll Register still was establishment oriented, indicated that manufacturing industry excluding fish processing was of an appropriate size. This conclusion was drawn by comparing wages and salaries paid according to the Payroll Register and compensation of employees in production accounts. In later years a comparison of this character has been carried out on a more overall basis by use of supply and use tables and not constricted to manufacturing alone.

At present the problem still exist that some units outside manufacturing may carry out some manufacturing activity and vice versa. Such a less homogeneity in manufacturing as well as in other industries can be explained by three factors:

- Enterprise Accounts Register is enterprise oriented, not establishment oriented
- VAT register is enterprise oriented, not establishment oriented
- There is a growing tendency for each company or legal unit to be involved in more than one main activity

In solving problems of this kind a several solutions can be considered. At least following improvements are worth to consider.

- Annual manufacturing sales statistics can be further developed and collected on an establishment basis together with statistics on cost structure by establishments.
- Breakdown of VAT register by establishment
- More intensive use of Pay-as-you-earn register

From a quality point of view the first one of these possibilities is the best one but definitely the most costly. Some improvements of the manufacturing sales statistics can be reached without any doubt but a direct collection of establishment data can be ruled out.

An attempt was made to break down the VAT register by some main activities or establishments. This was started in 1999 when the tax authorities agreed to ask the companies to disaggregate turnover by industry. It was on a voluntary basis. The purpose of it was to identify the share of non-characteristic output in each industry as well as the composition of the non-characteristic output. The result was disappointing because of low response rate and useless for grossing up purposes. The collection of these statistics was terminated in the year 2002.

The third possibility for improving the level of manufacturing industry output and the most promising one is a more intensive use of Pay-as-you-earn Register. As described in section 3.1.2 this register is meant to be establishment oriented and give information on employees such as the number of persons employed and the number of full time equivalence and wages and salaries by establishment. This register was established in 1998 but the processing of this register is not yet completed and results are still only available on a much aggregated level. It is the intention of Statistics Iceland to emphasize the work necessary to finalize this work. Given that the result will be successful this source might become the most useful one for constructing much more homogeneous breakdown by activity than now exists.

In view of the description above it might be surprising how many production accounts are in fact constructed and presented for manufacturing here. It can be argued that such a detailed activity breakdown is misleading and an indicator of an accuracy which does not exist. This is true. The number of production accounts in manufacturing is almost the same as published in the financial accounts statistics by Statistics Iceland. In interpreting the statistics one must keep in mind that in fact these are enterprise statistics where enterprises are classified according to their characteristic activity but they might be involved in other different activity, often on a considerable scale. In coming years Statistics Iceland is going to consider further aggregation of these production accounts when published.

## 3.11 Electricity, gas and water supply (NACE Rev. 1; E)

In the national accounts the activities of NACE E consists of 3 industries. The share of this section in GDP amounted to 3.2 percent in 2005. The size of each of these industries is given below. The share of this section has been increasing during recent years, especially the production of electricity.

Table 3-9 Output, intermediate consumption and value added in electricity, gas and water supply, 2005

Million ISK		Intermediate	Value added,
	Output	Consumption	basic prices
40 +41 Electricity, hot water and cold water	55,177	27,394	27,783
As % of total economy	2.91	2.65	3.24
40 Electricity, gas steam and hot water supply	52,213	26,627	25,586
40.1 Production and distribution of electricity	42,877	23,348	19,529
40.2 Manufacture of gas; distribution of gaseous fuels through mains	-	_	_
40.3 Steam and hot water supply	9,336	3,279	6,057
41 Collection, purification and distribution of water	2,965	768	2,197
41.0 Collection, purification and distribution of water	2,965	768	2,197

Unlike to what applies to most other activities the Enterprise Accounts Register is not the main data source in constructing production accounts in electricity and water supply. The reason is that practically all companies in these industries are government owned and exempt from income tax assessment. Therefore, most of these companies do not deliver data to the Register. Other sources must be utilized, mainly the original company accounts of all the main companies and a sample of the smaller ones. In grossing up a use is made of reliable production statistics of complete coverage for electricity and hot water supply. The *National Energy Authority* compiles these production statistics from all suppliers and they include both volume and value of production. These two facts, i.e. large samples and reliable production statistics in these two branches ensure high quality of the production accounts.

The structure in these industries is characterized by few big companies owned by the central government and the biggest local governments on the one hand, and a few small companies owned by small local governments on the other.

In constructing production accounts in electricity it has been impossible to distinguish between production of electricity, distribution of electricity through renting of the network for transportation of electricity and distribution of electricity through retail sale to final users.

Until 2003 all these three types of production existed within the same companies. In 2003 a new company, *Icegrid* (Landsnet), was established and it has a monopoly status for transmission of electricity in Iceland. Icegrid is the owner of all transmission lines in Iceland and all those who want to engage in sale of electricity, whether it is wholesale or retail, must sign a contract with Icegrid. The contract states that power sales organisations must ensure balance between requisition and consumption of power they are trading. The producers of electricity must pay service charges to Icegrid. These service charges are included in the prices to the final buyer so this new organisational structure does not explicitly allows disaggregation between production and transmission. However, such disaggregation might be easier now after the establishment of Icegrid.

As a consequence of the structure of the electricity industry the output includes the inter-industry transactions where hydroelectric power stations sell to the network of retail distributors, provided that these transactions are between different legal units. Similar transactions within the same legal unit are excluded. Gross treatment is therefore followed between legal units but net treatment within legal units in recording output like in other transactions. The establishing of Icegrid has not affected that gross recording as expected. It should also be kept in mind that the Eurostat's National Accounts Working Group (NAWG) has specified gross recording.

In some cases electricity is produced as a joint-product in production of hot water. That may affect the cost structure of the branches, but an attempt has been made to keep these two activities separate.

Production accounts for hot water supply are constructed in a similar way to that of electricity, and the grossing up methods are also based on data from the National Energy Authority which is

collecting data on the sale of hot water. All the companies operating in hot water supply are owned by local governments and in some cases Central government is a minority owner.

Production statistics similar to electricity and geothermal water supply do not exist for cold water supply, division 41. However the quality of data in that branch is also considered to be relatively reliable in spite of the absence of any production statistics. All the units in that branch are government owned, the total revenue is recorded in local governments' accounts and the quality of the cost structure is also high. The income consists of government fees but it is so related to the service rendered that it is defined as market production. All the big companies also pass the criteria of keeping a complete set of accounts and autonomy in decision making, contrary to the small companies which in many cases are barely distinguished in government accounts. Therefore, problems of double counting can arise by grossing up small units which might already be recorded within the government sector. This can be considered as a minor problem.

#### 3.12 Construction (NACE Rev. 1; F)

In the national accounts the activities of NACE F, Construction, is divided into 14 industries. The share of this section in GDP amounted to 9.6 percent in 2005. The size of each of these industries is given below.

Table 3-10 Output, intermediate consumption and value added in construction, 2005

Million ISK		Intermediate	Value added,
	Output	consumption	basic prices
45 Construction	230,260	147,458	82,428
As % of total economy	12.16	14.26	9.61
45.1 Site preparation	7,499	5,386	2,106
45.11 Demolition and wrecking of buildings; earth moving	7,216	5,229	1,981
45.12 Test drilling and boring	283	158	125
45.2 Building of complete constructions or parts thereof; civil engineering	160,728	114,030	46,376
45.3 Building installation	20,806	11,849	8,946
45.31 Installation of electrical wiring and fittings	14,037	8,139	5,889
45.32 Insulation work activities	_	_	_
45.33 Plumbing	6,770	3,710	3,057
45.4 Building completion	28,573	9,906	18,650
45.41 Plastering	2,906	1,567	1,338
45.42 Joinery installation	7,010	4,083	2,917
45.43 Floor and wall covering	1,902	1,153	748
45.44 Painting and glazing	5,185	2,441	2,743
45.44.1 Painting	5,106	2,397	2,709
45.44.2 Glazing	79	44	35
45.45 Other building completion	345	148	193
45.49 Own-account construction	11,224	514	10,711
45.5 Renting of construction or demolition equipment with operator	12,654	6,287	6,350

In construction activity, like most other activities in Iceland, there is not available any functional breakdown based on the final product. The production accounts are based on the Enterprise Accounts Register as the main source together with the VAT-Register for grossing up in some case. No direct information is available on products produced in individual activities. The methods applied are in most cases similar to those used in manufacturing. However, the intraindustry transactions are far more important in construction than in manufacturing owing to increasing role of subcontractors. In constructing production accounts here no attempt has been made to eliminate such transaction so in general it can be stated that as far as intraindustry transactions exist between legal units they are recorded gross. This treatment is meant not to have any impact on value added, only on the overall size of the accounts. In supply and use tables this means that a considerable part of the output of construction activity is delivered to that same activity as an intermediate consumption. Other consequences of this gross treatment in construction activity are that there are

serious difficulties in constructing clear links between the output in construction activity and gross fixed capital formation both in value and by type of assets.

One of the characteristics of the construction activity is a long production period, often exceeding one or more accounting periods. No special correction is made due to that but it is assumed that in the Enterprise Accounts Register, the companies are following the normal bookkeeping practices and recording such items as work-in-progress as inventory at the end of the accounting period and according to proportion of completion. This procedure is according to ESA 95 in the absence of a contract of sale. When a contract of sale is agreed in advance, the output produced each period should be treated as being sold to the purchaser at the end of the period, i.e. in the purchaser's fixed capital formation rather than work-in-progress in the construction industry. No direct adjustments are made here from the practices in the Enterprise Accounts Register. The construction of power plants is one of the most important contracts of sale agreed in advance in Iceland usually covering several years. In these cases the output produced each period is not recorded as the work-in-process but as being sold to the power plant and thus in accordance with ESA 95.

Another characteristic of construction is that there are many small units mainly engaged in own-account construction activity of various kinds. A special attention has to be given to such peculiarities and it needs further description. Two industries are especially of concern, i.e.

- Class 45.49 This activity code does not exist in present NACE Rev.1 but it has been created for national accounts purposes. It covers own-account construction of households and farmers
- Own-account construction by others than farmers and households, partly occurring in class 45.2

In these two cases the Enterprise Accounts Register is of no use and therefore other sources have to be exploited.

The activity in class 45.49 is supposed to cover the following four construction acivities on own-account:

- Construction in outhouses and other agricultural construction by farmers on own account
- Minor repair and maintenance of households
- Major repair of households
- Residential construction carried out by housholds on own-account

An artificial production account is created for these activities and a full detail of the output is given in Table 3-10A.

The first part of class 45.49 consists of the construction activity of the farmers. It is based on information available on the number of hours spent by farmers and their families in own account construction in outhouses and other agricultural construction. The number of hours spent is based on an annual survey now carried out by the Agricultural Economic Institute but previously done by the Farm Accounting Statistics Office. That survey is based on the same units in traditional farming as the AEI is collecting business accounts for. The hours recorded were valued at the unit price of skilled workers as published by the Institute of Labour Market Research, now incorporated into Statistics Iceland. No intermediate consumption is imputed so the production value of the production account equals the value of own account work which is recorded as operating surplus. These methods have been used from the beginning of the construction of production accounts, i.e. from 1973 onwards. The accuracy of these estimates relies on the accuracy of counting the number of hours worked on the farms. Some inaccuracy might occur here in light of the fact that the number of hours is based on a relatively small sample of farms which is neither stratified nor randomly selected. For the sake of simplicity the building material and other intermediate consumption used in that part of construction is ignored but this has to be corrected. The total value of the own account construction work applying these methods is estimated as 731 million ISK.

Table 3-10A Class 45.49 Own-account construction, estimation of output 2005

		Apartment Sin	ngle family
	Total	houses	houses
1. Construction in outhouses etc.			
1.1 Number of male hours working on new outhouses, average per farm			
(AEI estimate)	178		
1.2 Number of farms	3,700		
1.3 Total number of hours worked (1.3=1.1*1.2)	658,600		
1.3 Hourly pay, ISK	1,110		
1.4 Total construction on own account, million ISK	731		
2. Minor and major repair and maintenance of households			
2.1 Annual value of minor and major repair and maintenance per dwelling thous. ISK, no owners' work( BRI estimate)	138		
2.2 Number og dwellings (Land Registry of Iceland)	120,165		
2.3 Total minor and major repair (2.3=2.1*2.2), million ISK owners' work	120,103		
not included	16,607		
2.4 Breakdown between major and minor repair (BRI estimate)	100%		
2.4.1 Outdoor and indoor repair	87%		
2.4.2 Major repair and reconstruction	13%		
3. Minor repair, including owners' work	17,618		
3.1 Owners' work not included (3.1=2.3*2.4.1)	14,447		
3.1.1 Material, 55% of total	9,690		
3.1.2 Wages paid	4,757		
3.1.3 Thereof black work, 50% of 3.1.2	2,379		
3.2 Owners' work, 40% of total work	3,171		
3.3 Owners' and purchased work	7,928		
3.4 Owners' work and black work in minor repair (3.4=3.2+3.1.3)	5,550		
4. Major repair	2,453		
4.1 Major repair excluding owners' work (4.1=2.3*2.4.2)	2,159		
4.1.1 Material, 60% of total including owers' work	1,472		
4.1.2 Wages paid	687		
4.2 Owners' work, 30% of total work	294		
5. Residential construction carried out by households on own account			
5.1 Residential construction excl. major repair etc.	51,067		
5.2 Share of apartments and single family houses	100%	57%	43%
5.3 Shares in values	51,067	29,233	21,834
5.4 The stage of completion, when delivered to owner	31,007	95%	55%
5.5 The remaining share of completion		5%	45%
5.6 The remaining share in values		1,462	9,825
5.7 The labour share of the remaining part		40%	40%
5.8 The labour share in values		585	3,930
5.9 The share of own account work of the remaining share		50%	30%
5.10 The share of purchased work		50%	70%
5.10.1 Thereof black work		50%	50%
5.11 A breakdown of the labour share	4,515	585	3,930
5.11.1 Own account work	1,471	292	1,179
5.11.2 Purchased work, registered	1,522	146	1,376
5.11.3 Black work	1,522	146	1,376
5.12 Own account work and black work	2,993	140	1,570
6. The total output in class 45.45	11,727		
6.1 Own account construcion in outhouses (cf 1.4)	731		
6.2 Owners' work and black work in minor repair (cf 3.4)	5,550		
6.3 Major repair (cf 4.)	2,453		
o.s major repair (er +.)	2,433		

Notes: The breakdown in table 3-10A does not fully correspond to figures presented in table 3.10. The reason is that the breakdown refers to the latest revision of data as presented in March 2011 but the figures in table 3.10 refer to the September 2008 version of published data like elsewhere in the Inventory.

The second and the third part of the output in class 45.49 consist of minor and major repair undertaken by owners and black work. These estimates are based on a special research of the *Building Research Institute* (BRI). That research gave an estimate of 101.4 thousand kronur as the annual value of maintenance and minor and major improvement per dwelling at the prices of 1998 together with an estimated splitting of this amount between ordinary maintenance and major repair. The ordinary repair was estimated as 87% and major repair 13% of the total repair as estimated by the BRI. The number of dwellings is obtained from the Land Registry of Iceland and thereby the total repair was estimated. The share of labour cost was estimated 45% of ordinary repair and that was based on expert's advice as well as the building cost index. Own account work was estimated 40% of the labour cost and black work was estimated 50% of purchased work in ordinary repair. The total value of the owners' work and black work was estimated as 5,550 million ISK.

In the case of major repair similar methods were used. However the share of labour cost was a little bit lower, or 40% and no black work was imputed. Owners' work was estimated as 30% of the total labour input. The total output of major repair as the third part of class 45.49 was estimated as 2,453 million ISK.

The fourth part of class 45.49 consists of households' residential construction and repair on own account. Previously this activity was based on data from tax authorities because the individuals carrying out construction of dwelling on own account, have to fill in and return to tax authorities a special form which describes the investment activity and the total expenditure during the year. Among other things this form includes data on hours worked on own account. A sample of these forms was drawn from the forms returned to tax authorities in Reykjavík and an average number of hours per year of own-account work estimated from the same sample and that number multiplied by the number of dwellings under construction each year. At that time the number of dwellings under construction was taken from an annual construction survey undertaken by the National Economic Institute. This gave the total number of hours spent. Then this number of hours was valued at the price of skilled workers as published by the Institute of Labour Market Research and that gave an estimate of households' own-account construction work.

For various reasons these methods of own-account residential construction and repair were considered inadequate and simultaneously with the introduction of ESA95 new methods were developed. Now the estimates are no longer based on tax files. Instead a model was constructed based on both expert advice as well as the same research of the *Building Research Institute as mentioned above*. A separate model is constructed where the total value of apartments completed each year is split up between single family houses and apartment houses. Based on information from experts in the sector it is assumed that 95% of the building cost of the apartment houses and 55% of single family houses is completed when delivered to the owner. The share of labour of the remaining part of the construction is estimated around 40%, a part of that is own-account work and a half of purchased labour is estimated as "black" work for both single family houses and apartment houses. The share of the black work is guesswork after discussing with insiders. In recent years the amount of own-account work and black work has been estimated around 6% of the total value of residential construction. The value of the own account work and the black work in this part is estimated as 2,993 million ISK.

In total, the class 45.49 therefore covers own-account construction and repair work of the farmers and the own-account work of households on maintenance and minor and major repair and household residential construction on own account including also the purchased "black" work not measured in other activities. The size of "black" work is approximately 1/3 of the size of this class as can be derived from table 3-10A. Originally this class was constructed in order to cover own account work and black work, not registered in the conventional activity classification. The emphasis was on the labour input or more precisely own-account work and black work. The intention was that the production account should only be composed of output and operating surplus but no intermediate consumption. After comments from Eurostat, Statistics Iceland has now decided to change this method and estimate explicitly intermediate consumption having similar consequences on output. Statistics Iceland has also noticed error in the third part of this class where

the major repair was estimated as 2,453 million ISK. This estimate includes intermediate consumption, contrary to the present method. This can be noticed in item 4 in table 3-10A. Due to that the value added was estimated as 2,453 million ISK instead of 294, i.e. overestimated by 2,159 million ISK. This will be corrected.

Another activity worth mentioning is own-account construction carried out in various industries other than construction. In the former industrial classification this activity was in a separate activity, no. 420. In the new industrial classification, ÍSAT 95, this activity is included in class 45.2. The size of this activity was therefore easily recognized in the former classification, but not in the new one. However, a look at the former class 420 shows clearly that the activity is a minor one and it is an exception if such an activity is recognizable. There is no reason to think that changes have occurred after the introduction of the new classification and therefore the conclusion can be drawn that in most cases construction activity carried out in various other industries is recorded there but not in the construction activity. This is not going to have impact on the total GDP but it will underestimate the size of construction activity and be a part of non-characteristic output of other industries and overestimate the size of these industries to the same extent. No attempt has been made to correct this.

In the former industrial classification, the construction activity of general government was recorded in separate activities, identified by the numbers 431 through 490. The output of these branches was constructed from figures on gross fixed capital formation of General government in the respective branches of industry. The value added in these branches was estimated from the Payroll Register with some addition to cover social security contributions not included in the Payroll Register. When applicable an addition was also made for consumption of fixed capital. The intermediate consumption was calculated as the difference between output and value added. This method implied that when government fixed capital formation was contracted out, which was the normal procedure, this work was included in intermediate consumption of the appropriate branch of the government branch and the output increased subsequently. With the introduction of the new industrial classification, ÍSAT 95, starting from the year 1997, the construction activity of the general government was no longer recorded in separate activities but classified using the same criteria as for the activity of private units. The government units became direct purchasers of the construction but these transactions were not channelled through special government producing units within the construction activity. The consequences of these changes of methods are a considerable reduction of output and intermediate consumption of the total construction activity but value added should not be affected.

Hidden activity occurs to some extent in construction. Rough estimates are made in following activities to cover such activity:

- NACE 45.2, Building of complete construction or parts thereof, is increased by 8-10%
- NACE 45.3, Building installation, is increased by 10%
- NACE 45.4, Building completion, is increased by different percentage by sub-groups or by 10-25%

These estimates are guesswork. Partly a notice is taken of the structure of individual activities where it is considered more likely that hidden activity is carried out in small companies than in big ones. The methods undertaken by the tax evasion committees as described in section 7.1 have also been taken into accounts. One of these committees classified activities in eight groups depending on the risk of tax evasion.

In the case of construction abroad no specific adjustments are made. If the activity is on a considerable scale then a separate unit is established in the relevant country and a normal procedure is followed.

# 3.13 Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods (NACE Rev.1 G)

In the national accounts the activities of NACE G consist of 53 industries. Such a detailed activity breakdown can be misleading but it should be kept in mind, as emphasised in previous sections, that the activity breakdown is based on enterprise oriented statistics, not establishment oriented, having the consequences that many of these activities are heterogeneous in character. In the year 2005 this section made a contribution of 11 percent to GDP. The size of each of these industries is given in table 3-11.

Table 3-11 Output, intermediate consumption and value added in wholesale and retail trade, 2005

50 Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of automotive fuel 50.1 Sale of motor vehicles 50.10 Sale of motor vehicles 50.10.1 Sale of new motor vehicles 50.10.2 Sale of second hand motor vehicles 50.2 Maintenance and repair of motor vehicles 11,898 50.3 Sale of motor vehicle parts and accessories 50.4 Sale, maintenance and repair of motorcycles and related parts and accessories 50.5 Retail sale of automotive fuel 730 31,348 15,1 15,947 6,3 5,64 5,65 5,66 5,66 5,67 5,74 50.2 Maintenance and repair of motor vehicles 11,898 7,4 50.3 Sale of motor vehicle parts and accessories 2,576 88 50.4 Sale, maintenance and repair of motorcycles and related parts and accessories 197 50.5 Retail sale of automotive fuel 730 31,348 15,1	52       94,549         39       11.02         65       16,026         77       9,441         79       8,853         98       588         39       4,450         69       1,688         93       103
As % of total economy  50 Sale, maintenance and repair of motor vehicles and motorcycles;  retail sale of automotive fuel  50.1 Sale of motor vehicles  50.10 Sale of motor vehicles  50.10.1 Sale of new motor vehicles  50.10.2 Sale of second hand motor vehicles  50.2 Maintenance and repair of motor vehicles  50.3 Sale of motor vehicle parts and accessories  50.4 Sale, maintenance and repair of motorcycles and related parts and accessories  50.5 Retail sale of automotive fuel  730  31,348  15,1  6,3  50.10 Sale of motor vehicles  14,656  5,6  50.2 Maintenance and repair of motor vehicles  11,898  7,4  50.3 Sale of motor vehicle parts and accessories  50.4 Sale, maintenance and repair of motorcycles and related parts and accessories  50.5 Retail sale of automotive fuel  730  31,348  15,1  6,3  7,4  7,5  7,6  8  7,4  7,4  7,5  7,6  8  7,4  7,7  7,6  7,7  7,7  7,7  7,7  7,7	39     11.02       65     16,026       77     9,441       79     8,853       98     588       39     4,450       69     1,688       93     103
50 Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of automotive fuel  50.1 Sale of motor vehicles 50.10 Sale of motor vehicles 50.10.1 Sale of new motor vehicles 50.10.1 Sale of new motor vehicles 50.10.2 Sale of second hand motor vehicles 11,898 50.2 Maintenance and repair of motor vehicles 11,898 50.3 Sale of motor vehicle parts and accessories 50.4 Sale, maintenance and repair of motorcycles and related parts and accessories 197 50.5 Retail sale of automotive fuel 730 31,348 15,1 16,34 15,947 6,3 2,947 6,3 31,348 15,1 15,947 6,3 31,348 15,1 16,34 16,34 16,	55 16,026 77 9,441 77 9,441 79 8,853 98 588 39 4,450 1,688
retail sale of automotive fuel  50.1 Sale of motor vehicles  50.10 Sale of motor vehicles  50.10 Sale of motor vehicles  50.10.1 Sale of new motor vehicles  50.10.1 Sale of new motor vehicles  50.10.2 Sale of second hand motor vehicles  50.2 Maintenance and repair of motor vehicles  11,898  7,4  50.3 Sale of motor vehicle parts and accessories  50.4 Sale, maintenance and repair of motorcycles and related parts and accessories  50.5 Retail sale of automotive fuel  730  31,348  15,1  6,3  7,4  6,3  7,4  7,5  7,4  7,5  7,5  8  7,4  7,5  7,6  8  7,4  7,7  7,7  7,7  7,7  7,7  7,7	77 9,441 77 9,441 79 8,853 98 588 39 4,450 1,688
50.1 Sale of motor vehicles 50.10 Sale of motor vehicles 15,947 6,3 50.10.1 Sale of new motor vehicles 14,656 50.10.2 Sale of second hand motor vehicles 11,291 60.2 Maintenance and repair of motor vehicles 11,898 7,4 50.3 Sale of motor vehicle parts and accessories 2,576 80.4 Sale, maintenance and repair of motorcycles and related parts and accessories 50.5 Retail sale of automotive fuel 730 3 51 Wholesale trade and commission trade, except of motor vehicles and motorcycles 67,924 31,3	77 9,441 77 9,441 79 8,853 98 588 39 4,450 1,688
50.10 Sale of motor vehicles  50.10.1 Sale of new motor vehicles  50.10.1 Sale of new motor vehicles  50.10.2 Sale of second hand motor vehicles  11,291  60.2 Maintenance and repair of motor vehicles  11,898  7,4  50.3 Sale of motor vehicle parts and accessories  50.4 Sale, maintenance and repair of motorcycles and related parts and accessories  50.5 Retail sale of automotive fuel  730  31  51 Wholesale trade and commission trade, except of motor vehicles and motorcycles  67,924  31,3	77     9,441       79     8,853       98     588       39     4,450       59     1,688       93     103
50.10.1 Sale of new motor vehicles 50.10.2 Sale of second hand motor vehicles 1,291 60 50.2 Maintenance and repair of motor vehicles 11,898 7,4 50.3 Sale of motor vehicle parts and accessories 2,576 80.4 Sale, maintenance and repair of motorcycles and related parts and accessories 197 50.5 Retail sale of automotive fuel 730 31 51 Wholesale trade and commission trade, except of motor vehicles and motorcycles 67,924 31,3	79 8,853 588 588 39 4,450 69 1,688
50.10.2 Sale of second hand motor vehicles  50.2 Maintenance and repair of motor vehicles  50.3 Sale of motor vehicle parts and accessories  50.4 Sale, maintenance and repair of motorcycles and related parts and accessories  50.5 Retail sale of automotive fuel  730  31  51 Wholesale trade and commission trade, except of motor vehicles and motorcycles  67,924  31,3	98 588 39 4,450 69 1,688
50.2 Maintenance and repair of motor vehicles  50.3 Sale of motor vehicle parts and accessories  50.4 Sale, maintenance and repair of motorcycles and related parts and accessories  50.5 Retail sale of automotive fuel  50.5 Retail sale of automotive fuel  730  31  51 Wholesale trade and commission trade, except of motor vehicles and motorcycles  67,924  31,3	39 4,450 59 1,688 93 103
50.3 Sale of motor vehicle parts and accessories 50.4 Sale, maintenance and repair of motorcycles and related parts and accessories 197 50.5 Retail sale of automotive fuel 730 3 51 Wholesale trade and commission trade, except of motor vehicles and motorcycles 67,924 31,3	1,688 93 103
50.4 Sale, maintenance and repair of motorcycles and related parts and accessories  50.5 Retail sale of automotive fuel  50.5 Retail sale of automotive fuel  730  31  51 Wholesale trade and commission trade, except of motor vehicles and motorcycles  67,924  31,3	93 103
accessories 197 50.5 Retail sale of automotive fuel 730 3 51 Wholesale trade and commission trade, except of motor vehicles and motorcycles 67,924 31,3	
50.5 Retail sale of automotive fuel 730 3  51 Wholesale trade and commission trade, except of motor vehicles and motorcycles 67,924 31,3	
51 Wholesale trade and commission trade, except of motor vehicles and motorcycles 67,924 31,3	242
except of motor vehicles and motorcycles 67,924 31,3	343
	36,191
51.1 Wholesale on a fee or contract basis 8,552 4,4	33 4,083
51.11 Agents involved in the sale of agricultural raw materials,	
live animals, textile raw materials 104	38 16
51.12 Agents involved in the sale of fuels, ores, metals and	
industry chemicals 781 5	93 187
51.13 Agents involved in the sale of timber and building materials 547 2	12 332
51.14 Agents involved in the sale of machinery,	
industrial equipment, ships and aircraft 226	56 160
51.15 Agents involved in the sale of furniture, household goods,	
hardware and ironmongery 39	17 22
51.16 Agents involved in the sale of textiles, clothing,	
footwear and leather goods 63	36 26
51.17 Agents involved in the sale of food, beverages and tobacco 6,427 3,3	23 3,075
51.17.1 Agents involved in the sale of marine products 4,659 2,6	18 2,014
51.17.2 Fish markets 879 2	36 593
51.17.9 Agents involved in the sale of food,	
beverages and tobacco, excl. marine products 889 4	20 467
51.18 Agents specializing in the sale of particular products	
or ranges of products n.e.c. 284	56 218
51.19 Agents involved in the sale of a variety of goods 80	33 47
51.2 Wholesale of agricultural raw materials and live animals	51 143
51.21 Wholesale of grain, seeds and animals feeds	4 8
51.22 Wholesale of flowers and plants	39 125
51.23 Wholesale of live animals –	
51.24 Wholesale of hides, skins and leather 17	8 9
51.25 Wholesale of un manufactured tobacco –	
51.3 Wholesale of food, beverages and tobacco 9,328 3,7	5,519
51.31 Wholesale of fruit and vegetables 971 3	14 624
51.32 Wholesale of meat and meat products 17	8 8

51.00 White the color of the co			
51.33 Wholesale of dairy produce, eggs and edible oils and fats	467	201	- 226
51.34 Wholesale of alcoholic and other beverages	467	201	236
51.35 Wholesale of tobacco products 51.36 Wholesale of sugar and chocolate and sugar confectionery	- 156	- 59	95
51.37 Wholesale of coffee, tea, cocoa and spices	296	127	163
51.37 Wholesale of other food inc. fish, crustaceans and molluscs	1,820	1,159	660
51.39 Non-specialized wholesale of food, beverages and tobacco	5,601	1,845	3,732
51.37 Non-specialized wholesale of food, beverages and tobacco 51.4 Wholesale of household goods	17,855	10,148	7,580
51.41 Wholesale of textiles	381	130	249
51.42 Wholesale of clothing and footwear	1,418	625	788
51.42.1 Wholesale of clothing	1,152	509	642
51.42.2 Wholesale of footwear	265	116	145
51.43 Wholesale of electrical household appliances	200	110	1.0
and radio and television goods	2,546	1,393	1,132
51.44 Wholesale of china, glassware; wallpaper and cleaning materials	646	251	393
51.44.1 Wholesale of china and glassware	114	56	57
51.44.2 Wholesale of cleaning material	533	195	336
51.45 Wholesale of perfume and cosmetics	1,524	517	1,005
51.46 Wholesale of pharmaceutical goods	8,593	5,973	2,619
51.47 Wholesale of other household goods	2,747	1,259	1,394
51.47.1 Wholesale of furniture	315	164	147
51.47.2 Wholesale of carpets and other floor coverings	299	92	205
51.47.3 Wholesale of watches, photographic goods etc.	380	205	113
51.47.4 Wholesale of toys and games	178	87	88
51.47.5 Wholesale of books, newspapers and magazines	370	149	206
51.47.9 Wholesale of other household goods n.e.c.	1,205	563	635
51.5 Wholesale of non-agricultural intermediate products, waste and scrap	16,627	7,830	8,785
51.51 Wholesale of solid, liquid and gaseous fuels and related products	11,174	5,817	5,354
51.52 Wholesale of metals and metal ores	367	91	274
51.53 Wholesale of wood, construction materials and sanitary equipm.	2,512	805	1,707
51.54 Wholesale of hardware, plumbing, heating equip. and supplies	1,250	503	747
51.55 Wholesale of chemical products	909	471	437
51.56 Wholesale of other intermediate products	399	131	268
51.57 Wholesale of waste and scrap	16	11	-1
51.6 Wholesale of machinery, equipment and supplies	9,453	2,799	6,550
51.61 Wholesale of machine tools	78	21	57
51.62 Wholesale of construction machinery	219	72	136
51.63 Wholesale of machinery for textile industry,	1	2	21
and of sewing and knitting machines 51.64 Wholesale of office machinery and equipment	1 2,109	-2 612	-31 1,455
	2,109 1,924	567	1,433
51.64.1 Wholesale of computers, typewriters etc. 51.64.2 Wholesale of other office machinery and equipment	1,924	45	1,331
51.65 Wholesale of other machinery for use in industry,	103	45	104
trade and navigation	6,260	1,897	4,353
51.65.1 Wholesale of fishing equipment and fish processing mach.	745	255	480
51.65.9 Wholesale of other machinery for use in industry,	, 13	233	100
trade and navigation n.e.c.	5,515	1,642	3,873
51.66 Wholesale of agricultural machinery and accessories and	0,010	1,0.2	2,072
implements, including tractors	786	200	579
51.7 Other wholesale	5,914	2,348	3,531
52 Retail trade, except of motor vehicles and motorcycles;	- 7-	,-	- ,
repair of personal and household goods	72,551	29,945	42,331
52.1 Retail sale in non-specialized stores	23,460	10,868	12,513
52.11 Retail sale in non-specialized stores with food,			
beverages or tobacco predominating	22,046	10,284	11,688
52.11.1 Supermarkets	18,563	9,022	9,474
52.11.2 Food stores less than 400 m <sup>2</sup>	1,152	454	695
52.11.3 Kiosks	2,331	809	1,520
52.12 Other retail sale in non-specialized stores	1,414	584	824

52.2 Retail sale of food, beverages and tobacco in specialized stores	3,527	1,686	1,837
52.21 Retail sale of fruit and vegetables	_	_	_
52.22 Retail sale of metal and metal product	-	-	-
52.23 Retail sale of fish, crustaceans and molluscs	506	240	266
52.24 Retail sale of bread, cakes, flour and sugar confectionery	1.504	_	-
52.25 Retail sale of alcoholic and other beverages	1,504	809	695
52.26 Retail sale of tobacco products	1.517	-	- 077
52.27 Other retail sale of food, beverages and tobacco in spec. stores	1,517	637	877
52.3 Retail sale of pharmaceutical and medical goods, cosmetic and toilet articles	4 501	1,361	2 206
52.31 Dispensing chemists	4,581 4,271	1,301	3,206 3,034
52.31 Dispensing chemists 52.32 Retail sale of medical and orthopaedic goods	4,271	1,224	3,034
52.32 Retail sale of interical and offilopaetic goods 52.33 Retail sale of cosmetic and toilet articles	302	133	168
52.4 Other retail sale of new goods in specialized stores	38,865	15,226	23,466
52.4 Other retain safe of new goods in specialized stores	323	13,220	174
52.42 Retail sale of clothing	6,089	2,894	3,173
52.42.1 Retail sale of women' clothing	1,625	727	893
52.42.2 Retail sale of men's clothing	387	192	193
52.42.3 Retail sale of child's clothing	144	95	48
52.42.4 Retail sale of clothing, not classified	3,933	1,879	2,039
52.43 Retail sale of footwear and leather goods	524	211	310
52.43.1 Retail sale of footwear	472	186	282
52.43.2 Retail sale of leather goods	53	25	28
52.44 Retail sale of furniture, lighting equip.; household articles n.e.c.	5,718	2,444	3,250
52.44.1 Retail sale of furniture	3,315	1,469	1,829
52.44.2 Retail sale of carpet etc.	145	63	82
52.44.3 Retail sale of curtains	1,695	681	1,008
52.44.4 Retail sale of articles for lighting	377	125	250
52.44.5 Retail sale of household articles and equipment n.e.c.	186	104	81
52.45 Retail sale of electrical household appliances and			
radio and television goods	1,831	752	1,070
52.45.1 Retail sale of household appliances	536	196	337
52.45.2 Retail sale of radio and television goods	367	136	229
52.45.3 Retail sale of musical records and audio/visual tapes	94	30	64
52.45.4 Retail sale of musical instruments	211	60	150
52.45.9 Retail sale of household appliances, radios etc.	623	330	290
52.46 Retail sale of hardware, paints and glass	10,872	3,482	7,315
52.46.1 Retail sale of hardware	10,752	3,428	7,250
52.46.2 Retail sale of paints, wallpapers etc.	120	54	65
52.47 Retail sale of books, newspaper and stationery	2,462	942	1,509
52.48 Other retail sale in specialized stores	4,477	1,993	2,466
52.48.1 Retail sale of optical equipment	877	312	564
52.48.2 Retail sale of photographic equipment	313	148	165
52.48.3 Retail sale of jewellery	377	160	214
52.48.4 Retail sale of watches, clocks etc.	149	47	101
52.48.5 Retail sale of souvenirs, craftwork etc.	755	412	339
52.48.6 Retail sale of sports goods	729	335	389
52.48.7 Retail sale of toys and games	213	133	79
52.48.9 Retail sale of flowers, plants, etc.	906	377	526
52.48.9 Retail sale of plants, etc.	157	69	88
52.49 Other retail sale in specialized stores	6,569	2,362	4,199
52.49.1 Retail sale of pets	153	74	78
52.49.2 Retail sale of art; art galleries	119	76	42
52.49.3 Retail sale of computers, office equipment,			
telephones and telecommunication equipment	4,449	1,296	3,154
52.49.4 Retail sale of camping carriages	_	_	_
52.49.5 Retail sale of bicycles	154	46	107
52.49.6 Retail sale of baby carriages	847	437	407
52.49.9 Retail sale in specialized stores, n.e.c.	847	432	411

52.5 Retail sale of second-hand goods in stores	44	26	18
52.6 Retail sale not in stores	1,118	490	626
52.61 Retail sale via mail order houses	356	134	221
52.62 Retail sale via stalls and markets	341	150	191
52.63 Other non-store retail sale	422	206	215
52.7 Repair of personal and household goods	954	287	665
52.71 Repair of boots shoes and other articles of leather	95	33	62
52.72 Repair of electrical household goods	546	133	412
52.73 Repair of watches, clocks and jewellery	28	8	19
52.74 Repair n.e.c.	285	113	172

The output of the wholesale and retail trade is obtained from the Enterprise Accounts Register with adjustments to comply with the national accounts definitions in line with ESA 95. Output is made up mainly of the trade margin which is the difference in value between the sale prices and the cost of purchases of goods intended for resale. Consequently the costs of goods for resale are also deducted from intermediate consumption. Other items of the production accounts, both intermediate consumption and the components of value added are derived from the Enterprise Accounts Register. That register is the only source in estimating trade margin and no recent ad-hoc surveys on trade margin exist. However, the data from the Enterprise Accounts Register is available by individual enterprise so when an enterprise is in homogenous production more detailed indicators of trade margin can be obtained.

An attempt is made to eliminate holding gains and losses in wholesale and retail trade by revaluing the inventory at the beginning and the end of year to the same price level, i.e. the average price level of the year, see section 5.13 Changes in inventory.

The output in activity 50.2 Maintenance and repair of motor vehicles is defined on the gross basis, that is without deducting any purchase of goods. This will be changed and the output will be recorded on a net basis in conformity with other activities in activity section G. The production accounts of that activity are also derived from the Enterprise Accounts Register. No exhaustiveness adjustments are made in this activity. Some underreporting might exist here but it is meant to be declining due to a general use of debit and credit cards use.

The Enterprise Accounts Register is not of total coverage and therefore some minor grossing up procedure is necessary. In grossing up, the VAT Register is the main source. Both the VAT register and the Enterprise Accounts Register are enterprise oriented, not establishment oriented. Therefore the trade margin is also of mixed character and not reflecting trade margin by products as might be concluded from such a detailed activity breakdown in wholesale and retail trade as presented here. An example of this is wholesale and retail trade of automotive fuel. Here, the distinction between wholesale and retail trade is very limited and the retail part only covers those enterprises entirely engaged in retailing, NACE 50.5. On the other hand, all the 3 big companies are both wholesale and retail traders but they are registered in wholesaling, NACE 51.51, and therefore all trade margin originating in these companies is classified as wholesale trade margin.

In the grossing up procedure in wholesale and retail trade no attempt has been made to cover secondary trading activities in producing units classified under other industries. Such secondary trading activity occurs particularly in manufacturing and transport and remains there until further studies will be undertaken in this field.

In view of all this it is worth considering aggregating further the production accounts in wholesale and retail trade. The present disaggregation might be misleading and indicating accuracy which does not exist.

#### 3.14 Hotels and restaurants (NACE Rev.1 H)

In the national accounts the activities of NACE H consist of 11 industries. In the year 2005 this section made a contribution of 1.6 percent to GDP. The size of each of these industries is given in table 3-12.

Table 3-12 Output, intermediate consumption and value added in hotels and restaurants, 2005

Million ISK		Intermediate	Value added,
	Output	consumption	basic prices
55 Hotels and restaurants	38,853	25,459	13,388
As % of total economy	2.05	2.46	1.56
55.1 Hotels	10,642	6,471	4,169
55.11 Hotels and motels, with restaurants	9,128	5,499	3,627
55.12 Hotels and motels, without restaurants	1,514	972	543
55.2 Camping sites and other provision of short-stay accommodation	1,275	777	498
55.21 Youth hostels and mountain refuges	166	89	77
55.22 Camping sites, including caravan sites	214	125	89
55.23 Other provision of lodgings n.e.c.	895	563	333
55.3 Restaurants	22,022	15,012	7,006
55.30 Restaurants	22,022	15,012	7,006
55.30.1 Restaurants	21,342	14,554	6,785
55.30.2 Saloons	680	458	221
55.4 Bars	3,152	2,066	1,085
55.5 Canteens and catering	1,762	1,132	629
55.51 Canteens	1,098	677	421
55.52 Catering	663	455	208

The production accounts of hotels and restaurants are mainly based on the Enterprise Accounts Register. Similarly to the wholesale and retail trade some activities in this industry are distributive in nature such as selling alcoholic drinks in bars. However, the output of such activity should be defined on the gross basis as the value of the output of the services of hotels, restaurants and cafes including the value of the food, beverages etc. consumed, like here is done.

The Enterprise Accounts source is not of total coverage and therefore a grossing up procedure is necessary. In grossing up, the VAT Register is one of the sources but notice is also taken of the Pay-as-you-earn Register because of the risk of underreporting in VAT returns, especially in activities 55.3, Restaurants and 55.4, Bars. For these activities the Pay-as-you-earn Register is considered to be of superior quality to the VAT Register.

Canteen activity, NACE 55.51, was directly constructed from the VAT Register until unincorporated enterprises were incorporated into the Enterprise Accounts Register in 2001. Since then the production accounts of canteens are constructed in the same way as other activity by making use of the Enterprise Accounts Register. Grossing up is based on the VAT register. This grossing up ignores the canteens' operation in other activities because no attempt is made to transfer this activity to NACE 55.51. So the canteens' operation remains in the activity which it is originally recorded in the VAT register.

In 2005 the grossing up of hotels and restaurants as a whole was just minor to reach the VAT turnover and similar for hotels, restaurants and bars.

In the case of imports and exports of hotel and restaurant services the possibility of some underreporting should not be ruled out. However, an overwhelming share of the hotel activity is undertaken by big hotels keeping reliable accounts making any underreporting of income difficult. The restaurants are more of a concern and some explicit adjustments are made. This refers both to foreigners and domestic residents.

Direct estimate of hidden activity was made in some of the activities. These estimates are based on educated guesswork but also taking into account the structure of these activities. The percentages used are as follows:

- NACE 55.2 Camping and other provision of short-stay accommodation was increased by 100%
- NACE 55.3 Restaurants were increased by 5%
- NACE 55.4 Bars. Compensation of employees was increased by 25% and intermediate consumption decreased consequently. Output was slightly revised upwards.

Tips hardly exist in Iceland and no estimates are made to cover such payments. According to information from *The Icelandic Travel Industry Association* no special investigation has been made to verify this and tourists are generally informed of this practice.

Regularly the size of NACE H is checked against expenditure side figures. In section 5.7.5 a comparison is made between household final consumption (HFC) and household expenditure survey (HES) by expenditure categories, see table 5-7. Item 11 in that table shows the comparison for restaurants and hotels. This comparison shows 16.4% lower estimate for HES than HFC for this particular category, after adjustments have been made for direct purchases by non-residents in the domestic market. Another comparison is the supply and use table. A preliminary and unbalanced version of it for 2005 shows that use is approximately 4% higher than the supply.

Accommodation statistics exist in Iceland and are collected on a monthly basis by Statistics Iceland. These statistics cover all types of tourist accommodation with the exception of trade-union summer houses. It shows the number of overnight stays by citizenship, available accommodation etc. These statistics do not include any revenue or turnover data and so far they have not been used to estimate the total size of the production accounts but they have been indispensable in estimating the volume changes in relevant industries.

# 3.15 Transport, storage and communication (NACE Rev.1 I)

In the national accounts the activities of NACE I consist of 20 industries. In the year 2005 this section made a contribution of 6.4 percent to GDP. The size of each of these industries is given below.

Table 3-13 Output, intermediate consumption and value added in transport, storage and communication, 2005

Million ISK		Intermediate	Value added,
	Output	consumption	basic prices
60 + 61 + 62 + 63 + 64 Transport, storage and communication	211,402	156,525	54,851
As % of total economy	11.16	15.14	6.39
60 Land transport; transport via pipelines	19,403	11,029	8,372
60.1 Transport via railways	_	_	_
60.2 Other land transport	19,403	11,029	8,372
60.21 Other scheduled passenger land transport	3,295	1,944	1,351
60.22 Taxi operation	2,023	1,118	905
60.23 Other land passenger transport	3,501	2,060	1,442
60.24 Freight transport by road	10,584	5,909	4,674
60.24.1 Freight transport by delivery vans	3,052	1,530	1,522
60.24.2 Freight transport by trucks	3,782	2,114	1,668
60.24.3 Freight transport by lorries	3,750	2,264	1,485
60.3 Transport via pipelines	_	_	

61 Water transport	28,933	25,280	3,649
61.1 Sea and coastal water transport	28,816	25,233	3,578
61.2 Inland water transport	117	47	71
62 Air transport	76,579	65,613	10,959
62.1 Scheduled air transport	69,706	58,948	10,751
62.2 Non-scheduled air transport	6,873	6,665	208
62.3 Space transport	_	_	-
63 Supporting and auxiliary transport activities;			
activities of travel agencies	49,250	36,665	12,581
63.1 Cargo handling and storage	1,625	752	873
63.11 Cargo handling	123	14	109
63.12 Storage and warehousing	1,502	738	764
63.2 Other supporting transport activities	23,294	15,359	7,932
63.21 Other supporting land transport activities	2,516	1,030	1,485
63.22 Other supporting water transport activities	10,011	7,362	2,649
63.23 Other supporting air transport activities	10,768	6,967	3,798
63.3 Activities of travel agencies and tour operators;			
tourist assistance activities n.e.c.	16,159	13,832	2,326
63.4 Activates of other transport agencies	8,172	6,721	1,450
64 Post and telecommunications	37,236	17,938	19,290
64.1 Post and courier activities	7,104	3,438	3,665
64.11 National post activities	5,012	2,066	2,946
64.12 Courier activities other than national post activities	2,092	1,372	720
64.2 Telecommunications	30,132	14,500	15,625

The production accounts of this industry are mainly based on the Enterprise Accounts Register. Some of the industries in this section are characterized by small units and unincorporated companies. The most important of these activities are:

- NACE 60.22, Taxi operation
- NACE 60.24, Freight transport by roads, which is further broken down on 5 digit level between delivery vans, trucks and lorries

Unincorporated enterprises were not covered in the Enterprise Accounts Register until 2001 so before that time other sources had to be utilized. Now the Register is also the main source for unincorporated enterprises which will definitely improve the quality. However, some of the activities in transport are exempt from VAT and therefore the VAT register cannot be used for grossing up. These are activities like taxi operation and other public transport. In these cases use is made of Pay-as-you earn Register provided that some grossing up is necessary. Extra grossing up of 15% is undertaken in taxi operation due to expected tax evasion and other kind of underreporting. These estimates are based on information on total number of registered taxi licences and estimated gross revenue per taxi together with information from inside experts.

A considerable part of two activities are not included in the Enterprise Accounts Register. These are:

- NACE 60.21 Other scheduled passenger land transport
- NACE 63. 22 Other supporting water transport activities, (mainly operation of harbours)

These two activities contain both normal market enterprises and also similar activity carried out by local authorities, most often without establishing special legal units and sometimes not even separate units. This refers to bus transport and operation of harbours. In these cases the operating accounts are taken from local government accounts and an additional breakdown by type of revenue and expenses has been received from a regular investigation carried out by the Union of Local Authorities in Iceland. These accounts are manually processed and added to other enterprises in the Enterprise Accounts Register.

The grossing up of other activities in this section is more or less based on the VAT Register. Normally the grossing up is of minor importance. In some cases a notice is taken of the VAT Register like in NACE 60.24.1 Freight transport by delivery vans where the Enterprise Accounts Register is increased a little based on VAT turnover of identified enterprises. These enterprises are either transferred between activities or not appearing at all in the EAR but the value from the VAT Register is not exploited directly. In addition to that this activity is considered to be a subject for hidden activity and due to that an extra 10% are added to the size of that activity. These estimates are based on guesswork.

The activities of travel agencies and tour operators are of a mixed character. The agencies can both act as intermediaries receiving fees and commission for the service rendered but in other cases the agencies act as tour operators and thereby produce new products. The cost structure of the tour operators are quite different from the actual intermediation services but provided that the grossing up is minor this is not going to have impact on the value added. The value of output of travel agencies and tour operators are measured at the same way as the companies themselves are doing. No attempt is made to register travel agencies net. This method diverges from the manual but can be justified by arguing that anyway the value added is not affected by this gross recording.

Air transport, activity 62, is relatively important in this section, dominated by two carriers in 2005, Icelandair and Air Atlanta. The repair and maintenance of aircrafts is also an important activity for Icelandair. Until 2002 this operation was carried out within the same legal unit. In view of the size of this activity an attempt was made to separate this activity out of the enterprise and construct an establishment in industry 35.3. By doing this air maintenance was considered to be a secondary activity of air transport, not an ancillary activity. This treatment was a rather special case because the Enterprise Register does not allow a split of enterprises but here this was justified in view of the size of this activity. In 2002 Icelandair decided to transfer this activity to a new legal unit and thereby imputations of this kind were not necessary any more.

The Air Atlanta was a charter flight company with headquarters in Iceland but primarily operated abroad. Due to the location of the headquarters in Iceland all the operations of this carrier are included in the domestic product of Iceland.

The airlines supply travel tickets to their employees at considerably reduced prices. These incomes in kind are not treated as taxable income by tax authorities but in national accounting an imputation is recommended. Estimates of this kind were made few years ago and the total amount estimated approximately 25 million kronur in the year 1999. The output of air transport activity, NACE 62, and the compensation of employees were increased by the same amount. In recent years this amount was not considered to be of the magnitude that such imputation was worthwhile.

# 3.16 Financial intermediation (NACE Rev.1 J)

The section J includes financial intermediation, NACE 65 and 67, and Insurance and pension funding, NACE 66. In the national accounts the activities of NACE J consist of 8 industries. In the year 2005 this section made a contribution of 8.9 percent to GDP. The size of each of these industries is given below.

Table 3-14 Output, intermediate consumption and value added in financial intermediation, 2005

Million ISK		Intermediate	Value added,
	Output	consumption	basic prices
65 + 66 + 67 Financial intermediation	108,572	32,579	75,993
As % of total economy	5.73	3.15	8.86
65 Financial intermediation, except insurance and pension funding	93,698	26,785	66,913
65.1 Monetary intermediation	93,698	26,785	66,913
65.2 Other financial intermediation	_	_	_

66 Insurance and pension funding, except compulsory social security <sup>1)</sup>	10,509	4,035	6,474
66.0 Insurance and pension funding, except compulsory social security	10,509	4,035	6,474
66.01 Life insurance	1,119	239	880
66.02 Pension funding	2,922	1,677	1,245
66.03 Non-life insurance	6,468	2,119	4,349
67 Activates auxiliary to financial intermediation	4,365	1,759	2,606
67.1 Activates auxiliary to financial intermediation	2,112	692	1,420
67.11 Activates auxiliary to financial markets	459	239	220
67.12 Security broking and fund management	1,327	232	1,094
67.13 Activities auxiliary to financial intermediation i.e.	326	220	106
67.2 Activates auxiliary to insurance and pension funding	2,254	1,067	1,186

<sup>1)</sup> The figures for the industry 66 have been revised by the Financial Supervisory Authority from the September 2008 version of published data which are presented elsewhere in this Inventory. Therefore the totals in the table above do not fully correspond to aggregates in other tables.

The output of financial intermediation consists mainly of two components:

- Market output
- FISIM (Financial Intermediation Services Indirectly Measured)

In addition to that the output can also consist of some own-account output. The market output consists of various fees charged by banks either fixed rates or ad valorem type payments and other items like income from securities trading and currency transactions and income from rent.

Apart from market output, FISIM is the other main component of the output of financial intermediation. Before 2006 FISIM was not allocated to the sectors or industries which consume the service, neither as final nor as intermediate consumption. Instead, all FISIM was recorded as intermediate consumption of a notional industry. In March 2006 Statistics Iceland completed the allocation of FISIM according to the European Commission Regulation No 1889/2002 and Eurostat recommendations as far as data sources permits. It refers to the fact that as well as charging customers directly for banking services financial intermediaries also provide services for which no explicit charges are made. In the case of FISIM, service income is generated by paying or charging different rates of interest to borrowers and lenders. The intermediaries pay lower rates of interest than would otherwise be the case to those who lend them money and charge higher rates of interest to those who borrow from them. The methods applied in allocating FISIM are described in detail in Chapter 9 below.

Prior to the implementation of the new FISIM regulation and allocation of FISIM to users the old FISIM should be calculated as the difference between interest income and interest expenditure. Now the estimation is based on information on the stock of loans and deposits and interest margin between actual interest rates received/paid on those stocks and a chosen reference rate. The sectors producing FISIM now comprises private banks, mortgages companies, finance companies and state lending institutions but excluding the central bank. The central bank is not any more included in the calculation of FISIM; its output is measured as the sum of costs. So far there is not a full consistency in implementing the FISIM regulation in the output and expenditure approach. The regulation has been implemented in the expenditure approach but not in the output approach. This discrepancy was eliminated when the March 2008 version of annual national accounts was published.

Holding gains and losses very often play an important role in the revenue and profits of financial intermediation. It is of vital importance to ignore such items in output and operating surplus in this activity similar to other activities throughout the system. These items are eliminated in processing of the accounts and in the cases of the banks it is clearly separated.

Contrary to most other activities the Enterprise Accounts Register is not the main source of information. Most of the companies in this activity are subject to government supervision and therefore the company accounts are compiled and processed by the *Financial Supervisory* 

*Authority*. This supervision covers financial intermediation, insurance and pension funds. The accounts are of almost total coverage so hardly any grossing up is needed. However the output of the financial intermediaries has to be adapted to the definitions of national accounts where output is defined as described above.

In recent years, and until autumn 2008, the activity of Icelandic banks abroad increased considerably. In processing the accounts an attempt has been made to eliminate this activity from the domestic activity and record it as property income from abroad.

In some cases a considerable amount of money is transferred from the government to some of the credit funds, such as the *Housing Financing Fund*. In most cases payments of this type are treated as capital transfers. However exceptions exist. When the receiving unit shows an operating deficit, then that part of the capital transfer which is sufficient to balance the deficit is reclassified as subsidies. Housing Financing Fund is a kind of mortgage bank. The Fund finances its lending with the issuance of long-term bonds (HFF bonds), which are noncallable and index-linked. The bonds carry the government's guarantee of collection. The Fund's estimated direct market share in the residential mortgage market was 41% at year-end 2005. The Fund's market share declined significantly with the entrance of commercial banks into the residential mortgage market in August 2004.

In the case of non-life insurance the output or service charge is equivalent to the difference between premiums received and claims paid and to that is added premium supplements according to the ESA95 terminology. The Financial Supervisory Authority follows the same principle when the accounts for non-life insurance are compiled. These accounts are considered to give sufficient data and no further elaboration is made.

The output of non-life insurance is rather straightforward. The ESA 95 principles are followed by calculating the margin, i.e. premium less claims and adding premium supplements and deducting increases in technical reserves. However, some problems arise when the output is allocated by sectors and industry. So far no attempt has been made to allocate output by sectors due to the fact that sector accounts have not yet been completed in Iceland. However, an allocation has been made by industry and households where a use is made of some breakdown of insurance products like insurance of household's contents, private cars etc. Net premium of such products is classified as private consumption but the remaining part of the net premium of non-life insurance is classified as the intermediate consumption of industry. Finally this intermediate consumption is allocated by industry proportionally, based on the proportional distribution of gross premium in the year 1996. Gross premium by use industry is not available for later years because the Enterprise Accounts Register, utilized from 1997 onwards, does not allow such breakdown.

The gross premium by industry in 1996 was used to distribute the service charge for the year 1997 and onwards. The operating expenses according to the Enterprise Accounts Register were consequently corrected. The size of this correction amounted to approximately 10 billions in 2005 or 1% increase in the production approach to GDP. This correction had no impact on the expenditure approach to GDP. Prior to the implementation of ESA 95 in August 2000 no such corrections were made. Statistics Iceland envisages updating the reference year, now 1996, for premiums paid by individual industries in order to improve the allocation of insurance output among users.

Financial Supervisory Authority is processing the financial accounts of life and non-life insurance following international guidelines. Reinsurance commissions are treated as negative reinsurance premiums. Breakdown of the items on the output and intermediate consumption is given in table 3-15.

Table 3-15 The breakdown of life insurance and non-life insurance

Million ISK	66.01	66.03	
	Life-	Nonlife-	
	insurance	insurance	Total
1. Output	1,119.0	6,468.1	7,587.0
1.1 Premiums earned for own account	2,223.2	21,114.0	23,337.3
1.2 Premium supplements	1,079.4	4,318.9	5,398.3
1.3 Claims incurred for own account	-725.9	-19,096.5	-19,822.4
1.4 Change in equalization reserve	-	-46.6	-46.6
1.5 Change in premium reserve and other techn.res.,net of reinsurance	-1,430.8	-	-1,430.8
1.6 Commission and profit share from reinsurers	63.3	436.3	499.5
1.7 Bonuses and rebates	-55.8	-258.1	-313.9
1.8 Allocated investment returns transf.fr.the life assurance techn.acc.	-848.6	-	-848.6
1.9 Unrealized gains on investments, risk borne by policyholder	814.1	-	814.1
2. Intermediate consumption/Operating cost	239.3	2,119.1	2,358.4
2.1 Acquisition costs	363.3	3,158.8	3,522.1
2.2 Administrative expenses	472.2	3,223.7	3,695.8
2.3 Administrative expenses for investments	28.3	-	28.3
thereof wages and salaries	580.7	3,965.2	4,545.9
thereof depreciation	43.7	298.2	341.9
2.4 Expenses for marketing and administration (IFRS)	-	-	0.0
3. Value added (3.=12.)	879.7	4,349.0	5,228.7
4. Taxes on production	-	-	-
5. Subsidies on production	-	-	-
6. Gross domestic factor income (6.= 34.+5.)	879.7	4,349.0	5,228.7
7. Depreciation /consumption of fixed capital	43.7	298.2	341.9
8. Net domestic factor income	836.0	4,050.8	4,886.8
9. Compensation of employees	580.7	3,965.2	4,545.9
10. Operating surplus	255.3	85.6	340.9

For life insurance the methods applied are similar to those of non-life insurance and the sources are the same, namely the company accounts of non-life insurance companies collected and published by the Financial Supervisory Authority.

These accounts cover the operation of Icelandic insurance companies abroad which is a minor part but not the operation of foreign companies in Icelandic territory. This is a deviation from the national accounts principles saying that if the foreign institutions are residents in Iceland they should be included in these calculations and if the Icelandic companies overseas are resident units abroad they should be excluded from these calculations. For the moment the situation is such that no foreign insurance enterprises are operating resident units in Iceland. One foreign enterprise is operating a branch in Iceland involved in both life and non-life insurance. This branch is operated under the supervision of the German financial supervisory authority. The Icelandic FSA receives these data much later than from the Icelandic ones and therefore they are neither included in neither the FSA data nor the Icelandic national accounts.

Abroad, Icelandic insurance enterprises are neither operating resident units nor branches. During the period 2006-2009 one Icelandic enterprise was operating a resident unit in Norway. This activity was not included in the FSA data and not included in Icelandic national accounts. Statistics Iceland is going to revise these methods and include the foreign branch resident in Iceland in the production of Icelandic insurance services.

The production of insurance services is measured by following the accrual recording principle as reflected in the calculation of premiums earned (against premium receivable/written) and claim due.

Premium earned for own account 2005 can be broken down as follows. Figures for the total is presented as item 1.1 in table 3-15.

	Million ISK
Premiums written	25,730
Change in premium reserve	-624
Premiums earned	25,106
Premiums written, reinsurers' share	-4,023
Change in premium reserve, reinsurers' share	32
Reinsurers' share in premiums earned	-3,992
Premiums earned for own account	21,114

In the data sources available from the Financial Supervisory Authority (FSA) the concept "premium receivable" does not occur.

According to information from FSA "Premiums earned" covers also premiums that are not actually earned. Many consumers pay their early premiums by monthly instalments and the premiums receivable are covered in the premiums reserve. Premiums receivable are in other words premiums written.

In the table above the "actual premiums earned" are arrived at by deducting changes in the provisions for unearned premiums ("change in premium reserve") from premiums receivable ("premiums written"). Changes in provision for unearned premiums ("change in premium reserve" in the table above) are deducted from premiums receivable ("premiums written").

Income from the investment of own funds is recorded as "balance on the non-technical account". In non-life insurance, item 1.2 is investment return from technical provisions. Investment returns from own funds is classified as "Investment income". In life insurance item 1.2 represents investment income, which is income from both technical provisions and own funds. The item "Allocated investment return transferred from the life assurance technical account" is the part of investment income which is from own funds. Reinsurers are treated in the same way as non-life insurers.

Item 1.8 "Allocated investment return transferred from the life assurance technical accounts" in the table 3-15 refers to investment return transferred from the life assurance technical account and is income on insurance technical reserves. This income is not attributed directly to policyholders. The income from technical reserves in life insurance is shown as "investment income" in the FSA table (part of the technical account). In non-life insurance income from technical reserves is shown as "Investment return on non-life insurance business" and income from own funds as "investment income" in the non-technical account.

Item 1.9 "Unrealized gains on investments, risk borne by policyholder" in table 3-15 is an output component in national accounts. It covers unallocated investment income which policyholders have not yet received from their savings (unit-linked insurance). In fact, this item is owned by the policyholder and only occurs in life insurance. According to FSA this item includes both holding gains/losses and investment income. Holding gains should be excluded from the calculation of output in national accounting so an amendment is needed here.

Item 1.7 "Bonuses and rebates" are recorded as a minus item on the output side and are deducted from premiums earned in table 3-15. Item 1.3 "Claims incurred for own account" in table 3-15 can be broken down as follows:

	Million ISK
Claims paid	-19,966
Change in claims reserve	-920
Claims incurred	-20,886
Claims paid, reinsurers' share	2,508
Change in claims reserve, reinsurers' share	-718
Claims incurred, reinsurers' share	1,790
Claims incurred for own account	-19,096

Changes in equalisation reserves, item 1.4 in table 3-15, are included in the output algorithm as part of claims due. Eurostat has pointed out that according to the TF recommendation 3 they should be considered as part of the provisions for claims outstanding. However, they are accounted for separately as item 1.4 and not included in the "change in claims reserve" in the table above.

In recording management costs FSA follows its Guidance paper 4/2002 saying that claims management costs which can be attributed to a specific claim should be recorded as "claims". In other instances claims management cost are recorded as "administrative expenses". Eurostat has pointed out that according to the Eurostat Task Force recommendation 4 claims management costs should be excluded from the calculation of claims due to policy holders, i.e. from the production, and recorded respectively as intermediate consumption and labour costs. Here an amendment is needed although there is no impact on value added.

Item 1.5 "Changes in premium reserve and other technical reserve net of reinsurance" in table 3-15 can be broken down as follows:

	Million ISK
Change in premium reserve	-229
Change in premium reserve, reinsurers' share	84
Change in other technical provisions, net of reinsurance	-1,285
Change in prem. res. and other techn. res., net of reins.	-1,431

This item is equivalent to what is included in ESA95 algorithm for output of insurance services as changes in technical provisions for outstanding risks and technical provisions for with-profit insurance. Premium reserve is calculated at the year's end by the company's actuary and is the liability according to the life insurance policies.

Item 1.6 "Commission and profit share from reinsurers" in table 3-15 covers reinsurance commissions. Reinsurance business is not significant for Iceland companies. Premiums from reinsurance business are included in the premium items in the annual accounts. The treatment of reinsurance business is according to the EU Accounting Directive for Insurance Companies.

Reinsurance premiums paid by Icelandic direct insurers are deducted from premiums earned instead of being added to their IC as recommended in Eurostat Task Force. Reinsurance commissions received by Icelandic companies are added to output instead of being deducted from IC. This must be amended, see recommendation 1 of the Eurostat TF. However, the value added is not affected.

In the case of reinsurance the Icelandic insurance companies buy almost exclusively reinsurance from foreign reinsurers. Premiums from reinsurance business are included in the premium items in the annual accounts. The treatment of reinsurance business is according to the EU Accounting Directive for Insurance Companies. Reinsurance business is not significant for Icelandic companies. Some minor reinsurance services were done by Icelandic companies abroad in 2006-2008. That activity ceased in 2009.

Intermediate consumption and the cost structure of the pension funds are derived from the company accounts in this industry as published by the Financial Supervisory Authority. The operating surplus is defined equal to zero and thus the output is the sum of the intermediate consumption, compensation of employees and consumption of fixed capital. This is a deviation from the methods recommended in paragraph. 3.63 J in ESA95. Statistics Iceland considers changing these methods and implementing the ESA 95 recommendations.

# 3.17 Real estate, renting and business activities (NACE Rev.1 K)

In the national accounts the activities of NACE K consist of 49 industries. In the year 2005 this section made a contribution of 17.8 percent to GDP. The size of each of these industries is given below.

 $Table \ 3\text{-}16 \ Output, intermediate \ consumption \ and \ value \ added \ in \ real \ estate, \ renting \ and \ business \ activities, \ 2005$ 

Million ISK		Intermediate	Value added,
	Output	consumption	basic prices
70 + 71 + 72 + 73 + 74 Real estate, renting and business activities	260,196	106,815	153,327
As % of total economy	13.74	10.33	17.87
70 Real estate activities	129,583	41,566	87,991
70.1 Real estate activities with own property	1,879	1,408	469
70.11 Development and selling of real estate	1,468	1,204	264
70.12 Buying and selling of own real estate	410	204	205
70.2 Letting of own property	122,311	37,426	84,861
70.20 Letting of own property	122,311	37,426	84,861
70.20.1 Letting of apartment houses	93,545	27,993	65,552
70.20.2 Letting of housing for industry	28,079	8,734	19,321
70.20.3 Letting of land and land rights	687	699	-12
70.3 Real estate activities on a fee or contract basis	5,393	2,732	2,661
70.31 Real estate agencies	4,054	1,943	2,111
70.32 Management of real estate on a fee or contract basis	1,339	788	550
70.32.1 Property owners association	-	-	_
70.32.9 Other real estate operation	1,339	788	550
71 Renting of machinery and equipment without operator and	1,337	700	330
of personal and household goods	8,026	5,887	2,136
71.1 Renting of automobiles	2,197	1,537	660
71.2 Renting of other transport equipment	1,004	673	331
71.21 Renting of other land transport equipment	72	50	21
71.22 Renting of water transport equipment	47	22	25
71.23 Renting of water transport equipment	886	601	285
71.25 Renting of other machinery and equipment	3,380	2,426	953
71.31 Renting of agricultural machinery and equipment	30	18	12
71.32 Renting of construction and civil engineering	30	10	12
machinery and equipment	1,541	1,245	296
71.33 Renting of office machinery and equipment inc. computers	1,541	7	5
71.34 Renting of other machinery and equipment inc. computers 71.34 Renting of other machinery and equipment n.e.c.	1,797	1,156	640
71.4 Renting of personal and household goods n.e.c.	1,445	1,252	192
71.40 Renting of personal and household goods n.e.c.	1,445	1,252	192
71.40.1 Renting of videotapes	1,250	1,155	94
71.40.1 Renting of videotapes 71.40.9 Renting of private objects n.e.c.	1,230	97	98
71.40.5 Rending of private objects mete.  72 Computer and related activities	23,924	10,296	13,623
72.1 Hardware consultancy	924	690	234
72.1 Plattware consultancy 72.2 Software consultancy and supply	15,614	6,169	9,441
72.2 Software consumancy and suppry 72.3 Data processing	695	609	87
72.4 Data base activities	2,679	890	1,789
72.5 Maintenance and repair of office, accounting and	2,079	690	1,769
computing machinery	373	288	85
72.6 Other computer related activities	3,639	1,651	1,987
73 Research and development	11,270	6,944	4,326
73.1 Research and experimental development on natural sciences	11 270	6 044	1 226
and engineering	11,270	6,944	4,326
73.2 Research and experimental development on social sciences and humanities			
and numanides			

4 Other business activities	87,393	42,122	45,250
74.1 Legal, accounting, book-keeping and auditing activities;			
tax consultancy; market research and public opinion polling;			
business and management consultancy; holdings	35,225	17,639	17,580
74.11 Legal activities	6,667	2,289	4,378
74.12 Accounting, book-keeping, auditing activities; tax consultancy	8,162	2,490	5,672
74.13 Market research and public opinion polling	237	163	74
74.14 Business and management consultancy activities	7,377	3,887	3,487
74.14.1 Agricultural consultants	422	180	242
74.14.9 Business and management consultancy activities,			
excluding agricultural consultancy	6,955	3,707	3,244
74.15 Management activities of holding companies	12,782	8,810	3,969
74.2 Architectural and engineering activities and related technical			
consultancy	26,036	11,169	14,859
74.20 Architectural and engineering activities and related technical			
consultancy	26,036	11,169	14,859
74.20.1 Civil engineering and related technical consultancy	16,531	5,911	10,612
74.20.2 Business engineering	1,506	653	853
74.20.3 Architectural and civil engineering	6,217	3,644	2,573
74.20.4 Geological research and prospecting activities	92	110	-18
74.20.5 Exploring of land	259	117	141
74.20.6 Patent offices	444	211	233
74.20.9 Other technical consultancy	989	523	465
74.3 Technical testing and analysis	1,315	391	924
74.4 Advertising	7,818	5,371	2,446
74.40 Advertising	7,818	5,371	2,446
74.40.1 Advertising agencies	4,644	2,883	1,761
74.40.9 Other advertising activities n.e.c.	3,174	2,488	685
74.5 Labour recruitment and provision of personnel	333	108	225
74.6 Investigation and security activities	2,737	1,029	1,707
74.7 Industrial cleaning	4,121	1,092	3,028
74.8 Miscellaneous business activities n.e.c.	9,808	5,324	4,482
74.81 Photographic activities	911	529	382
74.82 Packaging activities	8	8	0
74.83 Secretarial and translation activities	902	342	561
74.83.1 Translations and interpretations	461	151	310
74.83.2 Office services	441	191	250
74.84 Other business activities n.e.c.	7,986	4,445	3,540

The Enterprise Accounts Register is the main data source used for these activities with one important exception. That is activity 70.20.1 Letting of apartment houses or dwelling services which is the single biggest industry in this section amounting to 65.6 billion kronur in value added or 43 percent of this section and 6.4 percent of GDP as a whole.

This industry justifies a special description both because of its size and the methods applied in estimating it. Prior to the implementation of ESA95 in August 2000 the output of dwelling services, both owner occupied and rented on market, was estimated by the user cost approach. From August 2000 and onwards these methods were changed and the stratification method as recommended by Eurostat was implemented so that the user cost approach was replaced by the equivalent market rent. The percentage share of owner occupied dwellings is extremely high in Iceland and the former user cost method was justified by this high percentage. According to the household expenditure survey (HES) in 2005 83% of the dwellings in Iceland are owner occupied. This percentage has increased slightly during the last few years. In 1999 Statistics Iceland undertook a special survey on rented dwellings and the results of this survey were exploited in estimating the market rent. The survey was split up into 5 strata by type of dwellings showing the rent paid for each type of dwelling. These strata were:

- 1. Single family houses
- 2. Terraced houses
- 3. Apartment houses with 2-5 apartments
- 4. Apartment houses with more than 5 apartments
- 5. Other type of dwellings

Additionally each of these strata was then sub-stratified by region into two regions, the Capital region and the remaining part of the country making the total of 10 strata.

For national accounts purposes some modifications were made on the observed rent from the rent survey. Most important was that the rent was increased by the amount of the rent compensation to low income families and the zero rent families. The rent survey was based on the price level in March 1999. That price level was extrapolated to the annual average price level of each year by using the price changes in the sub-group of rented dwellings in CPI. The price changes in that sub group of CPI are based on price changes for rents. The rental is based on unfurnished dwellings and no adjustments are made for rental of furnished dwellings. Garages used by the owner of a dwelling for final consumption purposes, even if separate from the dwelling, are included in the imputed output of dwelling services.

Then the total number of dwellings in each stratum is based on annual figures from *The Land Registry of Iceland* for each year from 1994 onwards and that resulted in the total value of rent. To make the classification fully comparable between the rent survey and the number of dwellings it became necessary to combine the first two classes, single family houses and terraced houses, so the effective number of strata ended up as 8 strata.

Finally the output of secondary residences, i.e. holiday homes, was estimated by comparing the value of these houses with the primary residence. The output of the secondary residences was estimated 0.8% of the value of the output value of primary residence. That is based on the total rebuilding cost of secondary residence which the Land Registry of Iceland estimates as 3.12% of the rebuilding value of primary residence. The usage time is estimated as a quarter of the year, the summer time. Based on that the output of the secondary residence was estimated as 0.8% of the output of primary residence.

The methods for estimating intermediate consumption of activity 70.20.1 are weak and mainly based on common sense considerations. The single most important intermediate consumption here is repair which is estimated as 20% of output. Originally this estimate was guesswork but later on confirmed by a research that the Icelandic Building Research Institute (IBRI) conducted around the year 2000 on building improvements, minor and major repairs. Insurance on a net basis and other intermediate consumption are estimated irregularly. The total intermediate consumption amounts to around 30% of output in this activity. For comparison it can be mentioned that in recent years some big enterprises occur in the EAR in this activity. This source gives a little higher share of IC or around 37% of output compared with 30% in the original estimate. The difference can be explained by higher purchased labour input and these new information were not considered as a reason for a change of the former estimate. Taxes on production are estimated irregularly on the basis of direct information and the values are extrapolated in the intervening years. The compensation of employees is based on data from the Pay-as-you-earn Register. Consumption of fixed capital is calculated as 2.4% of the value of capital stock of residential construction. That stock is accumulated gross fixed capital formation over the past years reduced by annual depreciation. The operating surplus became a residual after the introduction of the stratification method in August 2000. Prior to that the user cost approach was applied and then the operating surplus was imputed as 3.5% of the value of capital stock of residential construction and the output was estimated as sum of the cost and imputed operating surplus.

Some borderline cases occur between repair classified as household consumption and repair as an intermediate consumption in activity 70.20.1. In national accounts the borderline is drawn in such a way that minor repair, that is typically tenants' repair, is considered as final consumption but other repair, typically landlords' repair, is considered as intermediate consumption. Drainage charges and refuse collection is always paid by the owner and therefore it is intermediate consumption. Only expenditure which tenants and owner-occupiers incur for minor maintenance and repair are estimated as households' consumption (typically tenants' repairs). When these borderlines are drawn in Iceland then it has always been the understanding of SI that minor repairs actually carried out by tenants are excluded in the above mentioned BRI study. Furthermore it can be stated that anyway repairs carried out by tenants are of trivial importance in Iceland. The reason for that is both high owner occupancy rate, around 83%, and also that most of the tenants are considering their status as tenants as a temporary status and most of such contracts are on short term basis. This attitude definitely influences the willingness of tenants to do any repair work at all. In the case tenants are undertaking some repair work it is common that the owners are in fact financing the repair by a rent-free period corresponding to the cost of repair.

However some estimates are made of such typically tenants' repair. This amount is estimated as a fixed 2.5 percent of the total rentals, both actual and imputed. This is based on some indicators from the Household expenditure surveys and consultation with the price statisticians within Statistics Iceland. Minor maintenance of owner-occupiers is included in the imputed rentals of owners occupying their residence.

Thus the repair of residential construction can be distinguised between following three groups:

- Minor repair, typically owners' repair, classified as intermediate consupmption in activity 70.20.1. It is estimated as 20% of the output in that activity
- Minor repair, typically tenants' repair, classified as household final consumption. It is estimated as 2.5% of total rentals of dwellings
- Major repair, classified as gross fixed capital formation

For activity 74.15, Management activity of holding companies, the Enterprise Accounts Register must be used with care. The reason is that the main revenue of enterprises in such activity is property income like interests and dividends from other activities which should not be recorded as output in national accounting. In estimating the output of this activity the revenue of all the companies which are recognized as pure holding companies are omitted. Instead, the output of these companies is defined as the sum of compensation of employees and operating expenses. It has been noticed that some companies are wrongly classified as holding companies but are in fact letting own property and should be classified in 70.2. The most striking examples of this are reclassified each time but other remains in 74.15. Therefore a considerable part of the output of this activity consists of rental income similarly to activity 70.2. A permanent reclassification of these companies letting own property will be undertaken.

Another activity in section K worth mentioning is activity 73.1 Research and experimental development on natural sciences. In 1996 a new company, was established in this activity, *DeCode genetics*. The number of persons employed during the first year was around 500, most of them highly educated and holding many doctorates. This is a genomics company conducting research into the inherited causes of common diseases. Other much smaller firms in this field exist also. The importance of this activity in the Icelandic economy can be compared with the total size of the labour force of approximately 135 thousand at that time. It should also be noticed that the average wages in this branch might be 3 or 4 times the average wages in the economy so the share of that firm of the total compensation of employees might have been around 1.5%.

In the national accounts the time of recording of the output of these research firms is of special interest or concern. In the case of Decode genetics a considerable part of income comes from research sponsorships of which a part is evenly distributed during a contract period of five years, but the majority of the contract will be paid based on the results from the research. It is especially

this result-related payment which causes problems in the Icelandic national accounts and similar problems might exist elsewhere. Here the question arises: What is the appropriate time for recording these result-related payments? Several solutions might be possible:

- To do like the firms keep its accounts, which is the normal bookkeeping practice. According to this approach, result-related incomes are not recorded until they are realized.
- The result-related research is treated as an output and changes in inventories.

The advantages of the first method are that it is simple and easy to implement. However, it can be argued that most likely the current output of the research firm is seriously underestimated with the consequences that the production account in the branch shows a huge negative operating surplus. On the contrary when and if the result-related payments arrive the incomes will be recorded as the output of a wrong year. In this case the income will be recorded on a cash basis, not on an accrual basis as recommended in ESA95. This is the method presently followed in the Icelandic national accounts.

Following the second method an attempt will be made to record the production during the year when the research is performed. This is similar to the additions to work-in-progress. These additions are valued in proportion to the estimated current basic price of the finished product, cf. ESA95, paragraph. 3.50. However, in the case of a research project which might turn out to be successful or not it might be very doubtful to estimate each time what proportion of the research project has been finished. Alternatively taking into account that no current basic price might be available the output could be valued following the sum of costs principle.

Due to the relative importance of this treatment the National Economic Institute (NEI), at that time in charge of compiling national accounts, consulted Eurostat on this issue in 2000. Eurostat had preference for the first method, i.e. not to consider the current research expenditure as output and changes in inventories but as intermediate consumption. National Economic Institute and later on Statistics Iceland have both followed these preferences with the consequences that the production account in question shows a large negative operating surplus. In the forthcoming revision of ESA 95 this methodology will be revised. Provided that it will be decided to capitalize this research expenditure, the impact on GDP will be significant.

# 3.18 Public administration and defence; compulsory social security (NACE Rev.1 L); Education (NACE Rev.1 M); Health and social work (NACE Rev.1 N)

Sections L, M and N will be discussed together below. All of these sections are characterized by central and local government units and the output is overwhelmingly other non-market output and valued accordingly. Some of the activities are through market producers.

In the year 2005, these three sections made a contribution of 21 percent to GDP. The size of each of these industries is given below.

Table 3-17 Output, intermediate consumption and value added in public administration, education and health, 2005

Million ISK		Intermediate	Value added,
	Output	consumption	basic prices
75 + 80 + 85 Public administration, education and health	323,264	144,028	179,236
As % of total economy	17.07	13.93	20.89
75 Public administration and defence; compulsory social security (L)	82,420	32,683	49,737
80 Education (M)	84,638	38,874	45,764
85 Health and social work (N)	156,207	72,471	83,735

#### 3.18.1 Market activity within sections L, M and N

Within section L, Public administration, practically all activity is non-market. In section M, Education, the market activity is more important and even more so in section N, Health and social work. When the size of these market activities are estimated, similar methods are applied as in other market activities where the Enterprise Accounts Register plays the central role. The share of the government units in the output of each of sections L, M and N in 2005 was as follows:

Table 3-18 The share of government units in the output of sections L, M and N

	2005
Section L, Public administration and defence, compulsory social security	100.0%
Section M, Education	79.2%
Section N, Health and social work	62.9%

The market activity of section M, Education, consists mainly of private schools, adult education such as driving schools etc. with the market share of a little below 20% in this activity. Within section N, Health and social work, market activity plays a more important role amounting up to 1/3 of the total wage bill in that activity. Here the service of dentists and doctors in private practice is the most important one. The distinction between market and non-market activity mainly follows the distinction between A-part and the other parts of the Central government account where the A-part encompasses the non-market activity. Local governments' accounts are classified in a similar manner and that classification is utilized in eliminating market output from non-market activity.

The company accounts of the individual units are derived from The Enterprise Accounts Register. Contrary to most other market activities it was decided to add together all units in NACE 80 and NACE 85 separately and gross up this two groups on two digit level instead of grossing up separately each of the most detailed activity similar to the usual practise. The grossing up was based on Pay-as-you-earn Register. In both these activities the grossing up factor was extremely high. In 2005 it was 7.1 in education but much lower in health or 2.3. This high grossing up factor in education can be explained by the fact that many NPISH units in education are exempt from income tax and therefore these units are often missing from the Enterprise Accounts Register. The accuracy of this grossing up might be doubtful in view of this and also taking into account that the sample is not randomly selected. SI intends to reduce this far too high grossing up factor by selecting a sample of annual accounts of units operating in these activities. The main obstacle is that many of these units are exempt from income tax and do not enter the EAR. Therefore the collection of the data might be troublesome and costly.

In the remaining part of this section a description is given of the methods used in estimating non-market activities in L, M and N.

#### 3.18.2 The main sources of data for non-market activities

The non-market activity of the Government is divided into three sub sectors. They are:

- Central government
- Local government
- Social security system

Various sources are utilised for producing the government accounts. The most important ones are:

- The Budgetary central government annual account (The State Account)
- The Local Authorities' Reporting Unit
- The annual accounts of the largest local authorities
- The annual accounts of the State Social Security Institute

- The annual report on the Communal Equalisation Fund
- The annual report on the Pension Funds compiled by The Financial Supervisory Authority

The first one of the above sources, the State Account, is used for compiling data on the central government. Other sources on the list are used for Local government and the Social security system.

The State Account gives relatively detailed data on the overall incomes and expenditures as well as key figures for every institution included in the Central government account. In the A-part of the account, data is available on both public and quasi-public institutions such as schools and hospitals, etc. The B-part of the account contains data on the public non-financial and financial institutions which are defined as market activity and outside the government activity. The distinction between A and B-part of the central government accounts is similar to the borderline followed in making a distinction between non-market activity and market activity in the national accounts system.

The information on the sub-sector *Local government* is primarily derived from a new unit, the Local Authorities' Reporting Unit, which is an information unit established in co-operation between the Association of Local Authorities, Statistics Iceland and the Ministry of Social Affairs. That unit is operated by the Association of Local Authorities and it collects and processes a very detailed financial data from all local authorities. The number of local authorities has been diminishing in the last few years. They were 124 in 1999 but in 2007 they are 79. From a statistical point of view this decrease in numbers is positive because the quality of the data normally improves when the units become bigger. The accounting procedures among local authorities are standardized, so there is no need for adjustments because of discrepancies between them. From the same source a use is made of detailed information, on both municipal income tax and real estate tax, as well as on local government expenditures.

In addition to the information on local governments obtained from the Reporting Unit, Statistics Iceland gathers annual accounts from a few of the largest cities and towns. These accounts are used to acquire further disaggregation of the data, for example on the share of compensation of employees in government final consumption and on purchases, imputed pensions and sales of goods and services. This sample of accounts is also used as the main source of the March version of the annual accounts, i.e. the first estimate as well as quarterly estimates.

Finally it should be mentioned that *The Communal Equalization Fund* is recorded as a part of the local government sector. Its main purpose is to equalize the local governments' different economic conditions. The Fund receives a contribution from the central government amounting to 1.4 percent of the total tax revenue as well as direct contributions from central and local governments. These incomes are so redistributed to local government's following definite criteria in order to equalize the economic performance.

The data on the sub-sector *social security system* is based on accounting information from the *State Social Security Institute*. This information covers health insurance, pension and disability benefits, accident insurance benefits and unemployment insurance benefits. The information is rather detailed concerning various transfer payments. Nevertheless, it is necessary to estimate the share of the compensation of employees of that part of government final consumption which has its origin in this sub-sector. That is derived from the Pay-as-you-earn Register.

On basis of these accounts of central and local governments and the social security system, an overall summary of incomes and expenditures is compiled and grossed up when needed, following the Pay-as-you-earn Register. The gross output of general government is defined from the cost side as the sum of:

- Compensation of employees
- Purchases of goods and services, excluding capital expenditure

- Consumption of fixed capital
- Taxes less subsidies on production

The sum of these cost components equals the total output of government. Only a tiny proportion of the output is goods and services sold on the market. That part is subtracted from the output to estimate final consumption of general government.

From the above sources the production accounts are constructed. So far only one production account of government units is processed for each of the sections L, M and N. In fact it is assumed that the cost structure of government units is the same for each of this section and this cost structure is derived from the sector account for the government sector. The grossing up is based on Pay-as-you-earn Register after the addition of employers' social contribution as described in section 4.7 below. Market activity in each of these sections is added to the government units to reach the total. Only the total is published, not the distinction between government and market activity. The use of the concepts market or non-market activity is not fully consistent with government and private because within some of the government units there exists activity which is market oriented.

#### 3.18.3 Statistical adjustments to the government accounts

With the exception of consumption of fixed capital the above items are obtained from the various government annual accounts as described above. Consumption of fixed capital does not appear in the State Account or in the local authority's accounts and therefore this item has to be estimated explicitly for national accounting purposes. Another item specially estimated for national accounting purposes is the imputed social contribution to employee pension funds and the distinction between current and capital expenditure. Therefore there are three adjustments made to the conventional government accounts for national accounts purposes. These are:

- 1. Consumption of fixed capital
- 2. Imputed social contribution to The Civil Servants' Pension Fund
- 3. Distinction between current or capital expenditure

These three adjustments will be further described in turn.

#### Consumption of fixed capital in the central government account

In the government accounts fixed assets are not depreciated so from this source there is no information available on the consumption of fixed capital. For national accounts purposes other methods must be used. Here a use is made of the value of fixed assets covering the whole economy and with an adequate breakdown for the general government. These values are estimated by accumulating the annual gross fixed capital formation during the decades. Each year these values are revalued to the price level of the current year and from these values the consumption of fixed capital within the government account is calculated for use in the production account of the government. The depreciation method used is the geometric depreciation, i.e. the remaining value each year is depreciated by a constant percentage. The straight line method is not used. The depreciation rates for the main categories within the government account are as follows:

Table 3-19 Consumption of fixed capital in the government accounts

		Implicit service
		live in years,
	Depreciation	assuming residual
	rate	value of 10%
Government buildings	2.5%	88
Roads, streets, bridges etc.	3.0%	73
Software	20.0%	10
Office equipment, furniture etc.	15.0%	14

These methods might indicate a relatively long service live compared to the straight line method. However, it should be noticed that this depreciation pattern implies that the depreciation is highest at the beginning of the usage of the assets and in fact the depreciation does not end when the 10% remaining value is reached but it continues indefinitely.

For the year 2005 consumption of fixed capital on roads, streets, bridges etc. amounted to 4.44 billion kronur out of the 112.77 billion kronur of the total government final consumption. In percentage terms the share was 3.9%.

#### Imputed social contribution to The Civil Servants' Pension Fund

The imputed social contribution from the central government to The Civil Servants´ Pension Fund is another adjustment made to the government accounts for national accounts purposes. The Civil Servants´ Pension Fund is considered to be an institutional unit because it has a separate board of directors, separate accounts and decision-making autonomy. The Fund is practically operated in two divisions, A-division and B-division. The A-Division was established in 1997 and employees hired from that time are all members of the A-division. The premiums to and payments out of these two divisions differ considerably and therefore they are described separately.

#### **B-Division**

The statutory contribution of the employer and the employees into the B-Division of the Civil Servants' Pension Fund is 6% and 4% respectively of the total wages and salaries. Additionally the employer has to pay 2% extra contribution to a separate pension fund, individually owned by each employee, so in most cases the actual payment is 8+4%.

The pension liabilities of the Central government to their employees in the B-Division exceed considerably the statutory payments of the 8+4% so it is under funded. According to the accruals principle of national accounts, additional contributions have to be imputed and questions rise how to estimate these imputations and record them in the government account. Prior to the revision of national accounts in 1994, these additional contributions were not included in compensation of employees. Instead pensions payable during the same year were registered as current transfers since they were related to wage payments in earlier years. Obviously this approach greatly underestimated the wage component in the government final consumption as well as total government output and final consumption expenditure. A decision was therefore taken to revise the recording of the pension liabilities of the central government in the national accounts. This has been done by calculating an additional imputed pension contribution as a fixed percentage of wages. In recent years this addition has amounted to around 17% of wages so the total pension liabilities are in the size of 25% (6+17+2). The employee's share of 4% is not included. This addition amounted to 244.7 billion ISK in 2005. This imputation is included in the compensation of employees and therefore the government final consumption and GDP increased by this amount.

In estimating the size of the imputation it was considered to be unsatisfactory to use the unfunded pensions actually payable by the government during the same year as an appropriate substitute as suggested in SNA, paragraph 7.46. Instead an attempt was made to impute the additional pension liabilities on accrual basis and for current employees only. The imputations were estimated in such a way that these imputations together with actual payments were equal to the future liabilities of the Fund, taking into account interest income received by the Fund. The result was that these imputations were of considerable magnitude. They are based on annual actuarial computations made by experts hired by the Ministry of Finance. As an indication of size a comparison can be made with the A-Division of the Fund.

Table 3-20 Social contribution to The Civil Servants' Pension Fund, 2005

% of wages and salaries	A-Division	B-Division
1. Statutory contribution	15.5	10.0
1.1 Employer's contribution	11.5	6.0
1.2 Employee's contribution	4.0	4.0
2. Employer's extra contribution, conditional	2.0	2.0
3. Total (3.=1.+2.)	17.5	12.0
4. Imputed pension liability of employer		17.0
5. Total (5.=3.+4.)	17.5	29.0

#### **A-Division**

The A-Division was established in 1997. The total contributions of employers and employees to the new system are set as 15.5% (11.5+4.0) of total wages and salaries, excluding the 2% extra contribution, and are meant to be sufficient to meet the future pension benefits without further obligations of the employers like in the former system. The contributions in the B-Division system are 6+4%, excluding 2% extra contribution, as mentioned before and to this is added the imputed liabilities of 17% which makes the total 27% +2% extra contribution. The difference of 15.5% in the A-division and 27% (6+4+17%) in the former system is mainly explained by the fact that pension from the B-Division system is wage indexed but price indexed in the new A-division.

These imputations are added to the compensation of employees and they are meant to take into account the future liabilities the employer has to pay on behalf of the present employees. Consequently compensation of employees and the government final consumption increases.

It is quite clear that the imputed pension contributions are components of compensation of employees like the statutory contributions. In the Treasury's account these imputations are recorded among expenditures and debts. However, no formal securities are issued and in the Financial Accounts of the Civil Servants' Pension Fund these obligations of the central government are a memorandum item but not registered as a part of the ordinary assets of the Fund. Discussions have taken place for central government to issue formal securities and deliver it to the Fund, but so far no such decision has been made. However, in the last few years the central government has reduced its debt to the Fund by paying considerable sums to the Fund out of current income.

In the accounts of central government at least two alternative methods are worth considering when the imputed additional pension contribution is recorded. They are:

#### Method A:

Since the revision of the national Accounts in 1994 the National Economic Institute (NEI) had in fact recorded these imputations like statutory contributions. This means that these imputations have directly influenced the government deficit and should also increase the government debt. The present method can be justified by the fact that the imputation is of a more formal character than just an "imputation" because it is formally recorded in the operating account and the balance sheet of the State Accounts.

#### Method B:

Although method A is the present method it is not clear whether this method is the most appropriate procedure. Another possibility seems to be to treat these imputations as it is recommended in paragraph 7.47 in SNA. In this case the additional actual payments are recorded as current transfers with a direct impact on the government deficit. However, the imputations have no impact because the imputations in question are received by the employees as part of their compensation but they are paid back to the central government as the same amount of imputed social contributions (as current transfers), as they were paying them to a separate social insurance scheme. This method has a crucial impact on central government deficit and debt because the imputation does not increase government deficit nor government debt, as the present method does. This method was rejected by National Economic Institute at that time and Statistics Iceland is of the same opinion.

At the beginning the method A was only followed for the central government account. In March 2007 these same methods were finally fully implemented for local governments.

#### Distinction between current or capital expenditure

The government records of purchases of goods and services broadly correspond to intermediate consumption as defined in national accounts. Nevertheless, some major deviations exist. Of vital importance is the treatment of purchases of producer durables.

During the years 2004-2007 a special committee was working on reclassification of all expenditures of central and local governments. The committee was represented by officials from Statistics Iceland, Ministry of Finance, Financial Management Authority and Icelandic National Audit Office. This committee considered both the revision of the COFOG classification and the classification of expenditure by economic type thereby enabling more reliable distinction to be drawn between current and capital expenditure. The distinction between intermediate consumption and current transfer was also of major concern in the work of the committee. In the State Accounts the borderline between current and capital expenditure lies at a much higher level than in the ESA 95 recommendations. Therefore the current expenditure might be overestimated to a some degree and the capital expenditure underestimate by the same amount. In the use of the State Accounts in national accounting this discrepancy is only corrected in some vital cases like maintenance of roads etc. The work of the committee was completed at the beginning of 2007 and the result was implemented in national accounts in the March version 2007. The work of this committee was a big step forward in classification of government expenditure by economic type especially in making distinction between capital and current expenditure but also in distinguishing between intermediate consumption and current transfers.

## 3.19 Education (NACE Rev.1 M)

See section 3.18

# 3.20 Health and social work (NACE Rev.1 N)

See section 3.18

# 3.21 Other community, social and personal service activities (NACE Rev.1 O)

NACE O is defined on the basis of a grouping of producer units and consists of 19 of the national accounts' 371 industries. As the table below shows, this section is accounted for 3.9 percent of the value added of the Icelandic economy in 2005. This section consists of a great variety of activities, both market and non-market activities. These are activities like sewage and refuse disposal, business and employers organisations, recreational, cultural and sporting activities, radio and television, washing and dry-cleaning, hairdressing and physical well-being activities.

Table 3-21 Output, intermediate consumption and value added in other community, social and personal services 2005

Million ISK		Intermediate	Value added,
	Output	consumption	basic prices
90 + 91 + 92 + 93 + 95 + 98 Other community, social and personal serv.	73,905	40,649	33,241
As % of total economy	3.90	3.93	3.87
90 Sewage and refuse disposal, sanitation and similar activities	7,813	4,841	2,972
90.0 Sewage and refuse disposal, sanitation and similar activities	7,813	4,841	2,972
91 Activities of membership organization n.e.c.	19,087	10,842	8,246
92 Recreational, cultural and sporting activities	36,543	19,729	16,801
92.1 Motion picture and video activities	7,888	6,377	1,508
92.11 Motion picture and video production	5,699	4,583	1,114
92.12 Motion picture and video distribution	562	487	74
92.13 Motion picture projection	1,627	1,306	320
92.2 Radio and television activities	8,490	5,500	2,981
92.3 Other entertainment activities	5,129	2,077	3,052
92.31 Artistic and literary creation and interpretation	4,439	1,678	2,761
92.32 Operation of arts facilities	276	161	115
92.33 Fair and amusement park activities	_	_	_
92.34 Other entertainment activities n.e.c.	415	238	176
92.4 News agency activities	64	28	36
92.5 Library, archives, museums and other cultural activities	4,004	1,519	2,485
92.6 Sporting activities	6,293	1,946	4,347
92.7 Other recreational activities	4,674	2,282	2,392
92.71 Gambling and betting activities	3,831	1,610	2,221
92.72 Other recreational activities n.e.c.	843	672	171
93 Other service activities	9,742	5,206	4,533
93.0 Other service activities	9,742	5,206	4,533
93.01 Washing and dry cleaning of textile and fur products	1,837	821	1,015
93.02 Hairdressing and other beauty treatment	3,784	1,848	1,934
93.03 Funeral and related activities	351	251	100
93.04 Physical well-being activities	3,583	2,218	1,365
93.05 Other service activities n.e.c.	187	68	119
95 Private household with employed persons	720	31	689
97 No activity	_	_	_
98 Unspecified activity	-	_	_
99 FISM	_	_	_

The statistical sources underlying the national accounts calculations for NACE O depend on whether the activity is market or non-market. In the case of market activity the Enterprise Accounts Register is the main data source and the grossing up is based on the Pay-as-you-earn Register. Often this grossing up is of minor importance and in recent years this grossing up has decreased after the coverage of incorporated enterprises in the Enterprise Accounts Register.

In the case of non-market activity the data sources are more problematic. Many units in this activity are classified as NPISHs and most frequently they do not provide financial accounts to the tax authorities. Therefore these accounts are sometimes collected directly from the operating units. In other cases the operation is supervised by the *Icelandic National Audit Office* where the accounts are easily accessible for the national accounts purposes. However, in both these cases the samples are small and therefore the grossing up is high. Often the sample is also based on some outdated figures. The quality of these estimates of non-market activities is not good enough but it is the intention of Statistics Iceland to improve the collection from these data sources, especially in connection with the construction of the sector account for NPISH. The grossing up of non-market activity is mainly based on the Pay-as-you-earn Register.

# 3.22 Private households with employed persons (NACE Rev.1 P)

The section P of NACE consists of only one division on 2 digit level, the Division 95, Private households with employed persons. The size of this industry is trivial and the output in 2005 was estimated as 600 million ISK. By convention the intermediate consumption of this industry is zero so the value added and compensation of employees is the same amount as output or 0.07% of GDP.

The industry is defined in such a way that only persons who are in employment relationship with the household are included. Occasional payments by households to cleaners, window-cleaners etc. are not recorded here but constitute purchases of services from traders falling within other industries.

The industry is here restricted to home help and other paid labour for domestic tasks, e.g. cleaners. No income of this type is reported to tax authorities so all this activity is a part of the hidden economy. It is assumed that around 5% of all homes in Iceland are hiring such employees. That makes around 5000 homes and each one is paying 10 thousand kronur per month which adds up to 600 million ISK. It is assumed that income in kind, like food and accommodation is included in the remuneration paid to the employed staff. This is all an educated guesswork. Statistics Iceland has recently incorporated this item on the production side. Further investigation is needed here but this item is of trivial importance.

# 3.23 Treatment of extra territorial organisations and bodies (NACE Rev.1 Q)

The operation of the NATO base at the Keflavik Airport and international organizations within the borders of Iceland are not part of Iceland's economic territory. The output of these organizations is not included in Icelandic GDP. Before its closure in the autumn of 2006, the NATO base was the single most important extra territorial body. During the last years of its operation some 700-800 Icelandic employees were employed at the base. Other important extra territorial bodies are foreign embassies in Iceland. The wages and salaries which these units pay to Icelandic residents are included in Iceland's GNI via the balance-of-payments items for wages and salaries from the rest of the world. The Central Bank of Iceland keeps a complete and up-to-date register of extra territorial enclaves in the country and territorial enclaves abroad.

## 3.24 Taxes on products, excluding VAT

Taxes on products are taxes which are payable on goods or services which are produced or form part of transaction. These taxes are normally volume or value linked as a specific percentage of the value of goods or services. In distinguishing between a tax and a purchase of a service Statistics Iceland has endeavoured to adopt the following general guidelines in ESA 1995 and the GFSM 2001:

- 1. Sale of a product that can be sold further to third party is classified as a sale
- 2. Sale of compulsory services (product) which require production cost (not out of all proportion of sale) is seen as sale of services
- 3. Other levies on products than those mentioned in 1. and 2. are seen as tax

Adjustments are made to take into account the amount of taxes on products, including VAT, unlikely to be collected. These amounts are neutralised in the same accounting period by assessing the amounts recorded by a coefficient to reflecting the assessments never collected. The neutralisation is done on the revenue side to keep the level of total revenue and expenditure correct.

Value added tax is a one type of taxes on products and in fact the most important one. That tax will be dealt with in section 3.25. Other taxes on products are taxes and duties on imports and other taxes on products covering the remaining part.

Table 3-22 Taxes on products excluding VAT, 2005

	Million ISK
Taxes on products excluding VAT	53,635
% of GDP	5.2

The table below shows the breakdown of these taxes. The taxes are fully consistent with the State and local authorities' accounts and as far as applicable the accrual principle is followed in these accounts. The breakdown shows that apart from VAT, the excise duties are the most important type of taxes on products. The settlement period of that tax is up to two months and the assessment of the last period of the year is completed before the middle of March. That assessment is recorded as tax belonging to the previous year. Included in the assessments are non-collected excise duties. Comparable corrections are made at the beginning of the year.

Table 3-23 Breakdown of taxes on products, excluding VAT 2005

1 /	8
	Million ISK
Stamp duties	9,073
Excise duties, general	3,790
Excise duties on motor vehicles	10,391
Excise duties on fuel	2,356
Special excise duties on petrol	6,342
Excise tax on oil	1,703
Excise duties on liquor	7,111
Excise duties on tobacco	3,773
Environmental taxes on specifies goods	1,478
Transportation equalisation duties	404
Excise duties in agriculture	793
Inspection fees	57
Inspection fees on electricity	46
Harbour excise duties	1
Various excise duties	95
Supervision fee of the Financial Supervis. Authority	300
Prevention fee	799
Fire prevention fee	202
Airport fee	864
Import duties, general	3,520
Import duties, other	19
Manufacturing fee	380
Inspection fees on electricity power plants	138
Taxes on products, total	53,635

The most important items of taxes on products are excise duties on motor vehicles, taxes on financial and capital transaction, i.e. stamp duties and excise duties on imported fuel. Profits of fiscal monopolies, like trade in alcoholic beverages and tobacco, are also recorded as taxes on products.

Import duties paid at home by both residents and non-resident units are recorded.

## 3.25 Value added tax (VAT)

Like other taxes on products, VAT is recorded on an accruals basis. VAT is derived from the State Accounts and the VAT presented in national accounts is fully consistent with the amount presented in the State Accounts. In estimating VAT on an accrual basis a notice is taken of the settlement

period of the tax which is two months. Tax assessment, including non-collected tax, for the last period, November and December, is completed before the middle of March and that amount is recorded in the previous year. Comparable corrections are made at the beginning of the year. In 2005 the VAT amounted to 113.9 billion ISK or 11.1% of GDP as shown in table 3-24.

**Table 3-24 VAT 2005** 

	Million ISK
VAT	113,897
% of GDP	11.1

In the Icelandic national accounts VAT is recorded net according to international standards. That means that output of goods and services and imports are valued exclusive of VAT on outgoing invoices and purchases of goods and services are recorded inclusive of non-deductible VAT.

Compared with some other countries the Icelandic VAT system is relatively simple in the sense that there are only three rates. Before March 2007, the standard rate was 24,5 percent, a 14 percent rate on food, books and newspapers, radio and TV subscription and accommodation and a 0 percent rate for certain product groups like exported goods. The 14% rate was reduced to 7% from March 2007. In addition some activities do not have to register for VAT, i.e. they do not collect outgoing VAT on their sales and cannot deduct incoming VAT from their purchases. Non-market producers like government units belong to this last group and some market producers of which the financial services are the most important ones.

In the VAT system there exist some repayments of VAT to non-taxable units for their exempt activity. Most of these repayments relate to activities of local governments and they are recorded as transfers from the central government to the local governments. Examples of this type are: sewage and refuse disposal, building-cleaning activities, snow removal from roads etc, the services from engineers, technologists, architects, lawyers, certified public accountants and other experts who provide services to business activity.

The VAT recorded in the Icelandic national account is derived directly from the State accounts. Another possibility is to calculate theoretical VAT from the tax base as observed from the national accounts provided that all actors in the economy have paid VAT as the legislation states that they should.

A rather simplified comparison of theoretical and actual VAT has been undertaken several times in Iceland. The most recent one was undertaken in October 2003 by Statistics Iceland. This comparison was undertaken after a request from a committee appointed in 2002 by the Minister of Finance to conduct a study on tax evasion. Final result of this comparison indicates similar results as before i.e. that calculated VAT is higher than VAT actually collected. The difference varies by years from 1% to 13% during the period 1997-2002.

Table 3-25 VAT calculated from NA data and VAT receipts actually collected 1997-2002

Million ISK	1997	1998	1999	2000	2001	2002
VAT receipts actually collected	51.721	60.209	71.261	74.106	74.048	78.272
VAT calculated from NA data	57.828	64.703	71.747	77.446	83.639	87.107
Difference as % of VAT receipts	11,8	7,5	0,7	4,5	13,0	11,3

The difference cannot entirely be explained by tax fraud. It is also affected by the methods of calculation which could easily overestimate the VAT-base whereas the exemptions from VAT could be more than assumed in the calculations. In this case the VAT base would be lower and the difference less than calculated here. The uncertainty is definitely in this direction although it is not quite clear how much it will affect the result.

Finally it is also worth mentioning that some of the difference can also be explained by some overestimation of the national accounts figures as derived from the expenditure side. This

possibility cannot be totally ruled out but it is less likely now than in previous periods after the implementation of the balancing procedure between output and expenditure approaches in 2002 for data back to 1997.

## 3.26 Subsidies on products

Subsidies on products are paid as a fixed or variable contribution per quantity or unit of value on the manufacture, sale or intermediate consumption of a certain product. Other subsidies are classified as other subsides on production.

Table 3-26 Subsidies on products 2005

	Million ISK
Subsidies on products	9,492
% of GDP	0.9

Some borderline cases may arise between a subsidy and a social transfer. The main distinction made is that subsidies are considered as current transfers to enterprises but social transfers are considered as current transfers to households to meet certain social risks.

Table 3-27 Breakdown of subsidies on products 2005

	Million ISK
1. Agriculture	7,054
1.1 Direct product linked subsidies on milk	4,163
1.2 Direct product linked subsidies on lamb	1,582
1.3 Direct product linked subsidies on horticulture	200
1.4 Price transfer payments on milk	276
1.5 Equalization payments on lamb	116
1.6 Levy on purchase of production entitlements	64
1.7 Fodder fund	501
1.8 The Agricultural Productivity Fund	25
1.9 The Horticultural Fund	6
1.10 The Horticultural Fund	120
1.11 Purchase of production entitlements	1
2. Transportation Fund of Oil products	404
3. Wool subsidies	378
4. Subsidies to ferries and concessionaires	698
5. Subsidies to domestic flight	141
6 Deposit fees for recycling	817
Subsidies on products, total	9,492

Table 3-27 shows a detailed breakdown of subsidies on products in the national accounts for 2005. The single biggest items in this category are product linked subsidies to farmers. These payments are not totally volume linked but they are so linked to volume that they can be classified as subsidies on products.

As required by ESA95 subsidies on products are recorded on an accrual basis as far as possible. However the main source of information is the government accounts and in many cases subsidies are recorded when actual payments are paid and recorded in these accounts, often in the second year.

Table 3-28 Overview on production approach by industry and information on grossing up

		T Troduction appro	I I I I I I I I I I I I I I I I I I I	T	
NACE	% of total GVA		Additional	Grossing up	
Rev.1	2005	Main sources	sources	factors	Comments
A	1,47	Business accounts compiled by Agricultural Economic Institute	EAR, information from Farmers Association of Iceland	The coverage of the business accounts is low or 25% due to a small sample in "traditional farming"	Grossing up done for units not covered by the sample. Source for grossing up: agriculture production statistics (Farmers Association of Iceland)
В	5,52	Operating accounts of fishing establishments	EAR, information from Directorate of Fisheries, Institute of Freshwater Fisheries	The coverage of EAR is 63%.	Grossing up via total value of catch (from Directorate of Fisheries).
С	0,10	See D	see D	The coverage of EAR is almost complete.	
D 15.2	1,99	EAR	Tax data and direct establishment information	The coverage of EAR is: freezing plants 21% of production, salting 69%, fish meal and oil factories 52%, fresh fish export 36%.	Grossing up with export data on processed fish
D excl. 15.2	8,27	EAR	Information from Farmers Association and Milk Producers Association	The VAT Register is used for all industries. The coverage (sample size) of EAR is 99%.	
Е	3,25	Company accounts	Production statistics	No grossing up needed in electricity and hot water supply. Grossing up in cold water supply 54%. The grossing up in Section E below 2%.	
F	8,30	EAR		In 2004 information on unincorporated enterprises became available which enables revision of the size levels.	
F 45.49	1,26	Info on hours worked on own account construction (Agricult. Econ. Inst., Institute of Labour Market Research), Building Research Institute		Grossing up factor is approximately 8% and is assumed to be "black" work of own account construction and repair work and other concealed work.	
G	11,07	EAR	VAT Reg., Competition Investigation Agency, PR	Grossing up factor for ISAT 50: 1%; for ISAT 51: 1%; for ISAT 52: 25%.	VAT register main source for grossing up, some info on trade margins (Competition investigation agency), payroll register for unincorporated enterprises
Н	1,55	EAR	VAT Reg., PR	The grossing up factor is 6%, except in activity 55.2 where the grossing up factor is 53%. Changes in paired comparisons of enterprises is used to determine activity 55.2	
I	6,31	EAR	VAT Reg., PR, local and central govt. acc., Union of Local Authorities.	Grossing up via VAT Register amounts to 3%. When VAT Register is not applicable a use is made of PAYE Register	
J	9,24	Company accounts collected by Financial Supervisory Authority		Grossing up factor 3%	

K excl. 70.20.1	10,24	EAR except 70.20.1		Grossing up factor for ISAT 70: 2%; 71: 4%; for ISAT 72: 1%; for ISAT 73: 64%; for ISAT 74: 2%.	
K 70.20.1	6,79	SI's 1999 rent survey, Land registry		Total number of dwellings in each stratum.	
L	5,84	Government accounts, State Social Security Institute	Union of local authorities, PAYE register	The size of the accounts was adjusted according to PAYE+employers 'social contribution	
M	5,38	Government accounts, State Social Security Institute	Union of local authorities, EAR and PAYE register for market production	Share of market production 26,8%	Market production compiled with EAR. Grossing up for units not covered by EAR via PAYE-register.
N	9,78	Government accounts, State Social Security Institute	Union of local authorities, EAR and PAYE register for market production	Share of market production is 40,3%. Sample size for 85.13 is 74% and for 85.2 is 38%. For market production a use is made of paired comparison of enterprises' accounts.	Market production compiled with EAR. Grossing up for units not covered by EAR via PAYE-register
О	3,56	EAR	Directly collected accounts for NPISH units	Sample size for 92.1 = 98%, 92.2 = 99%, 93 = 94%.In grossing up the main source is the VAT register except for fitness centers where PAYE Register is used.	
P	0,08	Educated guesswork		Activity considered irrelevant in Iceland, mainly hidden	
FISIM		Central Bank and Financial Supervisory Authority		No grossing up. Figures from CBI and FSA are of complete coverage	
Total	100,00				

Enterprise Accounts Register Payroll Register Pay- As -You-Earn register

EAR PR PAYE

# Chapter 4. The income approach

# 4.0 GDP by income approach

The accompanying table shows Iceland's GDP divided into income components for the year 2005. In that year compensation of employees amounted to 51% of GDP at market prices. In basic prices it amounted to almost 60%. In fact all these income components, GDP(I), are derived from the production approach, GDP(P), after the balancing procedure of the expenditure approach, GDP(E), and the production approach as further described below.

Table 4-1 GDP, income approach 2005

	Million ISK	% of GDP
1. Gross Domestic Product	1,026,397	100.0
2. – Taxes on products	167,532	16.3
3. + Subsidies on products	9,492	0.9
4. = GDP at basic prices	868,357	84.6
5. Other taxes on production	28,501	2.8
6. Other subsidies on production	11,227	1.1
7. Compensation of employees	588,106	57.3
8. Gross operating surplus and mixed income	262,977	25.6
8.1 Consumption of fixed capital	149,855	14.6
8.2 Operating surplus, net	113,122	11.0

The cost components of GDP as shown in Table 4-1 can be broken down further by activity. This breakdown is shown in Table 4-2 on NACE 2-digit level. Due to some time lag in producing these tables the figures do not fully correspond to each other but Table 4-2 shows a slightly revised version.

Table 4-2 GDP by cost components 2005

Million ISK		Gross		Net	Compens-	
		domestic		domestic	ation	Operating
	Value	factor	Depre-	factor	of	surplus
	added	income	ciation	income	employees	net
01 Agriculture, hunting and related service activities	12,642	12,662	4,775	7,887	4,153	3,734
02 Forestry, logging and related service activities	33	33	14	19	45	-26
05 Fishing, operation of fish farms; service activities incidental to fishing	41,166	41,166	9,482	31,685	29,352	2,333
14 Other mining and quarrying	875	875	118	756	531	226
15 Manufacture of food products and beverages	30,826	31,509	4,991	26,518	30,254	-3,736
16 Manufacture of tobacco products	1,294	1,294	99	1,195	1,249	-55
17 Manufacture of textiles	124	124	15	109	130	-22
18 Manufacture of wearing apparel; dressing and dyeing of fur	_	_	_	_	_	_
20 Manufacture of wood and of products of wood	17	17	3	14	15	-0
21 Manufacture of pulp, paper and paper products	_	_	_	_	_	_
22 Publishing, printing and reproduction of recorded media	5,008	5,008	576	4,432	5,271	-839
24 Manufacture of chemicals and chemical products	927	927	181	746	507	240
25 Manufacture of rubber and plastic products	332	332	36	296	311	-16
26 Manufacture of other non-metallic mineral products	472	472	53	419	389	30
27 Manufacture of basic metals 28 Manufacture of fabricated metal products,	-	_	-	-	_	_
except machinery and equipment	676	676	64	613	598	15

29 Manufacture of machinery and equipment n.e.c.	37	37	3	34	21	13
30 Manufacture of office machinery and computers	-1	-1	1	-2	1	-3
31 Manufacture of electrical machinery and apparatus n.e.c.	114	-1 114	3	111	120	-3 -8
32 Manufacture of radio, television and communication equipment and apparatus	-	-	_	_	-	_
33 Manufacture of medical, precision and optical						
instruments, watches and clocks	1,547	1,547	118	1,429	1,376	53
34 Manufacture of motor vehicles, trailers and semi-trailers	_	_	-	_	_	_
35 Manufacture of other transport equipment	2,383	2,383	149	2,234	2,165	69
36 Manufacture of furniture; manufacturing n.e.c.	1,637	1,637	158	1,479	1,351	127
37 Recycling	389	389	80	309	204	105
40 Electricity, gas steam and hot water supply	19,655	19,706	8,708	10,999	7,108	3,891
41 Collection, purification and distribution of water	2,201	2,201	736	1,465	385	1,080
45 Construction 50 Sale, maint. of motor vehicles and motorcycles;	3,448	3,448	621	2,826	2,306	521
retail sale of automotive fuel 51 Wholesale trade and commission trade,	16,156	16,156	890	15,266	10,602	4,664
except of motor vehicles and motorcycles 52 Retail trade, except of motor vehicles;	36,053	36,053	4,619	31,434	27,236	4,197
repair of personal and household goods	43,211	43,211	5,166	38,046	36,164	1,882
55 Hotels and restaurants	13,533	13,533	1,822	11,711	12,250	-539
60 Land transport; transport via pipelines	8,434	8,434	1,679	6,755	4,726	2,029
61 Water transport	3,796	3,796	1,065	2,731	5,523	-2,792
62 Air transport	10,286	10,286	2,302	7,984	12,722	-4,737
63 Supporting and auxiliary transport activities;	10.012	10.012	2,116	9.709	7.600	1,099
activities of travel agencies 64 Post and telecommunications	10,913 19,391	10,913 19,391	5,420	8,798 13,971	7,699 11,170	2,801
65 Financial intermediation,	19,391	19,391	3,420	13,971	11,170	2,001
except insurance and pension funding 66 Insurance and pension funding,	65,714	65,557	1,803	63,754	27,686	36,068
except compulsory social security	7,087	7,087	406	6,681	6,587	94
67 Activities auxiliary to financial intermediation	2,616	2,616	46	2,570	1,045	1,525
70 Real estate activities	86,004	78,397	46,850	31,547	3,590	27,957
71 Renting of machinery without operator and of personal and household goods	2,170	2,170	825	1,345	1,302	43
72 Computer and related activities	13,685	13,685	970	12,715	11,761	954
73 Research and development	4,199	4,199	942	3,257	7,151	-3,894
74 Other business activities	43,785	43,785	3,362	40,423	35,871	4,552
75 Public administration and defence;	,	,,	-,	,	,-,-	-,
compulsory social security	49,737	49,737	5,189	44,548	44,548	_
80 Education	45,764	45,764	5,147	40,617	39,887	730
85 Health and social work	84,116	84,116	8,160	75,957	72,930	3,027
90 Sewage and refuse disposal, sanitation and similar activities	3,000	3,000	612	2,388	2,150	238
91 Activities of membership organization n.e.c.	8,174	8,174	939	7,235	7,593	-358
92 Recreational, cultural and sporting activities	16,879	16,879	2,607	14,273	13,232	1,041
93 Other service activities	4,563	4,563	438	4,125	3,591	534
95 Private household with employed persons	689	689	_	689	_	689
97 No activity						
98 Unspecified activity	_	_	_	_	_	_
Total	858,415	851,404	147,812	703,592	581,696	121,896
II Correction item, taxes and subsidies on product	10,263					
III Gross value added, basic prices	868,678	851,404	147,812	703,592	581,696	121,896
IV Taxes on product	167,532					
V. Less: Subsidies on product	9,492					
VI Gross value added, market prices	1,026,718					
VI For comparison: GDP, expenditure approach	1,026,718					
VII Statistical discrepancy	_					

### 4.1 The reference framework

The income approach defines the calculation of GDP as the addition of its various components, consisting of compensation of employees, gross operating surplus and other taxes on production minus other subsidies on production.

In Iceland's national accounts, GDP is not independently estimated using the income approach and there are no intentions to do so. The reason is that there do not exist any independent estimates of operating surplus other than that surplus derived from the output approach after all correction of the business accounts and the balancing procedure. Therefore, the individual cost components of the income approach are derived from the production approach where these components can be distinguished. By doing this the operating surplus becomes a residual instead of being calculated directly as the income approach assumes.

Although it is not the intention of Statistics Iceland to estimate GDP independently using the income approach SI is now working on institutional sectoring following ESA95's recommendations.

In this chapter the calculation of the various components of GDP will be briefly described. In many cases a reference is given to the production approach when the data originate from that source.

#### 4.2 Valuation

Compensation of employees and gross operating surplus are by definition estimated at factor cost. Gross operating surplus is calculated from an estimate of value added at basic prices, as calculated in the production approach. Consequently, there are no valuation problems specific to the income based estimate, contrary to the situation if operating surplus were directly estimated from the corporation and personal income tax returns. The reason is that the tax concepts of income from these returns are normally not for national accounts purposes and usually very different from national accounts concepts. These concepts can be adjusted according to the method described in Chapter 3.

The use of the output approach ensures that the transactions are on an accruals basis, not on a cash-basis.

# 4.3 Transition from private accounting and administrative concepts to ESA95 national accounts concepts

Here a reference can be given to section 3.3 above where these transitions were described for the output approach.

### 4.4 The roles of direct and indirect estimation methods

In principle all income components are estimated directly. The most important exceptions are owner-occupied dwellings and consumption of fixed capital relating to non-market output. For further description see section 3.4 above.

# 4.5 The roles of benchmarks and extrapolations

The compilation of Iceland's national accounts relies mainly on source statistics drawn up each year. The role of benchmarks and extrapolations in the current national accounts compilation is therefore quite limited. For further description see section 3.5 above.

# 4.6 The main approaches taken with respect to exhaustiveness

As a consequence of the fact that the income approach is not independently estimated, the approaches taken with respect to exhaustiveness are not undertaken independently from the income side. Instead exhaustiveness is determined from the output side; see section 3.6 above.

# 4.7 Compensation of employees

According the national accounts definitions compensation of employees must include all compensation to employed labour by resident producers, including benefits in kind, employers' social security contributions, such as the pension's liabilities, sickness, industrial injury and unemployment. Wages and salaries must also include payments in the form of commissions, fees, gratuities, retirement bonuses, wages and salaries in the form of productivity and other bonuses and benefits in kind comparable to cash. Any sickness insurance compensation obtained during sickness or maternity leave is deducted from wages and salaries.

Included in the cash amount of wages and salaries are social contributions, taxes on income, etc. payable by employer, even if retained by the employer and paid directly to the social security system, tax authorities etc. on behalf of employees.

In Iceland's national accounts Statistics Iceland strives to follow these definitions and the accrual principle is followed as far as possible in recording wages, salaries and employers' social contributions.

Wages and salaries in the form of benefits in kind consist of goods and services or other benefits offered free or at a lower price by employers and which employees may use at their leisure and discretion according to their own or their family's need. In most cases the tax rules are followed in estimating wages and salaries in kind. It might be argued that these rules are underestimating the actual value. Following the ESA manual wages and salaries in kind should be valued at basic prices if produced by the employer but at purchasers' prices if purchased by the employer. No such fine tuning is available.

A half of the business travel expenses are classified as payment for meals and drinks and therefore as wages and salaries in kind.

Table 4-3 Compensation of employees and wages and salaries 2005 Comparison between Enterprise Accounts Register and Pay-as-you-earn Register

Million ISK	Compensation of	Wages and	
	employees (COE)	salaries (WaS)	Ratio
	EAR Register	PAYE Register	EAR/PAYE
A-01 Agriculture and hunting	4,153	3,311	1.254
A-02 Forestry, logging and related service activities	45	269	0.167
B-05 Fishing	29,351	19,804	1.482
B-05 + B-15.2 Fishing and fish processing	46,561	40,336	1.154
C-14 Other mining and quarrying	531	436	1.218
D-15 Manufacture of food products and beverages	30,230	31,601	0.957
D-15.1 Production, processing and preserving of meat and products	3,952	3,380	1.169
D-15.2 Processing and preserving of fish and fish products	17,211	20,532	0.838
D-15.3 Processing and preserving of fruit and vegetables	243	193	1.259
D-15.4 Manufacture of vegetable and animal oils and fats	342	288	1.185
D-15.5 Manufacture of dairy products	2,259	1,805	1.252
D-15.6 Manufacture of grain mill products etc.	116	99	1.164
D-15.7 Manufacture of prepared animal feeds	709	575	1.234
D-15.8 Manufacture of other food products	3,816	3,373	1.131

D 15 0 M . C	1.500	1071	1 1 2 0
D-15.9 Manufacture of beverages	1,583	1,356	1.168
D-17 Manufacture of textiles	1,249	982	1.272
D-18 Manufacture of wearing apparel; dressing; dyeing of fur	617	528	1.170
D-19 Tanning, dressing of leather; manufacture of luggage	51	42	1.207
D-20 Manufacture of wood, products of wood, except furniture	1,588	1,161	1.367
D-21 Manufacture of pulp, paper and paper products	541	461	1.173
D-22 Publishing, printing, reproduction of recorded media	8,989	7,329	1.226
D-24 Manufacture of chemicals and chemical products	2,626	2,522	1.041
D-25 Manufacture of rubber and plastic products	1,942	1,633	1.189
D-26 Manufacture of other non-metallic mineral products D-27 Manufacture of basic metals	5,006	4,198	1.193
	5,375	4,545	1.183
D-28 Manuf. of metal products, ex. machinery and equipment	6,202	5,142	1.206
D-29 Manufacture of machinery and equipment n.e.c.	3,900 1	3,220	1.211 0.340
D-30 Manufacture of office machinery and computers D-31 Manufacture of electrical machinery & apparatus n.e.c.		4	
• • • •	1,003	732	1.369
D-32 Manuf. of radio, television and communication equipment	36	28	1.295
D-33 Manuf. of medic. & precision instrum., watches & clocks	1,592	1,447	1.101
D-34 Manuf. of motor vehicles, trailers and semi-trailers	238	196	1.216
D-35 Manufacture of other transport equipment	3,812	3,210	1.188
D-36 Manufacture of furniture; manufacturing n.e.c.	2,000	1,569	1.275
D-37 Recycling	297	243	1.223
E-40 Electricity, gas steam and hot water supply	9,156	6,872	1.332
E-41 Collection, purification and distribution of water	385	48	8.045
F-45 Construction	51,546	41,325	1.247
G-50 Sale, maintenance and repair of motor vehicles	10,556	9,348	1.129
G-51 Wholesale & commission trade, except of motor vehicles	27,261	23,677	1.151
G-52 Retail trade & repair of household goods, ex. motor vehicles	35,604	26,718	1.333
H-55 Hotels and restaurants	12,250	11,032	1.110
I-60 Land transport; transport via pipelines	5,232	3,733	1.402
I-61 Water transport	5,522	5,206	1.061
I-62 Air transport	13,462	10,392	1.295
I-63 Supporting transport activities; travel agencies	9,275	8,742	1.061
I-64 Post and telecommunications	11,169	9,030	1.237
J-65 Financial intermediation, ex. insurance & pension funding	32,514	27,406	1.186
J-66 Insurance & pension funding, ex. compulsory social security	6,587	3,134	2.102
J-67 Activities auxiliary to financial intermediation	1,015	2,334	0.435
K-70 Real estate activities	3,590	3,500	1.026
K-71 Renting of machinery and equipment	1,302	1,302	1.000
K-72 Computer and related activities	11,761	10,792	1.090
K-73 Research and development	7,126	6,077	1.173
K-74 Other business activities	37,495	29,041	1.291
L-75 Public administration; compulsory social security	44,548	38,253	1.165
M-80 Education	39,887	38,270	1.042
N-85 Health and social work	72,930	63,572	1.147
O-90 Sewage & refuse disposal, sanitation & similar activities	2,150	2,508	0.857
O-91 Activities of membership organization n.e.c.	7,590	6,506	1.167
O-92 Recreational, cultural and sporting activities	13,231	11,059	1.196
O-93 Other service activities	3,591	2,746	1.308
P-95 Private households with employed persons	_	3	_
No activity	-	24	_
Unspecified activity	_	237	_
Total all activities	588,106	497,500	1.182

The main sources of information are the Enterprise Accounts Register and the Pay-as-you-earn-Register. Section 3.1.2 above describes, among other things, which corrections are necessary to

adapt the EAR to national accounts definitions. These changes are also applicable here because the income components are derived from the production approach.

The PAYE Register is considered to be of complete coverage. Although incomes fall below the threshold for the payment of income tax they must be submitted to the tax authorities and recorded in the PAYE Register. No specific adjustments are made for tax evasion of compensation of employees. These adjustments are restricted to operating surplus. Included in the register are payments by resident employers to non-resident employees.

Statistics Iceland compares the two main sources of wages and salaries regularly. The first one and the main source is the compensation of employees as derived from the Enterprise Accounts Register. The other one are wages and salaries from the Pay-as-you-earn Register. The main results are presented in table 4-3. The third column of that table shows the ratio between compensation of employees and wages and salaries as presented in the Pay-as-you-earn Register. Before any comparison is made between these two sources it must be kept in mind that included in compensation of employees are employers' social contributions, both actual and imputed, mileage allowances and travel allowances. The social contributions differ between government employees and other employees, especially in the case of imputed pension liabilities of government employees but similar imputations do not exist in the private sector. Table 4-4 shows the composition of employers' social contribution in the government activity. According to these calculation the social contributions amounts to 21% and this is an addition to wages and salaries in government activity in order to approach compensation of employees. In addition to this a notice must be taken of the fact that a considerable under funding exists in the B-department of the Government pension fund as described in section 3.18.3 above. This has mainly been accounted for in table 4-4 by using 11.5% rate for both A and B departments, although the official rate in the under-funded Bdepartment is 6%.

Table 4-4 Employers' social contribution in Government and non-government sectors 2005

% rate on wages	Government sector	Non-government Sector
1. Pension funds	11.50	6.00
2. Social security contribution	5.73	5.73
3. Social security on pension funding	0.66	0.34
4. Private pension saving, employers' contribution	2.00	2.00
5. Social security on private pension	0.11	0.11
6. Diverse contributions, estimated	1.11	0.95
Total	21.11	15.14

In the non-government sectors employers' social contributions are considerably lower than in the government sector mainly owing to much lower contributions to the pension scheme. The general rate to the pension funds was 6.0% in 2005 and the overall social contribution was estimated 15.14%. In 2007 the pension rate payments were increased to 8%.

Finally, it must be emphasized here that the above mentioned percentage rates for social contributions are only used directly in the case of the government sector. For the non-government sectors these rates are only used directly in exceptional cases. In most cases the total compensation of employees are derived from the Enterprise Accounts Register and the components of social contribution are only used as a check when a comparison is made between wages and salaries from the Pay-as-you-earn Register and the compensation of employees in the Enterprise Accounts Register. The actual rate may vary by industries so such a comparison must be done by a care and some flexibility allowed. Another and even more important reason for gaps between these registers can be explained by discrepancy in classification of units in the registers. However the overall comparison between these two registers shows a difference of 18.6% and that seems plausible.

## 4.8 Other taxes on production and imports

Other taxes on production consist of all taxes for which enterprises are liable as a consequence of their production activities, irrespective of the quantity or value of the goods and services produced or sold. They may be paid on land, fixed assets or labour in the production process or on certain activities or transactions. The source of information is central and local government accounts. The time at which other taxes on production are to be recorded is when the taxable activities, transactions or other events occur and when their values have accrued or fallen due. In fact, government finances in Iceland have been on accrual basis since 1998. Adjustments are made to take account of other taxes on production and imports unlikely to be collected. This is done by means of coefficients, based on previous experience.

In distinguishing between a tax and a purchase of a service Statistics Iceland has endeavoured to adopt the following general guidelines in ESA 1995 and the GFSM 2001:

- 1. Sale of a product that can be sold further to third party is classified as a sale
- 2. Sale of compulsory services (product) which require production cost (not out of all proportion of sale) is seen as sale of services
- 3. Other levies on products than those mentioned in 1. and 2. are seen as tax

The various taxes listed under revenue headings 113 and 114 in table 4-5 are classified as taxes since little or no services (cost) is provided by the government in these activities and the government is first and foremost collecting revenue rather than providing services in these cases.

Table 4-5 Other taxes on production and imports 2005

Revenue		
heading	Name	Million ISK
112	Taxes on payroll and workforce	324
	Market fee to the Trade Council of Iceland	274
	Payroll tax earmarked for Occupational Safety	6
	Payroll tax earmarked for Icelandic Standards	38
	Payroll tax earmarked for IcePro	5
113	Recurrent taxes on land, buildings etc.	14,445
	Real estate tax	13,931
	Layout fee for new buildings	248
	Service fee to the Land Registry of Iceland	280
	Development fund's fee	-14
114	Business and professional licences	13,593
	Street construction charge	6,473
	Tax on vehicles' dead weight	3,918
	Mileage fee on vehicles	657
	Inspection fee for ships	172
	Registration fee	761
	Business licences	90
	Professional licences	16
	Various licences and certificates	102
	Inspection fees	741
	Other business and professional licences	663
116	Other taxes	140
	Production fee of aluminium	39
	Post and telecom administrat. equalisation fee	29
	Post and telecom administrat. operational fee	72
Total		28,501

With few exceptions, other taxes on production are not identifiable from the Enterprise Accounts Register but included in intermediate consumption. Real estate tax of dwelling services, activity 70.20.1, is the main exception but that tax is estimated separately and recorded in that activity. In 2005 that tax amounted to 7.6 billion ISK or just over 50% of the total real estate tax. Other taxes on production are unallocated by activity and the value added has to be corrected by subtracting

intermediate consumption and add the same amount to value added to reach basic prices. This correction is made on an aggregated basis for the whole economy not individual activity.

In 2005 the following revenue headings from the government income statistics were classified as other taxes on production and import:

Real estate tax is levied on the tax base of buildings or other structure utilised by enterprises in production. That also includes owner-occupied dwellings.

Street construction tax is a non-recurrent tax, levied on building sites by local government to prepare the sites for construction activity.

The tax on the use of business vehicles, inspection etc. is mainly payable on diesel powered vehicles annually. The tax depends on the vehicle weight. Also included here are those inspection charges which are tax characteristic.

Payments by households for licences to own or use vehicles are excluded. These payments are classified as other current taxes on income, wealth etc.

## 4.9 Other subsidies on production

Other subsidies on production consist of subsidies, apart from subsidies on products (see section 3.26), which resident producer units may receive as a consequence of involvement in production. These subsidies are not linked to the quantity or value of the goods and services produced or sold. For other non-market output, other non-market producers may receive other subsidies on production only in those cases in which such payments from general government are justified by general provisions applicable to both market and non-market producers. In implementing the classification rules for other subsidies on production the guidelines in ESA 95 are followed without any intended divergence. Examples of transactions not classified as other subsidies on production in Iceland are: current transfers to households, investment grants, transfers to cover accumulated losses, cancellation of debt with government etc.

The following expenditure is classified as other subsidies on production:

Table 4-6 Other subsidies on production, 2005

COFOG		_
heading	Description	Million ISK
140	The Icelandic Centre for Research	23
411	Icelandic Standards	37
411	Trade Council of Iceland	270
412	Guarantee Fund of wages and salaries	505
412	Job training	9
412	equal rights affairs	9
421	Agriculture Fund	250
421	Technical advice in agriculture	362
421	Horticulture, subsidies on electr. etc.	67
421	Farmers´ Pension Fund - milk	158
421	Farmers' Pension Fund - sheep etc.	866
421	Other subsidies in agriculture	119
423	Fish farming	62
435	Utilization of domestic energy etc.	30
442	Federation of Icelandic Industries	287
454	Flight between Iceland and Greenland	13
473	Tourism organisations and market support	37
0482/0483	Research in fisheries and energy	109
484	Research in manufacturing and construction	244

490	Regional development	354
490	Job creation and innovation in manufacturing	85
490	Subsidies to film production	307
0731/0760	Research in health	47
820	Icelandic Film Centre	170
820	Culture	418
941	Education	157
1020	Farmers' Pension Fund	2,630
451	Bus transport	997
451	Other traffic and transport	518
490	Social dwellings	99
	Other	1,832
	Interest subsidies	157
	Total	11,227

The data on subsidies are derived from government accounts with the exception of interest subsidies which are derived from the annual accounts of financial institutions. The interest subsidies are derived in such a way that if there is a deficit on the current account in any financial institution and that institution is in the same year receiving contributions from the government then the contribution is considered to be a subsidy to the extent necessary to eliminate the deficit. The remaining part of the contribution is classified as a capital transfer. On an aggregated level the total subsidies on production are obtained from the State Account but most of the subsidies are not yet allocated on industries. This allocation will be undertaken very soon, possibly with some impact on the total amount of subsidies on production.

# 4.10 Gross operating surplus

As a consequence of the fact that the income approach is not independently estimated in Iceland's national accounts, operating surplus is entirely derived from the production approach.

#### 4.11 Mixed income

Mixed income is the surplus or deficit accruing from production by unincorporated enterprises owned by households. It implicitly contains an element of remuneration for work done by the owner, or other members of the household, that cannot be separately identified from the return to the owner as entrepreneur but it excludes the operating surplus coming from owner-occupied dwellings.

At present mixed income is not distinguishable from operating surplus in Iceland's national accounts. However, it can be stated that this type of income has decreased considerably owing to the fact that both number and importance of unincorporated enterprises have decreased considerably in Iceland. These changes are motivated by more favourable tax rules for legal units than for unincorporated units.

# 4.12 Consumption of fixed capital

With one important exception the estimation of the consumption of fixed capital does not have a direct impact on the level of GDP. The exception is non-market activity where by convention output is calculated from the cost side and where the consumption of fixed capital is one of the cost components.

In Iceland, consumption of fixed capital in national accounts is calculated by means of two sources:

- Company accounts (Enterprise Accounts Register)
- Capital stock model

The company accounts as they appear in the Enterprise Accounts Register present depreciation of fixed assets following the rules of tax law or book-keeping practises. From national accounts' point of view these rules have various drawbacks as they allow some extraordinary depreciation, especially for the purpose of postponing tax payments. Nevertheless this source is the only one used in estimating or approximating consumption of fixed capital down to the 5 digit activity level and so far all breakdown of value added in this detail is based on that source.

Another and more sophisticated source of consumption of fixed capital is a direct calculation of the consumption from the capital stock. In that case capital stock is calculated from long investment series, price indices and presumptions about the formation of the survival/mortality functions and average service life. In Iceland, harmonized time series of gross fixed capital formation exist back to the year 1945. These series are classified by main type of assets but the activity breakdown is restricted owing to the fact that the main source of information was the import statistics. That source was detailed enough to give information of type of assets but not the activity of final use. Although the activity breakdown was limited, time series of capital stock have been calculated from 1945, based on perpetual inventory method (PIM-method) and consumption of fixed capital was a by-product. That by-product has been used on an aggregated level to reach at net domestic product and net national income. In the case of non-market producers and public infrastructure like roads and bridges the PIM method is the only method. The PIM method is carried out by means of the type of assets given in table 4-7. The service live by type of assets is definitely a matter of uncertainty so it is questionable if more detailed classification of type of assets will improve the quality of estimates. Thus the PIM method does not distinguish between bridges and roads. Lifetime assumptions were investigated last time in 2004. Then a notice was especially taken of the accounting rules and practices and a rather flexible tax rules.

The Enterprise Accounts Register was introduced in 1997. The Register became a new source of information on all statistics on fixed capital formation by activity and it replaced the use of import statistics. The consequences were that all gross fixed capital formation by activity down to 5 digit levels became much more reliable than before. At the same time, the new register also enabled compilation of data on capital stock by 5 digit activity level. However the value of that capital stock was based on the book keeping practises of the enterprises and this data could not be directly linked to the capital stock data already available. Therefore some harmonization work was necessary and in 2004 Statistics Iceland undertook such work which resulted in a publication in Statistical Series in August 2004, named Capital stock data 1997-2003. In that publication an attempt was made to reconcile the two series on capital stock. On the one hand, there was the old one based on annual gross fixed capital formation and calculation of capital stock by means of perpetual inventory method. On the other hand, there was the capital stock as recorded in the company accounts and the Enterprise Accounts Register. The harmonization work was undertaken on a two digit level and a thorough comparison made between the two sources for the year 1997. When large differences in level occurred an attempt was made to understand such differences for instance by comparing the rate of depreciation used in each source. In each case the level was decided from the source considered to be the most reliable each time.

When the level of the capital stock at the end of year 1997 had been determined the capital stock for later years was calculated by means of annual gross fixed capital formation and the perpetual inventory method. The current prices of each year were revalued to the following year by means of the most appropriate price index each time and the capital stock was recorded net, i.e. after the deduction of depreciation. Following the national accounts principles the capital should be valued at market prices each time. In Iceland, this is the case only for the fishing fleet and residential construction. In other cases the stock is valued at some approximated book value as valued in the balance sheets of the enterprises.

In connection with this harmonization work of the capital stock, the consumption of fixed capital was revised by slightly revising the rate of depreciation applied. Geometric depreciation was used in all cases.

From the rate of depreciation as presented in table 4-7 and provided that geometric depreciation is applied, the service live of the assets can be calculated. First the scrap value has to be decided and here it is given as around 10% of the original value of the asset.

Table 4-7 Service live and rate of depreciation by type of assets

	Geometric	Service
Type of assets	depreciation, %	live, years
Manufacturing machinery	12.5	17
Industrial buildings	4.0	55
Office buildings, dwellings, hotels, schools, etc.	2.5	88
Fishing vessels	6.0	37
Roads, streets and bridges	3.0	74
Electricity and water supply	5.0	44
Aircrafts	10.0	21
Computers, software and office mach.	20.0	10
Other office equipment	15.0	14
Harbours	5.0	44
Airports	3.0	75

Service lives as presented in table 4-7 seem to be very long in some cases. However, it must be kept in mind that geometric depreciation implies that the depreciation is very high at the beginning of the service live but falls sharply.

The figures on capital stock and consumption of fixed capital, which were revised in 2004 from 1997 as described above, have now been revised backwards to 1990. After that continuous time series exist back to 1990. However this revision is only available on a two digit level and therefore these series cannot replace the figures on depreciation in the Enterprise Accounts Register. These figures are still used in the production accounts at 5 digit level and in all aggregation. A comparison of these two series at an aggregated level is shown in table 4-8. There is a clear divergence in the development of these two series. In the company accounts the consumption of fixed capital has tripled from 1990 to 2005 but when the capital stock is used as a source the consumption has increased 1.8 times. At the beginning of this period the company accounts figures were around 20% lower than the capital stock estimates but at the end of the period the company accounts estimates were higher by a quarter than the capital stock estimates with the exception of the year 2006.

Table 4-8 Consumption of fixed capital according to business accounts and direct estimates from the capital stock

Million ISK	(1)	(2)	(3)
	According to the	Direct estimates from	Difference
	company accounts	the capital stock	(3) = ((1) - (2))/(2)
1990	51,261	65,611	-21.9%
1991	54,583	65,680	-16.9%
1992	55,737	64,310	-13.3%
1993	57,013	64,704	-11.9%
1994	58,245	64,813	-10.1%
1995	59,635	64,263	-7.2%
1996	64,716	64,370	0.5%
1997	69,093	63,677	8.5%
1997, revised base	71,749	63,677	12.7%
1998	79,772	67,602	18.0%
1999	94,097	75,364	24.9%
2000	106,538	81,071	31.4%

2001	116,581	93,426	24.8%
2002	123,919	98,451	25.9%
2003	129,723	101,043	28.4%
2004	139,798	107,572	30.0%
2005	149,855	119,618	25.3%
2006	162,352	145,403	11.7%

The difference in the developments of these series looks striking. A part of the difference may be explained by more flexible depreciation rates in the tax rules but it is also likely that other and higher price indices have been used for revaluing the company accounts to current prices than for revaluing the capital stock. But whatever the reason might be it is worth mentioning that in the case of market producers this kind of difference has no impact on the level of GDP, only the components of value added and GDP.

After all these comparisons it should be stressed that the figures actually used on the consumption of fixed capital are on one side based on direct estimates from the capital stock. That refers to all figures on aggregated level to reach at net domestic product and net national income. On the other side are figures by activity on the most detailed 5-digit level. These figures are derived from the company accounts as presented in the Enterprise Accounts Register for all market producers but for non-market producers the intention was to derive the figures from direct estimates. That has not fully succeeded as described in the following.

In the case of non-market producers the value of government final consumption is calculated directly from the cost side as the sum of the cost components where the consumption of fixed capital in the government sector is one of the components. Here the consumption of fixed capital has a direct impact on the level of GDP. In table 4-9 a comparison is made between the consumption of fixed capital used in the government sector accounts and direct estimates from the capital stock.

Table 4-9 Consumption of fixed capital in Government activity, comparison between government sector accounts and direct estimates from the capital stock

	(1)		
Million ISK	According to the	(2)	(3)
	government sector	Direct estimates from	Difference in
	accounts	the capital stock	(3) = ((1) - (2))/(2)
1990	6,540	5,886	11.1%
1991	7,367	6,609	11.5%
1992	7,945	7,117	11.6%
1993	8,560	7,668	11.6%
1994	9,255	8,280	11.8%
1995	9,887	8,832	11.9%
1996	10,482	9,364	11.9%
1997	11,146	9,465	17.8%
1998	11,875	10,175	16.7%
1999	12,587	12,042	4.5%
2000	13,487	12,810	5.3%
2001	14,519	15,497	-6.3%
2002	15,193	17,122	-11.3%
2003	16,044	17,962	-10.7%
2004	17,157	18,645	-8.0%
2005	18,681	19,387	-3.6%
2006	20,822	22,054	-5.6%

There should be a full consistency between these two series. That is not the case and the reasons will be investigated further. Statistics Iceland intends to investigate this discrepancy and eliminate it very soon.

The share of the public infrastructure of the gross capital stock in 2005 is presented in table 4-10.

Table 4-10 The share of the public infrastructure in the gross capital stock in 2005

Percent of the gross capital stock	
75 Government services (total)	17,5
75a Roads and bridges	4,1
75b Streets	3,7
75c Public buildings	8,9
75d Other public assets n.e.c.	0,8

# Chapter 5. The expenditure approach

# 5.0 GDP by expenditure approach

The accompanying table shows the GDP by the expenditure approach. Household final consumption expenditure accounts for almost 60 percent of it and public final consumption expenditure for around 25 percent. As exports account for 32 percent of GDP and imports for 40 percent, foreign trade is a key component of Iceland's economy.

Table 5-1 Gross Domestic Product by the expenditure approach 2005

	Million ISK	% of GDP
1. Private final consumption	610,638	59.5
1.1 Households	589,912	57.5
1.2 NPISH	20,726	2.0
2. Government final consumption	252,617	24.6
2.1 Individual	169,592	16.5
2.2 Collective	83,026	8.1
3. Gross fixed capital formation	291,265	28.4
4. Changes in inventories	-862	-0.1
5. Gross domestic final expenditure	1,153,658	112.4
6. Exports of goods and services	324,450	31.6
6.1 Goods, fob.	194,934	19.0
6.2 Services	129,516	12.6
7. Less.: Imports of goods and services	451,710	44.0
7.1 Goods, fob	288,034	28.1
7.2 Services	163,676	15.9
8. Gross Domestic Product	1,026,397	100.0
9. Primary incomes receiv. from abroad	-36,605	-3.6
10. Gross national income	989,792	96.4
11. Balance on current account	-163,866	-16.0
11.1 Balance on goods	-93,100	-9.1
11.2 Balance on services	-34,161	-3.3
11.3 Balance on prim. inc.from abroad	-36,605	-3.6

### 5.1 The reference framework

So far the expenditure approach has played the most important role in national accounts in Iceland. There is a much longer tradition in compiling national accounts according to the expenditure approach than the production approach. Figures are available according to the expenditure method back to 1957, directly estimated, but indirectly back to 1945. The output estimates are only available from 1973 onwards.

For historical reasons the emphasis has been on the demand side and this is still the case. Even more important is the fact that reliable estimates on the expenditure side are available much sooner than these on the output side. This emphasis on the expenditure side is reflected by the fact that until the year 1997, the level of GDP was entirely determined from the expenditure side and the statistical difference between these two methods appeared as a balancing item on the output side. Now supply and use tables have been constructed three times, i.e. for the years 1992 and 1997 and 2002.

Prior to the balancing procedure, which is the final step, an attempt is made to estimate independently the individual components of the expenditure side. Various sources of information are used as further described in the following section. Although most of the items on the expenditure side are estimated from independently collected source data there are many examples where the data sources are the same as on the output side and in some cases the individual expenditure items are directly collected from the output figures according to the production approach. Examples of these sources are various personal services, such as hair dressing etc.

#### 5.2 Valuation

The use of products is valued at purchasers' prices. In most cases final consumption components are estimated directly from the point of purchaser and therefore these components are valued at purchasers' prices. Final consumption expenditure includes value-added tax and other product taxes, but not subsidies. The products acquired by instalment payments or an equivalent credit system are recorded on their date of purchase.

Gross fixed capital formation includes value-added tax insofar as it is not tax deductible. As a general rule, investments are recorded according to the date of the transfer of ownership of the assets. There are a few exceptions to this rule in the national accounts. First, financial leasing should be recorded as an investment by the industry using it, even if there is no change of legal ownership. Secondly, own-account investments are recorded when they are produced. Thirdly, residential construction is recorded in the year the construction is registered at the Land Registry of Iceland. It is assumed that this represents the year of production but not necessarily a transfer of ownership. The fourth exception concerns uncompleted fixed assets. In this case as in other fixed capital formation in industries, the main sources of data are the financial accounts of enterprises. There the uncompleted fixed assets are recorded as investment without a transfer of ownership. Examples of this kind are large electrical power plants. The same treatment is followed in national accounts.

Goods produced by households for own consumption are of minor importance in Iceland and normally not covered in household final consumption. Apart from housing services produced by owner occupiers the major exception is the own consumption of milk and meat of farmers and other members of the households on the farm. That consumption is included in the household consumption. Information is collected from the Farmers Association of Iceland but direct estimates by Statistics Iceland are also used. The own consumption of milk and meat is valued at estimated market prices. The market price of meat was estimated as the average of two likely price classes some years ago and extrapolations for later years. In the case of capital goods own-produced products are valued at production cost prises.

Tips are not a problem in the valuation process because tipping does not exist in Iceland except in very exceptional cases.

Changes in inventories are valued at the average price for each quarter of the year, and the changes are then summed up. Exports and imports of goods are valued at their f.o.b. value, i.e. their value when they leave the exporting country. Exports of services are valued at basic prices and imports of services at purchasers' prices.

# 5.3 Transition from private accounting and administrative concepts to ESA95 national accounting concepts

In calculating gross fixed capital formation the single most important source of information is the Enterprise Accounts Register. That Register is also used in constructing production accounts and in

section 3.3.1 above a conversion table is shown where the individual items on the current account are reclassified following the national accounts principles. When the Register is used for calculating fixed capital formation some adjustments are also necessary where the bookkeeping principles and the national accounts principles differ. The impact on intermediate consumption is in opposite direction. The two most important examples of this are:

- The purchase of software
- The threshold value for capital goods

With the introduction of ESA95, *purchase of software* is now defined as gross fixed capital formation instead of intermediate consumption as in the previous system. The value of software is now estimated separately as an item of fixed capital formation, see section 5.11. However similar changes have not occurred in the bookkeeping practices of companies and the methods may vary considerably. In company accounts there is a tendency to record as current expenditure major repair of existing software although this expenditure lasts for more than one year and exceeds the threshold value for capital goods according to the tax laws. The threshold value in the tax law is 250.000 Icelandic kronur for the year 2005, equivalent to 3.200 Euros.

The *threshold value for capital goods* has a more general coverage than just for computer software. According to Icelandic tax law the threshold value determines the maximum value for individual items to be accepted as current expenditure. Items above that limit must be capitalized, that is recorded as fixed capital formation. This limit exceeds the ESA95 guidelines which use 500 Euros in 1995 prices as the limit. Until the utilization of the Enterprise Accounts Register from 1997 onwards no attempt was made to adjust the production accounts to ESA95 and the bookkeeping practices. The EAR makes some adjustments possible because one of the items specified in the Register under operating expenses is named "Small assets, not capitalized". Items recorded under this category are small equipment and tools. According to Icelandic tax laws the threshold value is approximately five times higher than the reference value in ESA95. Therefore it is assumed that a considerable part of these items should be capitalized and not expensed. In an absence of firm data it is estimated that half of the value of these items should be capitalized instead of expensed. The impact of this adjustment is a reduction of intermediate consumption of market producers by 3.6 billion kronur in 2005.

In calculating government final consumption expenditure, use is made of the financial accounts of local and general government. In these accounts there are several examples of items which are recorded as current operating expenses but should be capitalised in national accounting. Examples of these kinds are purchases of producers' durables and major and minor repair. All such expenditures are expensed in the State Account but in national account a distinction has to be made between fixed capital formation and intermediate consumption. Corrections of this kind are made when the government accounts are adjusted to the national accounts principles. As described in section 3.18.3 above a special committee was working on reclassification of this type as well as reclassifying all government expenditures according the new COFOG classification. That work sharpened considerably the borderlines between intermediate consumption, current and capital transfer and fixed capital formation in the State Account and the local government accounts.

#### 5.4 The roles of direct and indirect estimation methods

By far the largest share of expenditure-based GDP is calculated using a direct estimate of purchasers' acquisitions less disposals. The most important exceptions are household expenditure on services, where in the absence of company accounts, a use is made of the household expenditure survey and grossing up of these items. That source amounted to 9% of total household final consumption expenditure in 2005.

Imported consumer goods are a vital source for estimating households' final consumption. In most cases these estimates are direct but in the case of goods of multi-purpose use the households' share of the goods is estimated by means of ratios which make the methods indirect.

Indirect estimates are also generally used when estimating final consumption expenditure of NPISH. In this case, estimations are made indirectly on the basis of central and local government accounts, which provide data on grants to such institutions.

# 5.5 The roles of benchmarks and extrapolations

The role of benchmarks and extrapolations in the current national accounts is quite limited. The most important exception is the consumption of dwelling services (actual and imputed rentals) where levels are based on a special rent survey carried out by Statistics Iceland in 1999. These levels were extrapolated backward to 1990 and forward to most recent years taking into account the price changes of the most relevant subgroups of the CPI and the changes in actual number of dwellings according to the Land Registry of Iceland. In 2005 the share of dwelling services in private final consumption amounted to 15.4%.

A new complete rent survey has not yet been planned. In the meantime SI has to use structural information from the last one done in 1999 as a base for rent cost estimates. Data on rent prices are collected monthly for the calculation of CPI and that information is used to extrapolate rents cost in National Accounts. Furthermore, annual data are used from the The Land Registry of Iceland (FMR) on number of houses and flats and surface size (square meters) of occupied houses and flats in Iceland.

Another important exception relates to the calculation of major repair and renovations of residential buildings. The level of this investment was based on a basis of special research by the Building Research Institute for one year and extrapolations for other years. This amounted to roughly 4% of total residential construction in 2005.

The benchmark year for the calculation of the major repair and renovations of residential buildings is the same as for the consumption of dwelling services 1999. This section, typically tenants repair is estimated to be a share of consumption of dwelling (actual and imputed rentals) based on a special research by the Building Research Institute. This amounted to roughly 2.5% of total consumption of dwellings in 2006.

Although the role of benchmarks and extrapolation is quite limited in current national accounts these methods have been heavily used in all major or occasional revisions. The latest revision of this type was completed in September 2005. Then, breaks in time series for both household final consumption and gross fixed capital formation in 1997 and 1990 were eliminated by means of extrapolations.

# 5.6 The main approaches taken with respect to exhaustiveness

The data sources for the expenditure approach are fairly exhaustive. Calculations are based on complete data for final consumption expenditure with respect to exports and imports of goods, government final consumption expenditure and a substantial part of gross fixed capital formation.

The problem of exhaustiveness might especially arise in connection with unincorporated enterprises and the distinction between household final consumption, intermediate consumption and even gross fixed capital formation. Unincorporated enterprises are implicitly included in the normal grossing-up procedure. However, due to tax reasons the importance of unincorporated enterprises is diminishing. Private limited liabilities are replacing unincorporated enterprises in

many activities. Unincorporated enterprises are predominant in traditional farming, taxi driving and in the activity of independent craftsmen.

Co-ordination and balancing of the production and expenditure approaches by supply and use tables lag behind the regular production of the annual national accounts. This is caused by the late results of the first estimates of the production approach prior to the balancing procedure. Now it is planned to shorten the processing period of the production approach and have it ready 15 months after the end of the reference year. Then the September version of national accounts in year t+2 will contain balanced GDP figures for that year.

No distinction is made between hire-purchase and actual purchase. The treatment of second-hand goods is not as clear-cut. The sale of fixed assets from an enterprise is always recorded as a minus gross fixed capital formation in the books of the seller and with the plus sign in the books of the buyer if the buyer is an enterprise. However, if the buyer of second hand goods from an enterprise is a household then these purchases are not recorded as household consumption. The trade margin of such transactions is recorded, provided that the transactions are undertaken by a registered unit.

One of the main approaches taken with respect to exhaustiveness in household' expenditure is a regular comparison between the household expenditure survey results and the estimated household final consumption expenditure in national accounts. That comparison is presented in section 5.7.5.

Chapter 7 below makes a further reference to exhaustiveness in the case of both household budget surveys, payments in kind with a corresponding impact on household final consumption and hidden activity.

# 5.7 Household final consumption expenditure

## 5.7.1 Concepts, definitions and classifications

In compiling estimates of household final consumption expenditure, the concepts and definitions of the European System of Integrated Economic Accounts (ESA95) are followed. The product classification of household final consumption expenditure is based on the COICOP classification of individual consumption by purpose for households, as referred to in ESA95. It has been adapted to the needs of Iceland's annual accounts to yield a product classification, which at its most precise level is divided into 69 goods and services headings. The overall heading nomenclature is shown in conjunction with the description of calculating methods.

Household final consumption is defined as household expenditure on goods and services for direct satisfaction of needs. It comprises consumption on Icelandic territory, less tourist income from foreigners plus tourist expenditure of Icelandic residents abroad plus consumption of Private Non-Profit Institutions Serving Households (NPISHs). The connection between these concepts and their relative importance can be described as follows:

Table 5-2 Final consumption expenditure, 2005

	Million ISK
Final consumption expenditure in the domestic market by households	553,431
+ Direct purchases abroad by resident households	62,638
- Direct purchases in the domestic market by non-resident households	26,157
=Final consumption expenditure of resident households	589,912
+ Private Non-profit institutions serving households	20,726
= Total	610,638

#### 5.7.2 Borderline cases

Some attention has to be paid to transactions where private enterprises supply goods or services directly to private individuals but where the performance is wholly or partly paid for by general government. A few examples will be mentioned.

There exist privately owned schools, day-care institutions and hospitals which provide services to households. These units are not regarded as part of the general government sector but are classified in the NPISH sector or in the non-financial corporations sector if market producers. Any partial payment which households make for the services is classified as private final consumption.

In some cases market producers are supposed to reduce the price of their services to specific groups of households. Examples are:

- Free subscription rates on telephones and television for old age pensioners earning income below a certain minimum
- Free or considerably reduced bus fares for old age pensioners
- Free or considerably reduced admission fee to swimming pools, art courses etc. for old age pensioners

In these few examples, the producing units in question do not receive any special compensation from government. In other words, there are no money flows from government and therefore this type of price reduction should not be classed as Social Transfer in Kind.

An example of another borderline case is the special social benefits made to disabled persons for replacing their personal cars at certain intervals of time. These benefits are classified as current transfers from the government to the households and the cars are recorded at full market prices in household final consumption.

Other examples exist where the government makes payments to certain enterprises with the intention to subsidise the products of these enterprises to specific groups of households. Examples of this type were payments from the government to households intended to reduce the expenses of space heating by electricity. This source of energy is by far more expensive than geothermal water supply and these payments, prevailing until a few years ago, were meant to reduce the difference between these two sources. These payments were recorded as current transfers to households and thus keeping unchanged the total expenses of heating the dwellings.

Reimbursements to households for medicine, medical or dental treatments are another example. The amount of the expenditure reimbursed is not treated as a current transfer. Instead it is recorded as being incurred directly by the social security system. Now and then, the share of these reimbursements changes. This has especially been the case during recent years. An attempt is made to treat these changes as changes in volume, not in prices, although changes of this kind appear as price changes in the consumer price index.

Some borderline cases arise when a distinction has to be made between taxes and purchases of services from government. The following examples will be given:

- Licences to hunt, shoot or fish
- Licences to keep dogs and other pets

Licences paid to land owners for the permission to fish in rivers are included in consumption. The data are derived from the household expenditure survey. Any other licences of this type paid to governments were omitted from the household consumption and therefore were implicitly assumed to be current taxes. All major licences paid to governments by households are now included in consumption in Iceland. An example of this type is licences to keep dogs and other pets. These

payments paid to governments by households for special services are now included in household consumption and therefore no longer treated as taxes.

These borderline cases between <u>taxes</u> and <u>purchases of services</u> are now almost fully resolved in accordance with the recommendations of SNA 1993. There it is recommended that payments for driving licences, payments for passports, airport fees, court fees etc. are treated as purchases of services rendered by government.

#### 5.7.3 Data sources

In 2005 household final consumption amounted to 59.7% of GDP. The level of most of the components of the consumption is estimated annually and directly from the best available sources. In exceptional cases a use is made of projections from earlier base year estimates.

Until 1999 household consumption was classified according to the Classification of Household Goods and Services (CHGS) of the SNA68. Now this classification has been replaced by Classification of Individual Consumption by Purpose (COICOP) in the SNA93 and ESA95. However, in the estimation of consumption figures it is also appropriate to classify the consumption in various groups based on available data sources. First of all a distinction is made between:

- Imported consumer goods
- Domestically produced goods

Approximately 25% of household final consumption is estimated by exploiting the first method, i.e. making use of the direct calculation of *imported consumer goods*.

In estimating these goods, the external trade statistics are exploited. These statistics are compiled by Statistics Iceland. Goods in external statistics are classified according to the HS-system (Harmonised Commodity Description and Coding System). In the Icelandic version of the system there are approximately 8000 tariff numbers. Of these numbers or goods, it is assumed that some of them are entirely consumer goods. Other are considered being goods of multi-purpose use and for these goods a certain ratio is assumed to be consumer goods. These ratios are based on various assumptions or informed guesses and they are revised every five years or so. For certain goods these ratios can obviously be zero. Of the total number of approximately 8000 tariff goods there are approximately 2650 items which enter into household consumption either entirely or partly.

Table 5-3 Cif value of imported goods valued at purchasers' prices, a numerical example

Million ISK		Tariff &					
	Cif	import C	Consum.	Cif +	Trade		Purchasers
Tariff numbers	value	duties	Ratio	tariffs	margin	VAT	prices
66011000 Garden umbrellas of all kinds	778	77	100	855	666	373	1,894
82130000 Scissors and blades therefor	3,550	-	95	3,372	2,172	1,358	6,903
82149000 Other articles of cutlery (clippers,							
choppers, mincing knives and the like)	1,187	_	75	890	573	358	1,822
84331100 Powered mowers for lawns, with the							
cutting device rotating in a horizontal	20.204	4.061	75	10 274	C 205	( 022	20,600
plane, pedestrian controlled 84331900 Other mowers for lawns,	20,304	4,061	75	18,274	6,305	6,022	30,600
pedestrian controlled	5,786	1,157	75	5,208	1,797	1,716	8,720
85061000 Manganese dioxide batteries	20,004	1,033	50	10,518	6,571	4,187	21,276
85064000 Silver oxide batteries	484	13	50	248	155	99	502
85065000 Lithium batteries	5,575	70	50	2,823	1,763	1,124	5,710
85066000 Air-zinc batteries	1,925	38	50	981	613	391	1,985
85392100 Tungsten halogen lamps	25,418	4,080	50	14,749	9,214	5,871	29,833
85392200 Other filament lamps for							
$\leq 200 \text{ W} \text{ and } \leq 100 \text{ V}$	6,493	1,059	50	3,776	2,359	1,503	7,637
85392900 Other filament lamps	14,995	2,709	50	8,852	5,530	3,524	17,905
85393100 Fluorescent lamps, hot cathode	27,030	4,242	10	3,127	1,954	1,245	6,325

85393200 Mercury or sodium vapour lamps;							
metal halide lamps	8,080	1,290	10	937	585	373	1,895
85393900 Other discharge lamps	8,942	1,172	10	1,011	632	403	2,046
90066100 Flash devices for cameras	1,565	-	50	783	291	263	1,337
90066200 Flash devices for cameras	38	_	50	19	7	6	32
90066900 Other flash devices	1,339	_	50	670	249	225	1,144
94053000 Christmas tree lights	2,204	583	100	2,787	1,741	1,109	5,638
96031000 Brooms and brushes, consisting of							
twigs or other vegetable materials	522	35	100	557	359	224	1,140

Table 5-4 Breakdown of Tariffs & import duties presented in table 5-3

Million ISK			Super-		Alcohol		
	Import I	Recycling	vision	Excise	and		
Ttariff numbers	duty	charge	charge	duty	tobaco tax	Other	Total
66011000 Garden umbrellas of all kinds	77	_	_	_	_	_	77
82130000 Scissors and blades therefor	_	_	_	_	_	_	_
82149000 Other articles of cutlery (clippers,							
choppers, mincing knives and the like)	_	_	_	_	_	_	_
84331100 Powered mowers for lawns, with the							
cutting device rotating in a horizontal				4.061			1.061
plane, pedestrian controlled	_	_	_	4,061	_	_	4,061
84331900 Other mowers for lawns, pedestrian controlled	_	_	_	1,157	_		1,157
85061000 Manganese dioxide batteries	_	1,033	_	1,137	_	_	1,033
85064000 Silver oxide batteries	_	1,033	_	_	_	_	1,033
	_		_	_	_	_	
85065000 Lithium batteries	_	70	_	_	_	_	70
85066000 Air-zinc batteries	-	38	-	-	_	_	38
85392100 Tungsten halogen lamps	199	_	38	3,843	_	_	4,080
85392200 Other filament lamps for <= 200 W and <= 100 V	87		10	962			1,059
	486	_	23		_	_	,
85392900 Other filament lamps		_		2,200	_	_	2,708
85393100 Fluorescent lamps, hot cathode 85393200 Mercury or sodium vapour lamps;	128	_	41	4,074	_	_	4,242
metal halide lamps	57	_	12	1,221	_	_	1,290
85393900 Other discharge lamps	60		13	1,099			1,172
90066100 Flash devices for cameras	00	_	13	1,099	_	_	1,172
90066200 Flash devices for cameras	_	_	_	_	_	_	_
, , , , , , , , , , , , , , , , , , , ,	_	_	_	_	_	_	_
90066900 Other flash devices	-	_	_	_	_	_	-
94053000 Christmas tree lights	217	_	3	363	_	_	583
96031000 Brooms and brushes, consisting of	35						25
twigs or other vegetable materials	33						35

When household consumption goods have been defined from these tariff numbers, either entirely or partly, the next step is to add import duties, trade and transport margins and VAT to the c.i.f. value of imports. The value of import duties for every tariff number goods is available at the tax authorities and is used in these calculations. Then the value of individual items is available at purchasers' prices as required. A numerical example of these calculations is given in tables 5-3 and 5-4.

Estimation of trade and transport margins is also of vital importance and this item is shown seperately in table 5-3. Prior to 1985 a maximum trade and transport margin was fixed by legislation. It was assumed that due to high inflation during these years and limited competition most of the retailers followed these maximum trade margins. Therefore it was considered that the data on trade and transport margin were of high quality. Since the gradual deregulation of margins from 1985 and during subsequent years, the quality of these data has deteriorated. Now information is collected from the *Competition Investigation Agency* as well as from one leading enterprise in the retail trade. This information is more of general character and indicating the overall margins for branches of industries, not by type of goods. These data are used in the absence of better sources but considerable improvement is needed in this field. Financial accounts of retailers dominating the market are also used here, but these margins are enterprise oriented not by products. However, the

development of the supply and use tables in recent years has definitely improved the allocation of the trade and transport margins by industry and the total amount to be allocated is decided from the output of the relevant industries.

The methods used to estimate the supply of *domestically produced goods* and services are more heterogeneous. The methods used can be grouped together in 8 categories.

The **first method** is based on extrapolations where a use is made of i.e. the population figures. Examples of items in this category are dental and hospital services. In some cases a use is made of the Enterprise Accounts Register as a benchmark data, or a level, some years ago and these values extrapolated for later years according to changes in VAT turnover figures. Examples of these methods are air transport, hair dressing, confectionery and soft drinks.

The **second method** is based on direct information on production and sale of various domestically produced goods. This is the category for which the most detailed and most reliable figures exist. Examples of goods here are agricultural products such as milk, meat etc. That part of the production consumed domestically is valued according to price lists, prices as they occur in the consumer price index or in other sources.

The **third method** is based on the Enterprise Accounts Register or some specific industries or enterprises in that Register. Turnover as it appears in the enterprise accounts is used either directly or by adding to it trade or transport margins, when applicable. Examples of goods in this category are passenger transport by road, i.e. taxies and buses.

The **fourth method** makes use of the VAT turnover figures. The importance of this source is increasing. VAT was introduced in 1990 and from the beginning there are available turnover figures classified by branches of industry. This source is used in estimating the value of bakery products, biscuits, pharmaceutical products etc.

The **fifth method** exploits direct information from big enterprises or institutions, frequently dominating the market. Most often this information is collected from financial accounts of these enterprises or institutions. Examples are radio and TV subscriptions, number of airline passengers and tourists thereof, direct purchases abroad by residents etc. Financial accounts are either requested directly from related parties or a use is made of the Enterprise Accounts Register when it is suitable.

The **sixth source** of information is the household expenditure survey (HES) which Statistics Iceland carries out regularly. A survey was carried out in 1995 and during the period 1997-2001 the CPI was largely based on its results. From the year 2000 household expenditure surveys are carried out continuously and from March 2002 the results are used for annual rebasing of the CPI.

The survey cycle is three years. Each year a single-stage random sample of approximately 1,200 household units is drawn from the national population register. The actual number of responding households over the three-year period is in the interval 1,700-1,800; the response rate being 45-49 percent due to non-response and other factors. Statistics Iceland corrects for the bias attributable to the non-respondents, using data obtained from the HES and from other sources on family size and type and other major household characteristics. Statistics Iceland also compares the data with geographical distribution data from the population register.

The samples of households for each year are spread evenly over the year in 26 two-week sub samples. Respondents submit information of day-to-day expenses and also report expenditures for a three-month period for less frequently occurring expenses. Extensive use is made of the receipt approach by collecting cash register receipts in place of itemized purchases in diaries provided to respondents. By 2002, 77 percent of all entries were taken from cash register receipts. In the case of food and beverages, 89 percent of entries were taken from cash register receipts. In the remaining cases, Statistics Iceland used itemized data reported by respondents in diaries.

Household expenditure data are compiled on a three-year moving average basis. For example, data have been compiled for the years 2004 to 2006. The data for 2004 and 2005 were recalculated at 2006 prices for the purposes of deriving CPI weights. Standard errors are calculated for the main aggregates arising from the HES data. Standard errors for total expenditures are less than 2 percent and for groceries less than 1 percent. Where standard errors are greater than 20 percent, those particular data cells show an asterisk accompanying the figure indicating that the figure should be used with caution.

The **seventh method** deals with the estimation of the output of dwelling services. Due to the peculiar situation in Iceland approximately 80% of the dwellings are owner-occupied. Therefore an effective market rent hardly exists and the output was entirely imputed by user cost approach until the implementation of ESA95 in August 2000. Then these methods were changed due to recommendations from Eurostat and the user cost approach was replaced by the market rent using the most detailed stratification of the dwelling stock. This method is described in section 3.17 above.

The relative importance of each of the above mentioned methods can be presented in the following table. The table covers the above seven methods applied for domestically produced goods and one "other" method besides one category of imported goods, a total of nine categories.

Table 5-5 Relative importance of individual methods used in estimating household final consumption expenditure, 2005

	% share
1. Imported consumer goods	25
2. Domestically produced goods and services	75
2.1 Extrapolation	27
2.2 Direct information of domestically produced goods	5
2.3 Enterprise Accounts Register	9
2.4 VAT turnover	4
2.5 Direct information from specified enterprises	7
2.6 Household expenditure survey	2
2.7 Dwelling services etc.	19
2.8 Other methods	3
Total	100

The table above shows that of the individual methods the most important ones are imported consumer goods, extrapolation and dwelling services. More than half of the household consumption expenditure is derived from these three sources. The importance of imports in these estimates is almost unchanged during the last decades but the role of the VAT turnover has increased.

It should be noted that so far there is a lack of information on stocks of consumer goods. That refers both to imported goods as well as domestically produced goods. Therefore, the simplifying assumption is made that goods imported each year are consumed simultaneously during the same year. In the case of domestically produced goods the same assumption is partly made. Data obtained from the Agricultural Production Board on meat and milk products refer to sales, not production. When company accounts statistics are used, sales figures are also applied, not production. In some exceptional cases, however, production statistics from Statistics Iceland are exploited, for example statistics for non-alcoholic beverages. These figures show production, not sales.

Table 5-6 shows household final consumption in 2005 classified according to the Classification of Individual Consumption by Purpose (COICOP) in the SNA93 and ESA95. In the next section there is a detailed description of the methods used in estimating the individual items of the table.

Table 5-6 Household final consumption, 2005

	Million ISK	% of Total
01. Food and non-alcoholic beverages	66,488	10.9
01.1 Food	58,764	9.6
01.1.1 Bread and cereals	8,817	1.4
01.1.2 Meat	16,824	2.8
01.1.3 Fish	3,700	0.6
01.1.4 Milk, cheese and eggs	9,091	1.5
01.1.5 Oils and fats	1,378	0.2
01.1.6 Fruit	2,563	0.4
01.1.7 Vegetables	4,840	0.8
01.1.8 Sugar, jam, honey, chocolate and confectionery	7,115	1.2
01.1.9 Food products n.e.c.	4,435	0.7
01.2 Non alcoholic beverages	7,724	1.3
01.2.1 Coffee, tea and cocoa	1,642	0.3
01.2.2 Fruit and vegetable juices	6,082	1.0
02. Alcoholic beverages and tobacco	22,629	3.7
02.1 Alcoholic beverages	13,452	2.2
02.2 Tobacco	9,177	1.5
03. Clothing and footwear	25,641	4.2
03.1 Clothing	21,861	3.6
03.1.1 Clothing materials	208	0.0
03.1.2 Garments	20,496	3.4
03.1.3 Other articles of clothing and clothing accessories	739	0.1
03.1.4 Cleaning, repair and hire of clothing	417	0.1
03.2 Footwear	3,781	0.6
03.2.1 Shoes and other footwear	3,600	0.6
03.2.2 Repair and hire of footwear	180	0.0
04. Housing, water, electricity, gas and other fuels	113,738	18.6
04.1-04.4 Actual and imputed rentals and maintenance of housing	102,274	16.7
04.5 Electricity, gas and other fuels	11,464	1.9
04.5.1 Electricity for heating	6,323	1.0
04.5.2 Gas	264	0.0
04.5.3 Liquid fuels	168	0.0
04.5.4 fuels	48	0.0
04.5.5 Heat energy	4,662	0.8
05. Furnishings, household equipment and routine	36,718	6.0
05.1 Furniture and furnishings, carpets and other coverings	12,452	2.0
05.1.1 Furniture and furnishings	11,916	2.0
05.1.2 Carpets and other floor coverings	290	0.0
05.1.3 Repair of furniture, furnishings and floor coverings	245	0.0
05.2 Household textiles	2,411	0.4
05.3 Household appliances	6,265	1.0
05.3.1-05.3.2 Household appliances	6	0.0
05.3.3 Repair of household appliances	378	0.1
05.4 Glassware, tableware and household utensils	3,563	0.6
05.5 Tools, instruments etc.	2,488	0.4
05.6 Goods and services for routine household maintenance	9,539	1.6
05.6.1 Non-durable household goods	8,064	1.3
05.6.2 Domestic services and household services	1,476	0.2
06. Medical care and health expenses	16,703	2.7
06.1 Medical products, appliances and equipment	7,567	1.2
	5,067	0.8
06.1.1 Pharmaceutical products		
06.1.2-06.1.3 Other medical products, therapeutic appliances and equipment	2,501	0.4
06.2 Out- patient services	8,829	1.4
06.2.1 Medical services	2,771	0.5
06.2.2 Dental services	4,774	0.8
06.2.3 Other out patient services	1,284	0.2
06.3 Hospital services	307	0.1

07. Transport	100,592	16.5
07.1 Purchase of vehicles	43,922	7.2
07.2 Operation of personal transport equipment	47,438	7.8
07.3 Transport services	9,232	1.5
08. Communication	14,230	2.3
08.1-08.3 Postal and telephone services and equipment	14,230	2.3
09. Recreation and culture	66,603	10.9
09.1-09.3 Recreation equipment	21,354	3.5
09.4 Recreational and cultural services	25,240	4.1
09.5 Newspapers, books and stationery	8,053	1.3
09.6 Package holidays	11,956	2.0
10. Education	7,538	1.2
10.1 Pre-primary education	2,802	0.5
10.2-10.5 Educational services	4,736	0.8
11. Restaurants and hotels	44,106	7.2
11.1-11.2 Restaurants and hotels	44,106	7.2
12. Miscellaneous goods and services	38,446	6.3
12.1 Personal care	12,552	2.1
12.3 Personal effects n.e.c.	4,125	0.7
12.4 Social services	64	0.0
12.5 Insurance	4,586	0.8
12.6 Financial services n.e.c.	15,793	2.6
12.7 Other services n.e.c.	1,326	0.2
Households Final Consumption Expenditure in the Domestic Market	553,431	90.6
Direct purchases abroad by resident households	62,638	10.3
Direct purchases in the domestic marked by non-resident household	-26,157	-4.3
Household Final Consumption Expenditure of Resident Households	589,912	96.6
Non-profit institutions serving households	20,726	3.4
Final Consumption Expenditure	610,638	100.0

## 5.7.4 Description of the detailed classification

In the following section, a detailed description is given of the individual items of household consumption. The estimate of household private consumption is divided into two main categories. On the one hand, there is the retail price of imported goods. On the other hand there is the retail price of domestically produced goods and services. Emphasis will be particularly laid on domestically produced products because the methods applied are more heterogeneous in this category than in the case of imported goods. The treatment of imported goods is described where explicit adjustments are needed.

All domestic consumption of food is estimated in section 01 Food, in HFC. Therefore it is essential to correct two things, first consumption of food in hospitals and institution such as prisons etc. and second for restaurants and hotels. Expenditure is included in respective sections in public consumption and household final consumption and therefore the food section in HFC is reduced subsequently to avoid double counting.

The sections, divisions and groups are numbered according to Classification of Individual Consumption by Purpose (COICOP) in the 1993 SNA and ESA95.

#### 01. Food and non-alcoholic beverages

This section is sub-classified into two divisions - food and non-alcoholic beverages. Each of them will be described.

#### 01.1 Food

This division is subdivided into several groups of goods and in the following each of them will be discussed. Households' final consumption of foods is recorded "gross", that is inclusive of

consumption in restaurants, hospitals, fishing vessels, airplanes and institutions. To avoid double counting, corrections are made in individual groups, where needed.

The estimation of imported food is the same as described above. The share of household consumption of multi-purpose goods is occasionally revised. In preparing that revision use is made of figures from various companies and institutions, besides Statistics Iceland. One of them was the *Icelandic National Audit Office* which preciously had for own purposes classified imported goods by tariff number and importer. The Audit Office received the raw data from Statistics Iceland but now the same classification is easily accessible within Statistics Iceland. In many cases the name of the importer is a good indicator for distinguishing between consumer goods or other uses.

In many cases it is possible, not only to identify the importer, but also the final user, especially when he is a big intermediate user.

#### 01.1.1 Bread and cereals

#### Cereals

The predominant part of cereals is imported. For imported goods the usual methods are used. To some extent there exists a domestic production of breakfast cereals made of imported raw material. A special estimate is not available for this type of production. Instead, this production is included in that part of imported cereals intended for human use.

When distinction is made between the cereals intended for intermediate consumption and household final consumption note is taken of the size of the packages. The disaggregation of the tariff numbers allows such details in many cases.

#### Riscuits

Imported biscuits are estimated as described earlier. Domestically produced biscuits are estimated from VAT sources in the corresponding branch of industry, class 15.82 Manufacture of rusks and biscuits; manufacture of preserved pastry goods and cakes. This value is at producers' price so one has to add to it estimated trade and transport margins to reach the purchasers' price.

#### Bakery products

The value of domestically produced bakery products is based on the turnover from VAT sources in class 15.81, Manufacture of bread; manufacture of fresh pastry goods and cakes. To that value taxes on products are added. Approximately one third of the production is sold through the retail trade and a retail trade and transport margin is added to that part of the production. The remaining part of the production is sold directly from the bakeries to the households and therefore it includes retail trade activity.

#### 01.1.2 Meat

Information on slaughtering, monthly sale and stocks is compiled by the *Farmers Association of Iceland* and some other unions of producers. Statistics on production of meat are almost of complete coverage. The next step is to make a distinction between two different deliveries of the meat. The first is the sale of meat directly to consumers without further processing; the second is a further processing of the meat.

The share of each delivery differs from year to year and it depends on the total amount of meat supplied. In estimating the amount of meat for further processing a comparison is made with recently undertaken household expenditure survey (HES) which provides data on the total amount of goods consumed. In order to convert that amount to raw meat equivalent, conversion factors are received from the biggest processing factories.

Own consumption of farmers and other members of the households is included in the household consumption of meat. Information is collected from the Farmers Association of Iceland but direct estimates by Statistics Iceland are also used. These figures are supposed to cover slaughtering of the animals at the farms where no direct information is available. Included here are also the animals

slaughtered at slaughterhouses but then taken home by farmers. From 1987 onwards, meat taken home by farmers is already included in the sales figures from the Farmers Association of Iceland. The own consumption of meat is valued at estimated market prices where notice is taken of the average of two likely price classes some years ago and extrapolations for later years.

The processed and unprocessed meat is valued by exploiting various sources. Previously a use was made of price lists from the Agricultural Production Board, now the Farmers Association of Iceland, and *the Retailers Association of Iceland*. In recent years, during which price controls have been lifted, other sources are used. Among the most important ones are unit prices derived from the Consumer Price Index.

#### 01.1.3 Fish

In the years 2002 and 2003 the consumption of fish was based on figures from The Directorate of Fisheries. These figures showed the amount and the initial value of catches as well as the disposition of the catch by type of processing. This source is used in estimating the consumption of haddock and other demersal species except cod. From 2004 onwards the figures are extrapolated by means of changes in VAT turnover in activity 52.23, Retail sale of fish, etc.

Another source, worth considering, is the household expenditure survey. From that source figures on total consumption are available as well as the consumption of cod and salted fish. In estimating the total from the HES the average consumption per household is then multiplied by the total number of households in the country. In paragraph 3.8 above the domestic consumption of fish is also discussed, where some indications are given of a possible underestimate.

#### 01.1.4 Milk, cheese and eggs

Figures on the quantity of the sale of milk are obtained from *the Icelandic Dairy Association*. These figures are valued according to price lists from Reykjavík Milk Distribution Centre, the only retail distributor of milk in the Southwest of Iceland. Another source is from by far the biggest distributor of butter and cheese in the country. In recent years information has also been obtained from household expenditure survey.

Farmers own consumption of milk is estimated by the Farmers Association of Iceland. The price used is the producers' price.

The consumption of eggs was previously estimated from the average consumption per household from the HES and the number of households. Now the Farmers Association compiles figures for the production and sale of eggs. From these figures the intermediate consumption of eggs is subtracted to reach at the household consumption. Unit prices are collected from the Consumer Price Index.

#### 01.1.5 Oils and fats

Figures on production of oils and fats, such as butter, margarine and other prepared edible fat are compiled by the Farmers Association, the Icelandic Dairies Association and Statistics Iceland's Household Expenditure Survey.

Production is valued by using unit prices from the above mentioned associations as well as the CPI.

#### 01.1.6 Fruit

All fruit is imported. Therefore, the total quantity and cif value of fruit is available and the normal procedure is used to reach purchasers' prices.

#### 01.1.7 Vegetables

Figures on the quantity of domestically produced vegetables are compiled by *the Gardeners Marketing Company* and the Farmers Association. Wholesale prices are available from the same sources and to that is added a trade margin to reach the purchasers' value. In some cases unit prices are collected from the CPI.

Sale of vegetables directly from farmers to households and farmers' own consumption is estimated by the marketing company. That quantity is valued at the producers' prices.

Consumption of domestically produced and canned vegetables was originally calculated from the manufacturing statistics compiled by Statistics Iceland but in later years the values have been extrapolated following changes in VAT turnover in canning and related activity.

Imported potatoes are valued according to the normal procedure previously described. Figures on domestically produced potatoes were based on information on quantity sold from the main wholesale distributors up to the year 2002. From 2003 and onwards figures are based on extrapolation of VAT turnover in several activities like 01.11.2 Growing of potatoes, 01.12.1, Growing of vegetables etc., and activity 15.31 Processing and preserving of potatoes. Due to increased competition and different retail trade margins, the unit prices from the CPI are applied to a greater extent than earlier in valuing production. Previously information from the Agricultural Production Board was used.

Sale of carrots "etc" is estimated by the Farmers Association. An explicit estimate is made to cover direct sale from farmers to final consumers as well as own consumption on farms. These estimates are based on information from the Gardeners Marketing Company.

Direct sale is valued at wholesale prices but own consumption is valued at producers' prices, i.e. net delivery prices the producers receive from wholesalers when selling similar goods.

#### 01.1.8 Sugar, jam, honey chocolate and confectionery

All sugar is imported. Therefore the total quantity and c.i.f. value of sugar is available through normal procedures. The problem is to distinguish between final and intermediate consumption of the imports. Here several sources are exploited. One of them is the manufacturing statistics compiled by Statistics Iceland. Finally, important additional information can be collected by itemisation of import figures by importers for various tariff numbers. In many cases big importers are also users of the sugar and that fact facilitates the classification of imported sugar by industry of use.

Domestically produced confectionery is estimated from the turnover figures in VAT sources for class 15.84, Manufacture of cocoa, chocolate and sugar confectionery. In estimating purchasers' prices an addition is made to include excise duties, trade and transport margin and VAT.

#### 01.1.9 Food products n.e.c.

This group contains various food items, not elsewhere classified.

Domestic production of goods in this group was originally mainly based on manufacturing statistics compiled by Statistics Iceland. In later years these values are extrapolated following changes in VAT turnover in the most appropriated activities.

#### 01.2 Non-alcoholic beverages

Included here are coffee, tea, cocoa, mineral waters, fruit and vegetable juices, sodas, lemonades etc.

#### 01.2.1 Coffee, tee and cocoa

The normal procedure is applied for tea, cocoa and coffee imported in packages intended for household consumption. Information on domestically processed coffee is derived from the VAT turnover in activity 15.86 Processing of tea and coffee.

#### 01.2.2 Soft drinks, fruit juices and mineral water

For fruit juices the main source is manufacturing statistics and unit prices from the CPI.

Other beverage expenditures are derived from the output in class 15.98, Production of mineral waters and soft drinks. To these output figures are added trade and transport margins and VAT.

Special problems arise here in connection with direct imports by domestic producers of other beverages for resale. These imports are already included in imports of consumer goods and therefore it has to be subtracted here to avoid double counting. Previously, a fixed percentage, 5%, was estimated to cover this correction. This estimate was based on a special investigation carried out in 1986. In more recent years no such correction has been made. Therefore, some double counting might exist here. It will be revised shortly.

Approximately 1/6 of the total consumption of beverages takes place in the hotels and restaurants. That amount is subtracted here to avoid double counting.

#### 02. Alcoholic beverages, tobacco and narcotics

This section is sub-classified into three divisions. The first is alcoholic beverages, the second is tobacco and the third is narcotics but consumption of that has not yet been estimated.

#### 02.1 Alcoholic beverages

Until the middle of 1995 the *State Wine, Spirit and Tobacco Authority* (ÁTVR) had a monopoly of all wholesale and retail trade of alcoholic beverages. Now the wholesale monopoly has been abolished but the *ÁTVR* still has a monopoly on retail trade. Retail sales of alcoholic beverages are derived from this authority but data on sales in hotels and restaurants originate from both the ÁTVR and other wholesalers and is recorded in the appropriate expenditure category. The market share of other wholesalers is estimated around 30% of total. This share is based on a survey conducted by the National Economic Institute in 1986 but slightly revised later. A revision is needed. Following breakdown is available from ÁTVR on a quarterly basis:

- General sales of wine and spirits to regular households in the monopolized wine and spirits shops and of tobacco to retailers shops, supermarkets etc.
- Sales to restaurants and hotels
- Other sales to diplomats, officials etc.

This sales data are used to estimate the share of sales of these goods in restaurants and hotels in Iceland.

Figures from ÁTVR do not cover direct import of alcohol by tourists or crew members of ships and aircraft. These figures are estimated separately based on the total number of tourists and the amount each resident is allowed to import duty-free on arrival in the country.

Alcohol consumption at restaurants is excluded here and included in group 11, Expenditure in restaurants, cafés and hotels. Figures have been extrapolated from the VAT turnover but Statistics Iceland is going to revise these methods and rely on direct figures from ÁTVR and some of the biggest wholesalers of alcoholic beverages. Figures from Statistics Iceland about sales of litres of alcoholic beverages and litres of pure alcohol are also used here. From 1995 the figures cover the sales of ÁTVR and the sales of licence holders.

#### 02.2 Tobacco

The main source of information here is the State Wine, Spirit and Tobacco Authority (ÁTVR). Methods of estimation are similar to that of alcoholic beverages, and again the data are not fully complete. The main deviation is the estimation of sale of tobacco in restaurants. The sale in restaurants is registered there but subtracted from this expenditure group. It is estimated differently and assumed to be a fixed percentage, around 0.5% of the total sale of tobacco and has been falling gradually in recent years and is now around 0.3%.

#### 02.2 Narcotics

Consumption of narcotics has not yet been estimated in national accounts.

#### 03. Clothing and footwear

This section is sub-classified into two divisions. The first one is clothing, cleaning, repair and hire of clothing and the second one is footwear, including repair.

#### 03.1 Clothing other than footwear

Domestically produced clothing is estimated from the VAT turnover in activity 18.2, Manufacture of wearing apparel, similarly to the methods already described for confectionery etc. The VAT returns allows a subtraction of exports because exports is exempt from VAT.

#### 03.1.1 Clothing materials

Of minor importance are domestically produced clothing materials, so these have been totally excluded during the last few years. The total supply of clothing material has to be divided between intermediate consumption and final consumption. During recent years this information is based on estimates from the main importers of clothing materials. The total value of imported clothing materials is divided between groups 03.1.3 Other clothing and accessories and 03.1.1. Clothing material, but around 22% of the import is classified here. This estimate is drawn from the Household expenditure survey.

#### 03.1.2 Clothes

The total value of clothes is estimated from VAT turnover in the corresponding branch of the industry, class 18.2 for the domestically produced clothes. This value is at producers' price so one has to add to it estimated trade margins and VAT to reach the purchasers' price. Exports of these goods are compiled yearly by Statistics Iceland and are subtracted from the output figures. It is estimated that around 40 percent is household private consumption. For imported clothes the usual methods are used. Originally the estimation regarding domestically produced clothes was based on information from importers of clothing materials on how imported clothing materials were allocated. The estimation of the share of HFCE of imported clothes and other clothes and accessories is based on tariff numbers that include those products. Often tariff numbers are so specified that distinction can be made between intermediate and final use.

#### 03.1.3 Other clothes and accessories

It is estimated that around 78% of imported clothing material under this group is household consumption.

#### 03.1.4 Cleaning and repair of clothing

Household expenditures on cleaning are based on VAT return in activity 93.01, Washing and drycleaning of textile and fur products. This activity includes both laundries and cleaning. The share of households' purchases differs considerably between these two. Therefore it is necessary to split up the output of the activity. Few decades ago that was done by making use of the Pay-as-you-earn Register and from that it was estimated that 75% of the output in activity 93.01 was laundry services and 25% cleaning. Of each of these two sub-activities it was assumed that households purchase 5% of the output of laundries and 70% of the output of cleaning services. Finally the conclusion was reached that 20% of total output in activity 93.01 was household consumption. The separation between household expenditure and intermediate consumption was a rough estimate and some amendment is needed.

Dry-cleaning, laundering and dyeing of garments is included in this division but dry-cleaning, laundering, dyeing and hire of household linen and other household textiles is excluded here and included in division 05.6.2.

#### 03.2 Footwear, including repairs

#### 03.2.1 Footwear

Domestically produced footwear is estimated from the output in branch 19.30, Manufacture of footwear, taking into account the usual corrections. The conventional procedure for imports is applied.

#### 04. Housing, water, electricity, gas and other fuels

#### 04.1 Imputed rentals for housing

Approximately 80% of all dwellings in Iceland are owner-occupied. Information about the number and stratification of dwellings are derived from the Land Registry of Iceland (*LRI*) and the price of the rent is from Statistics Iceland's *Rent Survey* March 1999. That survey was conducted for CPI purposes.

To estimate the total rental of all dwellings the number of dwellings in each stratum is multiplied by rent price data in the housing survey and thereafter added up to a total sum. The total cost data is thereafter divided in two parts, 20% in actual paid rentals for housing and 80% in imputed rental for owner-occupied dwellings.

The value of average rental paid is derived from the 1999 housing survey performed by Statistics Iceland and used for national accounting purposes. That base is extrapolated following the information on the price changes of the rental subgroups in the CPI. The sub index of the CPI is based on extensive price surveys of rental for public and private housing. The rental is computed from the number of houses and average rental paid for different size and location of houses. The stratification is based on 8 strata, 4 by size and two by location. That stratification is derived from the LRI and it has been adapted to the 1999 housing census data. Statistics Iceland is considering utilizing better information that is available now about rentals compiled in the HES and EU-SILC surveys that are conducted regularly.

The number of houses, detached houses and apartments are available from LRI both in the capital area and outside the capital. These sources are used to estimate the total rental of housing. The number of houses, apartments etc. are multiplied by the average rent paid in each type of housing and location.

The rental of secondary residences are estimated as 0.8% of other rental and added to the total value of rental. That result is derived from the following:

- A special estimate is done to include holiday homes although they account for a very minor
  part of the housing stock. In this case a notice is taken of the real estate value of holiday
  homes in proportion to the same value of dwellings. Short usage time of holiday homes is
  also taken into account.
- The value of summer houses are estimated 3.12% of the total value of houses in 1999. That is the total value of groups 4.2.1 Imputed rentals of owner-occupiers and 4.2.2 Other imputed rentals. The estimated time of use is 25% and therefore the rents for secondary residences are estimated 0.8% of other rents.

#### 04.2 Actual rentals for housing

The actual rental for housing is estimated in a similar way as the imputed rental. Approximately 20% of all dwellings in Iceland are not owner-occupied and rented. Information about average rents are derived from Statistics Iceland's 1999 housing survey and information about the number of houses are from The Land Registry of Iceland (LRI). The 1999 survey has been used as a base and that base is extrapolated following the price changes of the rental subgroups of CPI that is based on regular rental surveys.

#### 04.3 Maintenance and repair of the dwelling

Only expenditure which tenants and owner-occupiers incur for minor maintenance and repair are estimated as households' consumption (typically tenants' repairs). An estimate is made of such typically tenants' repair. This amount is estimated as 4-5% percent of the total rentals, both actual and imputed. This is based on some indicators from the Household expenditure surveys and consultation with the price statisticians within Statistics Iceland. Minor maintenance of owner-occupiers is included in the imputed rentals of owners occupying their residence.

#### 04.4 Water supply and miscellaneous services relating to the dwelling

This cost is included in total rentals of dwellings as mentioned above because market rent data is used in estimating total rent.

#### 04.5 Fuel and power

From the production accounts, figures are available on the total output of public utilities such as electricity and hot water supply. Producing units in these activities do not have available figures which distinguish between sales to households and industry. Therefore an estimate has to be made. That is done by exploiting figures from the National Energy Authority. This institute regularly estimates the energy in Gwh needed to heat up each cubic meter of dwellings and transforms that energy to the equivalent of the corresponding source of energy, whether it is hot water or electricity. Information is also available on the volume of dwellings heated up by hot water or electricity and the unit prices of both. From this the total expenditures of heating of the dwellings can be calculated.

Use of electricity for purposes other than heating, i.e. for cooking and lighting is also based on figures from the National Energy Authority. These figures are derived directly from the sales statistics of enterprises. There are different price brackets for electricity used for different purposes. Therefore it is not necessary to use estimates based on coefficients as in the case of heating.

#### 05. Furniture, furnishings, and household equipment and repair

This section is sub-classified into five divisions, which are calculated separately. The divisions cover various household goods such as furniture, household equipment and appliances and repair of them.

# 05.1 Furniture, fixtures, carpets, other floor coverings 05.1.1 Furniture, fixtures,

The value of imported furniture is calculated according to the usual procedure. The estimation of domestically produced furniture causes bigger problems. Account is taken of output in branch 36.1, Manufacture of furniture and fixtures. However, problems arise in distinguishing between furniture and fixtures, because fixtures are to be included in fixed capital formation but furniture is a part of household consumption. The distinction is made by estimating the value of fixtures and leaving the residual of the output as furniture. The fixtures are estimated from the total value of gross fixed capital formation and the estimated share of fixtures in a selected group of buildings such as residential construction, schools, hotels etc. Special investigations carried out by the *Association of Icelandic Furniture Makers* are also taken into consideration. These sources show that approximately 1/3 of the output of the branch 36.1 is production of furniture. This refers to the latest years but the production of furniture has diminished considerably in the last two decades. Now the available breakdown of NACE 36.1 on 4 digit level allows revision of these methods.

Finally, to reach the household consumption of furniture one has to subtract from furniture production the export of furniture and furniture purchased for industrial use which is classified as investment.

#### 05.1.2 Carpets, other floor coverings

Fitted carpets and linoleum are excluded here because they are a part of fixed capital formation. Other carpets etc are included. Information is based on import statistics following the normal procedure.

#### 05.1.3 Repair of furniture

Repair of furniture is based on VAT turnover in activity 36.14, Manufacture of other furniture. The share of households is estimated as 28%.

#### 05.2 Household textiles, other furnishings, and repairs

Domestically produced goods are based on statistics on manufactured goods compiled by Statistics Iceland. Unit prices from CPI are used to obtain values.

#### 05.3 Household appliances

This division includes heating and cooking appliances, refrigerators, washing machines and similar major household appliances, including fittings and repairs.

#### 05.3.1-05.3.2 Purchases of new household appliance

There is no production domestically of appliances of this type that can be classified as household final consumption. There exists production of wall-ovens, and until recently production of electric ovens on a small scale existed, both classified as fixed capital formation. The normal procedure is followed in estimating household consumption of imported household appliances, i.e. import duties, VAT and trade and transport margin are added to the CIF value.

#### 05.3.3 Repair of household appliances

This item is estimated from two sources. One is the import of spare parts for household appliances. The second is an estimated margin intended to cover the repair work and other additional expenses. These margins are estimated from the operating accounts in the appropriate branches. Account is also taken of the VAT turnover in branch 52.72, Repair of electrical household goods and it is estimated that 32% of the turnover belongs to the household expenditure. This source has played an increasing role during the last few years due to the difficulties of recognising the spare parts of home appliances from other purposes, especially in imports, so this has from the year 1995 onwards been the only way to estimate the repair of household appliances.

#### 05.4 Glassware, tableware and household utensils including repairs

Silverware is now estimated from the output in activity 28.75 Manufacture of other fabricated metal products, n.e.c. This share has varied in recent years and has decreased because of increased share of imported articles. According to the VAT turnover the import share in this activity is estimated as 96%. These estimates are made in co-operation with the *Icelandic Goldsmiths' Union*. These estimates are transferred from here and used in deciding the consumption in item 12.3.

Information on domestically produced lamps is taken from the statistics on manufactured goods compiled by Statistics Iceland. It is estimated that a half of it is household consumption. This part of the households' expenditure also includes tools and equipment for house and garden, which are mostly imported. A new investigation is needed here.

#### 05.6 Goods and services for routine household

This division is sub-classified into goods and services

#### 05.6.1 Non durable household goods

Included here are cleaning materials, household paper products, candles, mops, brooms and brushes etc. Domestically produced goods are derived from the statistics on manufactured goods compiled by Statistics Iceland and some assumptions on the share of that production going to household consumption.

Of individual items in this group the most important ones are the purchases of pottery and cleaning agents. These items are estimated from the VAT turnover in corresponding activities, i.e. activity 26.21, Manufacture of ceramic household and ornamental articles and 45% of activity 24.51, Manufacture of soap and detergents, cleaning and polishing preparations. Besides these activities approximately 85% of the output of following activities is included:

- 17.40.2 Manufacture of made-up textile and furnishing articles;
- 17.40.9 Manufacture of other made up textile articles n.e.c.;
- 21.22 Manufacture of household and sanitary goods and of toilet requilites;
- 26.25 Manufacture of other ceramic products;
- 26.26 Manufacture of refractory ceramic products.

The shares used in this category are based on discussions with some insiders in these activities.

Finally estimated export is subtracted.

#### 05.6.2 Domestic services and household services

#### 05.6.2.1 Laundry services

Household expenditures are based on output in industry 93.01, Washing and dry cleaning of textile and fur products. This industry includes both laundries and cleaning. The share of households' purchases differs considerably between these two. Therefore it is necessary to split up the output of the branch. That was done by making use of the Pay-as-you-earn Register and from that it was estimated that 75% of the output in branch 93.01 was laundry services and 25% cleaning. Of each of these two sub-branches it was guessed that households purchased 5% of the output of laundries and 70% of the output of cleaning services. Finally one comes to the conclusion that 20% of total output in branch 93.01 was household consumption. These methods require a revision.

Dry-cleaning, laundering and dyeing of household linen and other household textiles is included in this division but dry-cleaning, laundering, dyeing of garments is excluded here but included in division 03.1.

#### 05.6.2.2 Domestic services

Here the household expenditure is subdivided into two divisions which are expenditure to day nurseries and to domestic services. This item is estimated by using the same procedure as for day nurseries, i.e. by making use of Household expenditure survey.

The item covers services such as domestic services rendered by employed persons as well as that part of services rendered to old people and disabled and paid for by the recipients of the service.

#### 06. Medical care and health expenses

Included in this section are direct payments by households for medicine and medical treatment. Payments by government are classified as government final consumption and mostly as social transfer in kind and a part of actual individual consumption. The household expenses are subclassified into two groups. The first one is purchase of medical and pharmaceutical products, as well as purchase of therapeutic appliances and equipment and the second one is outpatient services of physicians, nurses and related practitioners

#### 06.1 Medical products, appliances and equipment

This section is sub-classified into two divisions, medical and pharmaceutical products and other medical products and therapeutic appliances and equipment.

#### 06.1.1 Medical and pharmaceutical products

The starting point is the output of branches 52.31 and 52.32, Dispensing chemists and Retail sale of medical and orthopaedic goods. From *the Pharmaceutical Pricing Committee* information is available on the share of drugs and pharmaceutical products in total turnover of the activity. During recent years this share has been 80-83% of which the Social Security System is paying a certain proportion. That proportion varies by type of drug etc. but on average it is 63-65%. This proportion is subtracted and what remains is household consumption.

#### 06.1.2-3 Other medical products and therapeutic appliances and equipment

Included here are among others eyeglasses, hearing aids, artificial limbs etc. Items included here are imported and the value is estimated following the normal procedure. Households only finance a part of it and that part is household final consumption. The rest, financed by government, is classified as government final consumption.

#### 06.2 Out-patient services

Services of physicians, nurses and related practitioners are the main out-patient services. Fees to dentists, physicians etc. are estimated from Household expenditure survey, where the average family size used is 3.66. This is an out-dated size. The size has gradually decreased and according to the 2006 survey the size is now 2.47. Accordingly these estimates will be revised. During recent

years a comparative statistics are also collected from the *Ministry of health* on the number of visits to clinics and the average cost per visit paid by patients.

#### 06.3.0 Hospital services

This section is under revision. Revised figures will be published soon. Number of patients' visits to hospitals will be used to estimate Household private consumption.

#### 07. Transport

Included in this section are purchases and operation of personal transport equipment and other transport services.

#### 07.1 Purchase of personal transport equipment

These transport equipment are imported. The normal procedure is followed in estimating the purchasers' price from the c.i.f.-value. However the calculation varies in the sense that more diverse duties are levied on this equipment. Problems arise in distinguishing between private and business cars. In recent years it has been assumed that 75% of personal cars are classified as household consumption with the remaining part as business cars and consequently classified as capital formation. This proportion is based on the Car Registry, held by *The Road Traffic Directorate*, which keeps a record of every car and its owner. Concerning motor cycles, in higher size classes the corresponding share of household consumption is 76%. The purchases of bicycles are considered to be 100% private household consumption.

Imported cars are registered as imported when they are cleared through customs, not when they are crossing the borders of the country.

#### 07.2 Operation of personal transport equipment

The cost of operation of personal transport equipment is based on the household expenditure survey. The average total cost per car per year is multiplied by the number of personal cars. Fuel consumption is included but depreciation and insurance costs are omitted from the cost. The number of personal cars in these calculations is estimated as 71.5% of the stock of registered passenger cars according to registration kept by the *Road Traffic Directorate*. Included in these calculations are passenger cars for 7 passengers or less.

Included in this class is that part of NACE 63.21 "Other supporting land transport activities" that is deemed to be households' final consumption. That part is derived from the Household Budget Survey in 2002 and extrapolated from that value by means of the change in the stock of private cars and the corresponding sub-item of CPI. So far no direct use is made of the output of NACE 63.21.

#### 07.3 Transport services

Public transportation services are sub-classified into few divisions that are passenger transport by land, sea and waterway, and by air. Fares on buses are based on direct information from all the main enterprises in this activity. Expenses on long-distance coach transport are based on paid licence fees together with estimates from the *Association of Icelandic Concessionaires*.

The level of other passenger land transport was based on the HES for the period 2000-2002. These levels are extrapolated by changes in VAT turnover and later on the changes in the EAR in activity 60.21; 60.22 and 60.23 covering taxis and car rentals. It is assumed that barely half of the car rental service is purchased by units other than households. This is likely an underestimate of Household Final Consumption but here a revision is needed and a recent Tourism Satellite Accounts from Statistics Iceland will be exploited. The unit prices here are derived from the consumer price index.

The methods for estimating passenger air transport were revised in 2003 and the values were reconciled with the household expenditure survey that year. For later years a notice is taken of the turnover in the activity, number of passengers and price changes of the relevant items of the CPI. It is estimated that 75% of the total turnover in the activity has its origin in international flight and the

remaining part is domestic flight. The value of food consumption during the flight is estimated as 5% of the turnover and that percentage is subtracted in order to avoid double counting.

#### 08. Communication

Included in this section are postal and telephone services as well as purchases of telephone and telefax equipment.

#### 8.1-8.3 Postal and telephone services and equipment

The sales statistics of Iceland Telecom, formerly the Post and Telecommunication Administration, does not allow disaggregation between households and business use. Therefore Statistics Iceland has to estimate the share of households. It is done by making use of the number of registered personal phone numbers and the average use of the phones as reported in the household expenditure survey. It is estimated that the share of households is around 75% of VAT turnover in activity 64.2 Telecommunications. Household expenditure on internet access is included in telephone expenditure.

The postal expenses of households are based on the household expenditure survey and extrapolated by taking into account changes in VAT turnover in activity 64.11 National post activities. These methods need further revisions and a more intensive use of recent household expenditure surveys is planned.

The normal procedure is followed in estimating the household consumption of imported telephone equipment, i.e. import duties, VAT and trade and transport margins are added to the CIF-value.

#### 09. Recreation and culture

This section is sub-classified into several divisions, which are separately calculated.

#### 09.1-09.3 Equipment and accessories, including repairs

This division covers articles such as television sets and radios, personal computers, photographic equipment etc. The normal procedure is followed in estimating the value at purchasers' prices of these imported goods.

The most important software purchased by households is computer games, embedded in the hardware and therefore included in this category.

Estimated repair of TVs and radios is based on the number of registered users and average repair costs from the household expenditure survey.

#### 09.4 Entertainment, recreational and cultural services, excluding hotels restaurants and cafés

Various items are classified in this division. Some of them will be mentioned here. Subscription fees to radio and TV are based on the financial accounts of these firms. Photographic services are derived from the output in the activity 74.81, Photographic activities. A definite share, 82%, of the output is classified as household consumption. This information is collected from producers in the photographic activity.

The purchases of flowers are based on estimated domestic production and the value of imports.

Expenditures on lotteries are estimated on net basis, which is the total value of tickets sold less the prizes paid. Reliable data is obtained from all the big lotteries but the treatment of the small lotteries is more problematic. However use is made of the licences to operate a lottery issued each time by the *Ministry of Justice*.

The household expenditure survey is exploited in estimating the fishing licence for rivers. Expenditures on theatres, symphony orchestra etc. are based on direct information from the main

entities in these branches and estimates for the smaller ones. These estimates take notice of the output in the corresponding activities, like:

- 71.40.1 Renting of videotapes etc.;
- 74.81 Photographic activity;
- 52.48.2 Retail trade of photographic equipment;
- 92.13 Motion pictures projection
- 92.2 Radio and television activity.

Most often cultural activity of this type is considered as non-market output and the government payments are either classified as government final consumption expenditure or as current transfers in the case of NPISH.

Expenditure on cinemas is based on VAT turnover in branches 92.11, 92.12 and 92.13, Motion picture and video production, Motion picture and video distribution and Motion picture projection. It is estimated that 82% of the output is household consumption but the remaining 18% are assumed to derive from the production of motion pictures and the sale of confectionery.

The renting of video films etc. are estimated from the household expenditure survey and from output in branch 71.40.1, renting of video tapes etc.

#### 09.5 Newspapers, books and stationery

The normal procedure is followed in estimating expenditure on imported books, magazines, stationery etc. More complicated measures are applied in estimating domestic production.

#### 09.5.1, Books

For books, information is available on the number of titles and the copies printed of each title as well as the price. In previous calculations the assumption was made that half of the copies printed was sold during the year of publishing and the remaining half were sold during the next two consecutive years. In recent years the estimates rely more on VAT records, activity 22.11 Publishing of books where 62.5% is estimated to be Household private consumption. The estimate also relies on the Households expenditure survey and production accounts.

#### 09.5.2 Newspapers and periodicals

Data on periodicals is scarcer. The source used is the Household expenditure survey and changes in VAT turnover in these activities. The same source is also applied for newspapers. In that case a check is carried out by using data on the circulation of the biggest newspapers.

#### 10. Education

#### 10.1 Pre-primary education, day nursery etc. for children

Included are direct payments of households. The expenses are derived from the average expenses of households in the Household expenditure survey. These expenses are grossed up using the average size of households, the total number of households and the total population.

#### 10.2-10.5 Educational services

Included here are fees to schools, paid directly by the households. Payments for food, beverages and shelter are not included. The source of the information is the Household expenditure survey. In 2006 it was decided to use another data source regarding educational services. Direct payments of households are now derived from the total number of students registered to schools every year at each educational level. The unit prices are derived from the consumer price index.

#### 11. Expenditure in restaurants, cafés and hotels

This item contains three subgroups:

- Restaurants and cafés
- Canteens
- Hotels and guesthouses

Each one of these groups is estimated separately. Included in the output are food, tobacco, wine and spirits consumed in restaurants and hotels. The same amount is subtracted from the corresponding expenditure items in order to avoid double counting. Expenditure in camping and caravan sites and other provision of short-stay accommodation is included here.

The expenditures on restaurants and cafés are originally based on the output of the activity 862 in the former activity classification for the year 1996. These values are extrapolated by annual changes of VAT turnover of activities 55.3 and 55.4 for later years.

The expenditures in canteens are based on VAT turnover in activity 55.5 after the turnover has been reduced by 20% in an attempt to eliminate purchases by other than households.

The expenditures on hotels and guesthouses are based on the accommodation statistics compiled by Statistics Iceland where the number of overnight stays is presented. The average room rate is obtained from the home page of the Icelandic Travel Industry Association. Until these statistics are available for each year preliminary estimates are based on changes in VAT turnover in activities 55.11 and 55.12.

#### 12. Miscellaneous goods and services

#### 12.1 Personal care

This item includes both goods and services. Domestically produced cosmetic goods are estimated from the output of branch 24.52.0, Manufacture of perfumes and toilet preparations. Expenditure on services is based on output in branch 93.02.0, Hairdressing and other beauty treatment and changes in VAT turnover. Included in output of this branch is some sale of cosmetics. This sale is subtracted from output in order to avoid double counting.

#### 12.3 Personal effects n.e.c.

Household expenditure on domestically produced jewellery is estimated as approximately 40% of the output in branch 36.22.0, Manufacture of jewellery and related articles n.e.c. These shares are partly based on information from goldsmiths and other experts in this field. Some level adjustments may be needed here but annual changes are derived from VAT turnover in NACE 36.22.

Included under this item are handbags and various travelling goods, sleeping bags etc. The sources used are the statistics on manufactured goods compiled by Statistics Iceland.

#### 12.5 Insurance

Service charges for insurance are here classified by type of insurance i.e. life insurance and non-life insurance, insurance in connection with the dwelling, health, transport and other insurance.

Household expenditure is estimated by including the service charges of insurance companies. Life insurance is estimated at 4.5% of total operation expenses in the insurance branch and insurance of personal belongings at home and travel insurance are estimated at 4.2% and 1.0% respectively. This information is obtained in records from the Financial Supervisory Authority. Insurance of dwellings is estimated at 0.77% of total cost of owner-occupied dwellings but insurance of rented houses are classified as intermediate consumption and are not included in private household consumption. The net cost of insurance of personal transport equipment is based on the household expenditure survey as other operation of personal transport equipment and is described before in section 07.2. In the household expenditure survey almost 18.5% of total operational costs, less depreciation, are net insurance costs. That average cost is multiplied by the number of private passenger cars to estimate the total cost of insurance of personal transport equipment.

#### 12.6 Financial services

Included here are operating expenses of pension funds and actual charges for bank services. The charges for bank services are based on the FISIM calculations as described in chapter 9. The charges are based on the classifications of stocks of deposits and loans by sectors and the difference between market interest rate and the reference rate.

#### 12.7 Services, n.e.c.

Prior to the implementation of ESA95 this category included items such as membership dues in professional organisations, derived from the Payroll Register. Other membership fees were derived from the household expenditure survey. After the implementation of ESA95 in 2000 these items were transferred to the NPISH sector. This correction was carried out back to 1990.

Among other items remaining here are funeral expenses, based on information from the *Capital Area Cemeteries* where information is available on the average cost per funeral. Another source of information are changes in VAT turnover of branch 93.03, Funeral and related activities.

#### 13.1 NPISH

Final consumption of NPISH is further described in section 5.8 below. However the consumption of this sector is presented here because of its near relationship with the Household sector.

#### Additional items to reach expenditure of resident households

#### Direct purchases abroad by resident households

Here, the main source of information is the balance of payment statistics compiled by the Central Bank of Iceland. This covers purchase of foreign currency by tourists used for hotel and travel expenses. So far no attempt has been made to distinguish business travel from tourist expenditure of Icelanders abroad. This clearly leads to overestimation of consumption and an investigation will be carried out soon to correct this.

#### Direct purchases in the domestic market by non-resident households

The source of information is the balance of payment statistics. The most important here are income from foreign tourists and income from foreign embassies in Iceland. The distinction between residents and non-residents is important here. These concepts are defined in accordance to Act No 87/1992 on Foreign Exchange. Resident refers to any individual permanently resident in Iceland in accordance with the provisions of the Act on Legal Domicile, irrespective of nationality; the same shall apply to an Icelandic national and his dependants residing in other countries who is employed there by the Icelandic State with an embassy, permanent delegation or consulate and accepts remuneration from the Icelandic Treasury, or is employed by an international organization to which Iceland is party.

Act on Legal Domicile no 21/1990 states that a person residing in Iceland for six months or longer has to obtain a legal domicile in Iceland. A person that resides and intends to reside in Iceland for employment or educational purposes for longer than 3 months can have a legal domicile in Iceland.

Resident also refers to any legal person registered as legally domiciled in Iceland, stated to be resident in Iceland in its articles of association, or in effect managed in Iceland; Icelandic branches of legal persons domiciled outside Iceland are regarded as residents.

# 5.7.5 Comparison between household expenditure survey 2005 and household final consumption

As a check on the level of household final consumption in the national accounts a comparison has been undertaken of these results and similar results derived from the household expenditure survey (HES) carried out regularly on a sample basis.

Regularly, Statistics Iceland carries out the household expenditure survey (HES). The survey is continuous and the survey cycle is three years as further described in section 5.7.3. For the comparison here the three years period chosen was 2003-2005. The final size of the sample was 1,773 households consisting of 4,433 individuals or about 1.5% of the total population. The weighted average size of household was 2.50 individuals, about 1 child and 1.6 adults. That size was used as a base when the household expenditure survey was grossed up to macro level. The mid-year estimate of the population was 295,864 individuals so the grossing up factor was 118,346, i.e. 295,864 divided by 2.5.

The household final consumption of the three years 2003-2005 was calculated at the average prices of the year 2005 by using the price indices of each 3-digit sub-items. An average of these three years was the base for comparison with the expenditure survey.

Table 5-7 shows a comparison between the grossed up household expenditure survey and the national account figures for Household final consumption. In both cases the price levels are average 2005 prices.

The most suitable base for comparison is the concept *residents' household final consumption expenditure in the domestic market*. That concept excludes direct purchases abroad by resident households as well as direct purchases in the domestic market by non-resident household that have already been subtracted from the individual expenditure groups. Non-profit institutions serving households are also excluded. After these adjustments of the household final consumption, they have been adjusted to the household expenditure survey. However, further adjustments are necessary to improve comparability owing to different methods of estimation. Two items are of a special importance. These are:

- · Actual and imputed rental
- Purchase of vehicles

The estimation of imputed rent of dwellings is quite different in national accounts and household expenditure surveys. In the national accounts both the actual rental of tenants and imputed rental for owner occupied housing is based on a rental survey undertaken by Statistics Iceland in 1999. These results are then extrapolated following the price changes of the rentals in the CPI and volume changes of the housing stock.

In the household expenditure survey the total cost of dwellings for owner occupied housing is measured as a simple user cost and the rentals collected in the household expenditure survey for actual rental.

The second item that should also be omitted from the comparison is purchase of vehicles. The experience in Iceland is that there are frequently considerable fluctuations in these purchases from one year to another with a direct impact on the household consumption. Similar fluctuations are not noticed in the survey where they are incorporated more slowly because of the three year survey cycle.

Table 5-7 Comparison for 2005 of household final consumption expenditure according to the national accounts and the household expenditure survey. Three years period 2003-2005, calculated at average prices of 2005.

	Household final		Household		
	consumption		expend	enditure survey	
				]	Deviation
					of HES
	Million	% of	Million	% of	From
	ISK	total	ISK	total	HFC, %
01. Food and non-alcoholic beverages	58,383	12.0	62,722	12.9	7.4
01.1 Food	56,552	11.6	56,381	11.6	
01.2 Non alcoholic beverages	7,267	1.5	6,340	1.3	

Direct purchases in the domestic marked by non-resident household	-5,436				_
02. Alcoholic beverages and tobacco	20,815	4.3	14,435	3.0	-30.6
02.1 Alcoholic beverages	12,775	2.6	8,707	1.8	
02.2 Tobacco	9,275	1.9	5,728	1.2	
Direct purchases in the domestic marked by non-resident household	-1,235				
03. Clothing and footwear	23,057	4.7	22,962	4.7	-0.4
03.1 Clothing	20,219	4.1	19,718	4.1	
03.2 Footwear	3,580	0.7	3,244	0.7	
Direct purchases in the domestic marked by non-resident household	-741				
04. Housing, water, electricity, gas and other fuels	110,450	22.6	123,020	25.4	11.4
04.1 Actual rental	18,248	3.7	9,528	2.0	-47.8
04.2 Imputed rental	72,992	14.9	75,140	15.5	2.9
04.3 Maintenance of housing	3,300	0.7	20,249	4.2	513.6
04.4 Other housing expenses	4,910	1.0	6,693	1.4	36.3
04.5 Electricity, gas and other fuels	11,001	2.3	11,409	2.4	3.7
05. Furnishings, household equipment and routine	31,839	6.5	32,487	<b>6.7</b>	2.0
05.1 Furniture and furnishings, carpets and other coverings	10,382	2.1	14,779	3.1	42.4
05.2 Household textiles	2,197	0.4	3,101	0.6	41.2
05.3 Household appliances	5,014	1.0	5,595	1.2	11.6
05.4 Glassware, tableware and household utensils	3,037	0.6	2,964	0.6	-2.4
05.5 Tools	2,110	0.4	1,434	0.3	-32.0
05.6 Goods and services for routine household maintenance	9,346	1.9	4,613	1.0	-50.6
Direct purchases in the domestic marked by non-resident household	-247				
06. Medical care and health expenses	16,348	3.3	17,490	3.6	7.0
06.1 Medical products, appliances and equipment	7,596	1.6	8,499	1.8	11.9
06.2 Out- patient services	8,697	1.8	8,883	1.8	2.1
06.3 Hospital services	302	0.1	108	0.0	-64.2
Direct purchases in the domestic marked by non-resident household	-247				
07. Transport	84,766	17.4	75,678	15.6	-10.7
07.1 Purchase of vehicles	31,135	6.4	30,736	6.3	-1.3
07.2 Operation of personal transport equipment	45,506	9.3	36,273	7.5	-20.3
07.3 Transport services	9,114	1.9	8,668	1.8	-4.9
Direct purchases in the domestic marked by non-resident household	-988				
08. Communication	13,665	2.8	14,277	2.9	4.5
08.1 Postal services	607	0.1	530	0.1	-12.8
08.2 Telephone and telefax equipment	992	0.2	921	0.2	-7.2
08.3 Telephone and telefax services	12,313	2.5	12,826	2.6	4.2
Direct purchases in the domestic market by non-resident household	-247				
09. Recreation and culture	59,662	12.2	62,385	12.9	4.6
09.1 Audio-visual, photographic and					
information processing equipment	7,906	1.6	8,754	1.8	0.0
09.2 Other major durables for recreation and culture	2,562	0.5	2,896	0.6	0.0
09.3 Other recreational items and equipment, gardens and pets	7,038	1.4	8,015	1.7	0.0
09.4 Recreational and cultural services	24,478	5.0	22,952	4.7	0.0
09.5 Newspapers, books and stationery	7,867	1.6	8,333	1.7	0.0
09.6 Package holidays	11,789	2.4	11,433	2.4	0.0
Direct purchases in the domestic marked by non-resident household	-1,977				
10. Education	7,321	1.5	6,543	1.4	-10.6
10.1 Pre-primary education	2,807	0.6	3,726	0.8	32.7
10.2-10.5 Educational services	4,513	0.9	2,818	0.6	-37.6
11. Restaurants and hotels	28,506	5.8	23,844	4.9	-16.4
11.1-11.2 Restaurants and hotels	41,601	8.5	23,844	4.9	
Direct purchases in the domestic marked by non-resident household	-13,095				
12. Miscellaneous goods and services	33,445	6.8	28,547	5.9	-14.6
12.1 Personal care	11,552	2.4	11,296	2.3	-2.2
12.3 Personal effects n.e.c.	3,634	0.7	1,437	0.3	-60.5
12.4 Social services	63	0.0	46	0.0	-26.6
12.5 Insurance	4,456	0.9	3,506	0.7	-21.3
12.6 Financial services n.e.c.	12,941	2.7	7,854	1.6	-39.3

12.7 Other services n.e.c.	1,294	0.3	4,407	0.9	240.5
Direct purchases in the domestic marked by non-resident household	-494				
13. Residents' households' final consumpt. in the domestic market	488,258	100.0	484,390	100.0	

14. Correction items for better comparison	122,375	25.1	115,404	23.8	
14.1 Actual and imputed rent	91,240		84,668		
14.2 Purchase of vehicles	31,135		30,736		
15. Households final consumption for comparison (15.= 1314.)	365,883	74.9	368,986	76.2	0.8

After the adjustments of the household final consumption in national accounts in line with the household expenditure survey, as described above, the overall result is that the level of the household expenditure survey is 0.8% higher than the final consumption expenditure of resident households in the domestic market which is the most comparable concept.

Apart from the overall difference, which is remarkably low, there are some deviations in a few items. Alcoholic beverages and tobacco are seriously underreported in the survey as normally happens in this kind of survey. This happens although this specific item has been revised upwards in the published survey from the actual results of the questionnaires.

In comparison with previous research of this kind it is noteworthy that the overall difference between household consumption in national accounts and the survey is similar to what it was before but the deviation between individual sub-items is much smaller now than it was before. For example, the latest comparison before this one referred to the year 2005 and was published in the Inventory of 2003. Then a considerable difference occurred in the items clothing and furnishing but now these differences can be ignored. This cannot be explained by a more intensive use of the survey in national accounts. In fact it has slightly decreased. Here it should be kept in mind that from 2000 onwards the household expenditure survey is a continuous one with the survey cycle of three years. That allows more regular comparison and might improve the comparability. The most positive conclusion to be drawn might be that the quality of either or both of these estimates has increased during the last decade.

# 5.8 NPISH final consumption expenditure

The final consumption expenditure of units of Non-Profit Institutions Serving Households (NPISH) is obtained by deducting from the total output the market output and the sale of non-market products. The output of some specific industries is used here to estimate the output and final consumption of NPISHs. The characteristic branches are the operation of sporting activities, religious organizations, homes for elderly people, welfare institutions, operation of charities, relief and aid organisations, trade unions and membership organization n.e.c. All NPISH-units are included in the business register. Every unit in that register is identified by legal form, like limited liabilities and NPISH, as described in section 3.1.2.

Although NPISH units are included in the business register, most of them do not deliver financial accounts to the tax authorities. Therefore, the statistical source cannot be the Enterprise Accounts Register. Instead these accounts are collected directly from the units in question or in some cases from the National Audit Bureau when the accounts are supervised by that institution.

In the implementation of ESA 95 in the year 2000 a special effort was made to estimate the output of NPISHs for the period 1990-1996. That was done by using as a starting point the output of the characteristic activities of NPISH from the output approach. Most of these activities contain both NPISH and other units. These activities were split up by making use of the classification of the Business Register by institutional sectors (more precisely legal form) and the share of the compensation of employees by activity and institutional sector from the Payroll Register. When the share of the compensation of employees in NPISH had been determined, the output and the cost components within NPISH were calculated proportionally.

The next step was to make a distinction of the output of NPISHs between household final consumption and other output. That was made on a selective industry by industry basis. The result was that approximately 45% of the output of NPISHs was considered as NPISH final consumption.

The remaining part was recorded as intermediate consumption of general government or direct sales to households, i.e. already included in household final consumption.

The two largest activities within NPISH were the operation of homes for elderly people and welfare institutions whose shares are 25% and 20% of total NPISHs respectively.

These methods were used for the years 1990-1996. In 1996, the NPISH final consumption was estimated as 9,591 million ISK. From that time the extrapolation of the values has been applied. That has been done by using the same annual volume and price changes as in government final consumption.

Table 5-8 NPISH final consumption by type of services in 2005

	Million ISK
Housing	829
Health	1,347
Recreation and culture	1,865
Education	1,036
Social protection	9,327
Other services (churches, polit.parties etc.)	6,321
Total	20,726

The total value of NPISH final consumption as described here has been broken down by type of services rendered. In table 5-8 the breakdown is shown for the year 2005:

This breakdown is based on rather rough estimates and a further investigation is needed. In particular, it is necessary to coordinate better these expenditures with corresponding current transfers from the Government sector.

Statistics Iceland is of the opinion that the overall revision of the methods applied in estimating NPISH is urgently needed. Among other things, an updating of the benchmark year and a more reliable sample of units, is an important part of this revision.

# 5.9 Government final consumption expenditure

#### 5.9.1 The sector and its subsectors

Government final consumption expenditure (GFCE) consists of expenditure, including imputed expenditure, incurred by general government on both individual consumption goods and services and collective consumption services.

In the national accounts, general government consists of three sub-sectors – central government, local government and the social security funds. The breakdown in terms of the relative scale of GFCE by sub-sectors is as follows:

Table 5-9 Government final consumption 2005, by sub-sectors

	Million ISK	% of total
Central government	139,107	55.1
Local government	84,427	33.4
Social security sector	29,083	11.5
Total	252,617	100

General government is one of the institutional sectors. These sectors consist of institutional units. All institutional units are producers and produce goods and services. The general government sector includes all institutional units, which are other non-market producers or producers for own final use, NPIs, which are mainly financed and/or controlled by general government. Within general government, there might exist units which are organised as limited liability companies but

are nevertheless classified as other non-market producers because they are mainly controlled and/or financed by general government. Similarly there may be units which are similar to companies but do not have the legal form of a company. These so-called quasi-corporations are also classified as market producers. They are characterised both by the fact that they keep a full set of accounts and they are managed as though they were companies. Thus, with certain exceptions, publicly owned corporations and quasi-corporations do not form part of general government. In Iceland no enterprises are classified as quasi-corporations.

An institutional unit may consist of several kind-of-activity units (KAU). In general government there are KAUs, which are classified as market producers or producers for own final use. GFCE only arises in units, which are other non-market producers.

### 5.9.2 The definition and classification by purpose

As described in previous section, Government final consumption expenditure (GFCE), consists of expenditure, including imputed expenditure, incurred by general government on both individual consumption goods and services and collective consumption services. The output value of the government units is calculated as the sum of their production costs which is composed of intermediate consumption of purchased goods and services valued at purchasers' prices, compensation of employees, consumption of fixed capital and other taxes on production less other subsidies.

GFCE is classified according to purpose. The classification by purpose follows COFOG. Government services may either concern society as a whole, i.e. they may constitute collective consumption expenditure, or consist of individually oriented services, i.e. they may constitute so-called individual consumption expenditure. Classification in accordance with COFOG offers, amongst other things, the possibility of distinguishing between individual and collective services provided by general government. In the national accounts expenditure for individual consumption is treated as transfers in kind. By deducting it from total final consumption expenditure in general government, it is possible to obtain actual consumption of general government. By adding the same item to the final consumption expenditure of households, it is possible to obtain the actual consumption of households. By convention, all government final consumption expenditure under definite headings of COFOG should be treated as expenditure on individual consumption services. These are especially items such as education, health, social security and welfare etc. Table 5-10 presents the breakdown of government final consumption expenditure between individual and collective consumption.

Table 5-10 Individual and collective consumption of government in 2005

	Million ISK	% of total
Individual consumption expenditure	169,592	67.1
Collective consumption expenditure	83,026	32.9
Total	252,617	100.0

Classification by purpose according to COFOG is undertaken for each component of the government expenditure, i.e. for consumption, gross fixed capital formation, current and capital transfers and subsidies. In table 5-11 this breakdown is shown by 3 digit COFOG classifications for the year 2005 and for GFCE only.

Table 5-11 General government final consumption in 2005 by 3 digit COFOG classification

	Million ISK
01 General Public service	21,854
0111 Executive and legislative organs	3,542
0112 Financial and fiscal affairs	6,121
0113 External affairs	2,585
0121 Economic aid to developing countries	425
0122 External affairs	155

0121 Canaral marcannal carriage	0.16
0131 General personnel services 0132 Overall planning and statistical services	946 519
0133 Other general services	3,176
0140 Basic research	1,183
0160 General public services n.e.c.	2,607
0170 Public debt transactions	595
0180 Transfers between governments levels, general	0
02 Defence	272
0230 Foreign military aid	272
03 Public order and safety	12,518
0310 Police services	7,443
0320 Fire-protection services	797
0330 Law courts	1,768
0340 Prisons	741
0350 R&D Public order and safety	0
0360 Public order and safety n.e.c.	1,770
04 Economic affairs	16,336
0411 General economic and commercial affairs	1,821
0412 General labour affairs	1,177
0421 Agriculture	1,039
0422 Forestry	35
0423 Fishing and hunting	1,126
0432 Petroleum and natural gas	0
0435 Electricity	-338
0436 Nonelectric energy	0
0442 Manufacturing	29
0451 Road transport	6,457
0452 Water transport	399
0454 Air transport	475
0460 Communication	219
0473 Tourism	550
0481 R&D General economic and labour affairs	5
0482 R&D Agriculture, forestry and fishing	1,979
0483 R&D Fuel and energy	307
0484 R&D Mining, manufacturing and construction	527
0487 R&D Other industries	280
0490 Economic affairs n.e.c.	249
05. Environmental protection	4,280
0510 Waste management	3,148
0520 Water waste management	1
0530 Pollution abatement	2
0540 Protection of biodiversity and landscape	719
0550 R&D Environmental protection	35
0560 Environmental protection n.e.c.	375
06 Housing and community amenities	2,734
0610 Housing development	534
0620 Community development	1,511
0630 Water supply	2
0640 Street lighting	619
0660 Housing and community amenities n.e.c.	68
07 Health	77,933
0711 Pharmaceutical products	6,079
0713 Other medical products	1,544
0721 General medical services	7,138
0722 Specialized medical services	3,451
0723 Dental services	1,214
0724 Paramedical services	2,570
0731 General hospital services	37,340
0732 Specialized hospital services	864

0734 Nursing and convalescent home services	15,338
0740 Public health services	496
0750 R&D Health	52
0760 Health n.e.c.	1,847
08 Recreation, culture and religion	13,190
0810 Recreational and sporting services	4,836
0820 Cultural services	8,113
0830 Broadcasting and publishing services	3
0840 Religious and other community services	13
0850 R&D Recreation, cultural and religion	136
0860 Recreation, culture and religion n.e.c.	90
09 Education	65,627
0911 Pre-primary education	4,457
0912 Primary education	23,880
0921 Lower-secondary education	10,506
0922 Upper-secondary education	12,623
0930 Postsecondary nontertiary education	152
0940 Tertiary education	11,307
0950 Education not definable by level	594
0960 Subsidiary services to education	431
0980 Education n.e.c.	1,676
10 Social protection	19,193
1011 Sickness	-36
1012 Disability	6,722
1020 Old age	1,062
1030 Survivors	0
1040 Family and children	8,189
1050 Unemployment	470
1060 Housing	0
1070 Social exclusion n.e.c.	252
1090 Social protection n.e.c.	2,535
11. Consumption of fixed capital	18,681
Total	252,617

In the production accounts government final consumption expenditure is subdivided between sections L, M and N according to ISAT 95 activity classification. Further description of these activities is given in section 3.18 above. There, the emphasis is on the total output of these activities contrary to this section which is restricted to the non-market output of this activity.

# 5.9.3 The delimitation of the general government sector

In section 3.18.2 a description is given of the main data sources exploited in constructing the government accounts. The central government account is sub-classified in a few parts and one of them (the A-part) represents more or less government activity as defined in national accounts. The accounting structure of local governments has recently been revised as well and will better suit national accounts purposes than before. After that revision the A-part of the central and local government sector is primarily limited to activities which are mainly financed by compulsory levies on other sectors - e.g. by taxation - but not by sale of goods and services in the market.

That means that production carried out by government units, which is mostly financed by sale of goods and services, is now classified outside the government sector but it constitutes a part of the non-financial or financial corporations sectors.

The third sub-sector of the government is the social security sector as described in section 5.9.1 above. That sector receives current transfers from other government units, mainly the central government and uses these transfers for social security purposes both in the form of social benefits and also to hospitals for medical treatments. There exist no direct social contributions from

individuals to the social security sector. All such contributions are channelled through the General government but a part of these contributions is clearly earmarked for the social security sector. This justifies the existence of the social security system as a sub-sector.

In defining the government sector, the guidelines have been the ownership or the control principle as well as the rate of direct and indirect competition prevailing on the corresponding market. Therefore the question of market producers charging "economically significant prices" has played an important role. However, the guidelines in ESA say that an economically significant price (excluding taxes on products and including subsidies on products) should generally cover at least 50 percent of the production costs of the product. In implementing ESA95 in the year 2000 that guideline was followed here as far as possible. In accordance with that, both *the National Theatre of Iceland* and *Iceland Symphony Orchestra* are now classified inside the general government sector. Prior to the implementation of ESA95 these units were classified in the non-financial corporations sector and transfers to them were treated as subsidies to these producers.

Despite these exceptional cases, most of the institutions which provide goods and services to the community or individual households fall directly under the general government sector. The sector consists of the central government, the social security system and local government units. The number of local governments has been declining. It was 79 at the beginning of year 2008 but 101 in 2005 and 197 in 197 in 1992. Most schools, hospitals and institutions for children, the elderly and handicapped people are among these institutions within governments. Their financial accounts are part of the general government account.

In some cases there exist independent institutions or units outside the general government sector which provide services free or at prices that are not economically significant. Examples of this type are several nursing homes, private schools and dental clinics. The government sector's purchases of goods and services from these units are classified as intermediate consumption of government and therefore it becomes final consumption of government.

Another example of similar type is the *Icelandic Student Loan Fund*. It is owned and controlled by the central government. However, it is classified to the financial corporations sector. The reason is that only a part of its lending activity is financed by direct contributions from the central government. The Fund has also the possibility to incur liabilities with units outside the government to finance its activity.

All pension funds in Iceland are classified outside the general government sector. They are many, independently controlled and confined to particular industries, unions, or employers, and in most cases they have been established through negotiations between employees and employers rather than through government decision. Most of them are controlled independent of government.

#### 5.9.4 Valuation

Consumption expenditure is made up of the output value of the activity units of general government, which are classified as other non-market producers, minus their sales income plus their purchases from market producers of goods and services, which are supplied to households directly without further processing as social transfers in kind. On the expenditure side the own-account capital formation is kept outside by following the detailed breakdown available in the government accounts. On the production side, the size of the accounts is scaled to size according to the sum of wages and salaries in the Pay-as-you-earn Register. The valuation of the consumption expenditure can be decomposed as follows:

#### Intermediate consumption excluding deductible value-added tax

- + Wages and salaries
- + Social contributions
- + Other taxes on production
- Other subsidies on production

- + Consumption of fixed capital
- = Output value
- Sales income (on goods and services)
- + Purchases for direct consumption (market-produced goods supplied directly to households)
- = Consumption expenditure of general government

Deductible value-added tax is subtracted from the intermediate consumption of general government in a similar way to other activities. In this context the treatment of VAT refunds to non-market units is worth mentioning. In Iceland, similar to many other countries in the EEA area, the law provides that some units which do not charge VAT on their products, may still ask for a refund (total or partial) of the amount of VAT paid on their purchases.

In Iceland the logic behind these refunds is justified by the aim to equalise the competitive position between private legal units and similar activity inside government units. Therefore government units can get a refund of VAT from the following services purchased from private legal units:

- Sewage and refuse disposal
- Building-cleaning activities
- Snow removal from roads etc.
- Rescue work and protective custody in connection with natural disaster and civil defence
- The services of engineers, technologists, architects, lawyers, certified public accountants and other experts who provide services to the business activity, provided that these persons have university degree or comparable degree.
- The services of the telephone exchange for emergency calls.

The items above are exhaustive; no refund exists for other activities carried out by government units.

Prior to the implementation of ESA95 in Iceland in August 2000, VAT refunds of this type were treated like deductible VAT. This treatment was changed in implementing ESA95 and now VAT refunds are treated like current transfers to government units and consequently VAT receipts and government final consumption increase.

#### 5.9.5 The roles of benchmarks and extrapolation

As can be concluded from the description above, the calculations are based on annual data at current prices; hence extrapolation is not used with the exception of consumption of fixed capital. Consumption of fixed capital consists of the reduction in value which a fixed asset undergoes because its economic life is limited. In the central and local governments accounts as presented by these units consumption of fixed capital is not accounted for. Therefore, special estimates have to be made for national accounts purposes.

These estimates are based on the creation of capital stocks with the aid of investment series in accordance with the so-called perpetual inventory (PI) method. The capital stocks are subsequently written down in accordance with economic life assumptions, and the consumption of fixed capital is obtained. See section 3.18.3.

#### 5.9.6 Direct consumption

So-called direct consumption arises mainly in the sub-sector of social security and consists of medicine directly delivered from the pharmacies to the individuals but mainly financed by the government. This kind of purchase is recorded as government final consumption of the sub-sector

social security but the amount not financed by the government is recorded as household final consumption.

## 5.10 Acquisitions less disposal of tangible fixed assets 5.10.1 Definition and delimitation

According to ESA95 gross fixed capital formation is measured as the total value of producers' acquisitions, less disposals, of fixed assets during the accounting period, plus certain additions to the value of non-produced assets realised by the productive activity of institutional units. Fixed assets are tangible or intangible assets produced as outputs from processes of production which are themselves used repeatedly or continuously in other processes of production for more than one year.

More accurately, the following main types of Gross fixed capital may be distinguished:

- 1. Acquisitions, less disposals, of new or existing tangible fixed assets
- 2. Acquisitions, less disposals, of new or existing intangible fixed assets
- 3. Major improvements to tangible non-produced assets, including land
- 4. Costs associated with the transfers of ownership of non-produced assets

In compiling figures on fixed capital formation in Iceland an attempt has been made to follow this general description. Of the four categories above the first one is the most important one, i.e. the acquisitions of tangible fixed assets. The sub-division of this category will be discussed in section 5.10.2 below. Information on items in categories 2., 3. and 4. are scarce in some cases but these items will be discussed in sections 5.11 and 5.12 below.

In the valuation of assets, installation charges and cost of ownership transfers are included provided that these charges are properly capitalized in the EAR, what is considered to be the normal practice.

Assets produced on own account are most likely valued at the cost of production.

Disposal of assets are valued after deducting costs of ownership transfer. Purchased assets are valued with cost of ownership. Therefore if old assets are sold between firms the only amount that will be recorded in GFCF is the ownership transfer cost.

Major improvement of existing assets is a part of gross fixed capital formation as mentioned in category 3. above. Expenditure by government on major improvements is available and can be considered to be of total coverage. Major projects of improvement carried out by the industries are derived from Enterprises' accounts. However some corrections are made because the bookkeeping practises differ from the national accounts guidelines. Borderline cases of this kind are further described in section 3.3.3 above where the threshold values are also described.

In category 4. above, costs associated with the transfers of ownership are mentioned. In the case of residential construction, including secondary residence, this cost is explicitly accounted for. This is done by obtaining information from the Land Registry on the total value of residential construction which has changed ownership each year. The real estate agents margin is estimated at 1.6% of the total value, which matches the margin derived from the VAT turnover in activity 70.31 in the ISAT activity classification. The stamp duties on the purchases are added to that value.

In the case of assets for industrial use, the cost of ownership transfer is implicitly included by making use of the expenditure based estimates from the Enterprise Accounts Register. Thus, it is assumed that the purchases of assets in the enterprise accounts include all costs of the purchases, transfer costs included.

Acquisition of fixed assets by hire-purchase and financial leasing is included in GFCF. Time of recording of such acquisition is at the time as the goods are recorded in the books of "the owner", often at the same time as the owner takes possession of the asset.

Exceptional and catastrophic losses are definitely excluded from disposals of assets. In the absence of "other changes in volume of assets account" such changes are not explicitly recorded. Instead it assumed that indirectly the value of fixed assets is reduced in the registers used like the Land Registry.

## 5.10.2 Previous methods in estimating the gross fixed capital formation

Prior to 1997 the figures on gross fixed capital formation were compiled from four main sources. These were:

- C.i.f. value of imported capital goods
- Building statistics which included the number of cubic meters of completed residential and non-residential buildings
- Direct information from some main contractors or the owners in the case of special major projects, such as electrical power plants, also including financial statements of some enterprises
- Data on the value of fishing vessels and other ships and some domestically produced capital goods, compiled from producers or investment credit funds

The importance of each of these sources varied but the last one was of minor importance. The other three had the share of approximately one quarter to one third.

These various sources caused a lot of concern about the quality of the data, especially as regards the coverage or even possible duplication. Sometimes use was made of import statistics, or building statistics, sometimes the supply side was the main source or the user side. These approaches limited a uniform classification of fixed capital formation by industry. Of special concern here were imported vehicles and machines which could be used in many industries. This problem was left unsolved and such machines were unclassified by branch of industry which prevented direct connection between output and the value of fixed assets by branches of industry. For the same reasons, these sources made it impossible to construct reliable series on fixed assets by industry.

These various sources of information led to some concern about the accuracy of the level of gross fixed capital formation as well as the annual changes. Another reason for these concerns was the obvious underestimation of the value of the stock of fixed assets in residential construction. This underestimation came to light when comparing the value of the stock from two sources.

One source was the stock valued from the accumulated annual fixed capital formation in residential construction. The stock was depreciated annually and the net value of gross fixed capital formation was added to the stock from previous year, using the perpetual inventory method. The stock was also revalued taking into account annual price increases.

The second source was a direct estimate of the value of the stock of residential construction. Up to 1997, the National Economic Institute collected data on the size and the stage of the building process of every single residential and non-residential construction at the end of each year. Each building stage was converted to the equivalence of completed construction by using rather rough estimates. Then the production in number of cubic meters was calculated as the difference of the stages of each building from the beginning to the end of each year. The value of capital formation was then calculated by applying the quantity-time-price approach using the unit prices from the building cost index. From these annual estimates of capital formation during decades or from 1945,

capital stock data was calculated using the perpetual inventory method. That capital stock was compared with another source the Land Registry of Iceland. This registry is of complete coverage and the recording of the value of each piece of real estate is estimated as being the present value of sales contracts where all future payments have been discounted. Similar assets are valued with reference to the value of traded assets. This value should equal the accumulated investment, at least approximately. During last few decades statisticians had noticed a large difference between these two sources, where the registry figures were considerably higher than the figures on accumulated assets. Rough research showed that the registry was a much better indicator of the total value of the stock than the accumulated values. From this result it was decided that the former accumulated investment method should be replaced by the use of figures from the register. The new figures were introduced in 1994 and they resulted in an approximately 30% increase in the value of the stock of residential construction.

One of the main reasons for the underestimation of residential construction was the general application of the building cost index for estimating the value of the investment, both for residential construction and industrial buildings. For these purposes the index has serious drawbacks. In many cases the actual building cost can evolve differently from the average unit price. Revisions of the base of the index can also cause problems. The latest revision occurred in 1987 and before that the base was revised in 1982. Both these revisions involved considerable increases in the average building cost per square metre. The increases were gradually included in the estimates of capital formation with the consequences that previous estimates of capital formation were revised upwards.

#### 5.10.3 New methods applied from 1997 onwards

In view of the above-mentioned drawbacks in the previous methods for estimating gross fixed capital formation, the most appropriate solution was to obtain direct information for actual expenditure on capital formation more frequently than before. In the absence of direct surveys a more intensive use of currently available administrative registers was the most pragmatic solution. Four sources were exploited, of which the two first one were new sources:

- The Enterprise Accounts Register
- The Land Registry of Iceland
- The cif value of imported capital goods
- The financial accounts of central and local governments

These new sources were brought into use in March 2002 and earlier estimates were revised back to 1997. Each of these sources will be discussed below in turn.

#### The Enterprise Accounts Register

From 1997 onwards it became compulsory for incorporated enterprises to return standardised annual accounts to the tax authorities. These obligations were extended to cover unincorporated enterprises from the year 2001. This source has become the most important one in construction of production accounts as described in section 3.1.2 above. In addition to this the register was also brought into use for investment statistics from 1997. It allows a rather detailed breakdown of investment and fixed assets by type of assets and the breakdown by activity is into the 5 digits ISAT classification which corresponds to NACE, rev. 1. Information of disposal of assets is also available and the book value is subtracted from the acquisition of new assets. The assets are classified by type in 10 groups depending on the rate of depreciation allowed in the tax laws. These groups are the following:

- 1. Motor vehicles for industrial use
- 2. Ships, aircraft and pertaining equipment
- 3. Manufacturing machinery and equipment

- 4. Office machinery and computers
- 5. Other machinery and equipment, such as vans, coaches, taxis, bulldozers etc.
- 6. Constructions
- 7. Non-renewable subsoil assets such as non-metallic mineral reserves, sand pits etc.
- 8. Intangible non-produced assets, such as purchased goodwill, patented entities etc.
- 9. Assets, not depreciated, according to tax laws, such as land, fishing quotas, valuables etc.
- 10. Other assets, not depreciated, such as production rights in agriculture, start-up costs etc.

Each of these depreciation groups are further disaggregated by type of assets into various assets. The type of assets varies between groups. In groups 1 and 7 there are two types of assets, three in group 10, but there are more types in other groups and up to 20 items in group 5.

This source opened new possibilities for compiling investment statistics both by type of asset and by industry. The methods previously used did not allow a complete classification by industry due to the fact that some imported capital goods of multi-purpose use were not classified by industry.

The quality of this source is also without doubt much better than previous estimates. Now the valuation of capital formation is based on the book value of purchased assets, not the quantity-time-price approach following the previous method, where the price was a unit price per cubic metre from the building cost index. The Enterprise Register has almost complete coverage of all legal units and unincorporated enterprises as described above. Due to non-response and some inaccuracy in the tax files, experience has shown that some grossing-up is needed in most industries. Here, the problem arises that the final grossing-up factor cannot be decided until the production accounts have been completed. So far the production accounts have been lagging behind by a few years but according to present plans this lag will be reduced substantially. Now the time lag is one year. Statistics Iceland publishes the first estimate from the expenditure approach  $2\frac{1}{2}$  month after the end of the respective year but the first results of capital formation from the Enterprise Accounts Register is only available 13-14 months after the respective year. The second and final version from the Enterprise Accounts Register is available one year later, i.e. 25-26 months after the respective year.

Due to the fact that data from the Enterprise Accounts Register is available so late it is always necessary to collect direct information from some major contractors or producers on own account. This source is used especially in the case of major projects such as electrical power plants and other specialised buildings such as hospitals, schools and sport facilities and most other government buildings. Direct information on domestically produced capital goods such as ships etc., are often obtained from the shipyards for checking purposes.

#### The Land Registry of Iceland

Prior to the implementation of the new methods from 1997, the unit prices of a few types of buildings derived from the building cost index were heavily used in the calculation of investments, both for residential construction as well as for other buildings for industrial use. The value of capital formation was calculated by applying the quantity-times-price approach by making use of unit prices per cubic meter. The number of cubic meters of produced buildings was collected by the National Economic Institute (NEI) from the construction inspectors in every community. This collection by the NEI was to some extent considered to be duplicated work, carried out both by the NEI and the Land Registry of Iceland.

Therefore it was decided by the NEI in cooperation with the Land Registry that the NEI discontinued this collection of data but that it should receive comparable data from the Land Registry. This change of data sources caused some problems of comparability due to the fact that the Land Registry emphasises the value of the stock of buildings at a definite point of time, i.e. at the end of each year, not the value of produced buildings during the year. For national accounting purposes

the task is to evaluate the value of the addition to the stock from the difference of the stock of residential construction, including secondary residence, at the beginning and the end of each year. The difference is taken after the stock at the beginning of the year has been revalued to the same price level as the value of the stock at the end of the year, which is actually the price level in October of each year. Then the difference is transformed to the average price of the year to reach the value of investment that year. There are advantages and disadvantages with methods of this type compared with the previous method used. The following can be mentioned:

- Investment is decided as a difference of two large stock figures. Each of them is approximately 30 to 40 times bigger than the annual investment. A small error in each of them would have a serious impact on the estimated value of investment each year.
- Often the Land Registry has revalued the stock from one year to another due to previous evaluation errors. This has nothing to do with a real addition to the stock. The Land Registry has tried to eliminate these revaluations for national accounting purposes by omitting all small revaluations without any increases in square metres. Large revaluations are incorporated because they represent major repair of the stock.

So far the experience of the new method has shown that it must be used with care and there exist various problems of interpretation. However, it is the opinion of Statistics Iceland that this method is superior to the previous one.

This new method is at present only applied for residential construction, including secondary residences, but it is not yet applied in the case of industrial construction. In this case the Enterprise Accounts Register is the sole source of final estimates but it is the intention of Statistics Iceland and the Land Registry of Iceland to develop further methods which would also enable use of the Land Registry data for industrial construction. More intensive use of the Land Registry data might cause some problems of interpretation for industrial construction similar to residential construction. Nevertheless it is worth trying to use it for industrial construction as well, especially because the data from the Land Registry are available much earlier than the Enterprise Accounts Register.

#### The cif value of imported capital goods

Prior to 1997 the exploitation of the c.i.f. value of imported goods was similar to the methods used in estimating imported household final consumption. Goods in external trade statistics were classified according to the HS-system including approximately 6,700 tariff numbers. The numbers which could possibly include investment goods were specially investigated. Some of them can easily be grouped as containing capital goods only but others are of multi-purpose character. In the latter case certain ratios of these numbers were taken as capital goods. The ratios were based on various assumptions or informed guesses. They were revised regularly. When it had been decided which tariff numbers to include, entirely or partly, the next step was to add to the c.i.f. - value import duties when applicable, trade and transport margin and installation cost.

After the introduction of the Enterprise Accounts Register as the main source of data for the estimation of investment the importance of the import statistics for these purposes has reduced. Import statistics are not any more the main source of the final estimates. However, they still play an important role in preliminary estimates of the investment for quarterly and annual accounts because they are available very quickly after each period. Import statistics are also used intensively for comparison and checking purposes.

#### The financial accounts of central and local governments

Central and local government units involved in non-market activity are by definition excluded from the Enterprise Accounts Register. Data on the investment of these units are therefore derived directly from the government accounts. In some cases the government accounts deviate from the national accounts definitions in distinguishing between capitalized and expensed expenditure. However, in the case of central government the available breakdown is so disaggregated that this distinction can be implemented. The number of local governments in Iceland was 79 at the

beginning of year 2008 but it is declining. Obviously the quality and the breakdown of this data are more heterogeneous than in the case of central government. Nevertheless the breakdown is considered to be sufficient.

The gross fixed capital formation of the central government consists mainly of roads and bridges, hospitals, schools and various equipment for the most usual functions of government. There is only one source, the Central Government Account compiled by the Financial Management Authority. The Account is on an accruals basis and available 8-9 months after the end of each year. This source can be used for the September version of the GDP estimates but earlier estimates, i.e. the March version, is based on monthly cash figures also derived from the Financial Management Authority.

Gross fixed capital formation of local government is derived from information from the individual local governments. It consists mainly of streets and sewers, schools, kindergartens and various equipment. Statistics Iceland receives data from the Local Authorities' Reporting Unit in a prescribed breakdown. The coverage is almost complete; just a few very small governments do not submit the required data. The processing of the data is normally finished early enough to be incorporated into the September version of the GDP estimate. On the contrary the March version of the GDP estimate is based on various estimates and some vague information on fixed capital formation from the local governments' accounts. A notice is taken of a sample survey of around 15 largest municipalities in Iceland, which together comprise more than 85 percent of the total income (revenue) and expenditure of local governments. The results of this survey are evaluated and compared with other sources such as similar studies conducted by the Union of Local Authorities in Iceland. The Local Authorities Reporting Unit is a new data source and still in the developing process. It will definitely improve the quality of the data on fixed capital formation of local governments, both first estimates and the final data.

#### 5.10.4 The breakdown of data on capital formation

In 2005 gross fixed capital formation amounted to 291,265 million kronur or 28.4% of GDP. Similarly to household and government final consumption, the level of most of the components of capital formation is estimated annually and directly from the best available sources as can be seen from the description above. In exceptional cases a use is made of projections from earlier base year estimates.

In section 5.10.1 above a distinction was made between four main types of gross fixed capital formation. The first and the most important one were the acquisitions, less disposals, of new or existing tangible fixed assets. By type of asset it is subdivided into:

- Dwellings
- Other buildings and structures
- Machinery and equipment
- Cultivated assets trees and livestock- that are used repeatedly or continuously to produce products such as fruits, milk, etc.

Table 5-12 The breakdown of gross fixed capital formation by type in 2005

	Million ISK	% of Total
1. Business sector investment total	201,114	69.0
1.1 Motor vehicles for industrial use	4,053	1.4
1.2 Ships, aircrafts and pertaining equipments	6,846	2.4
1.3 Manufacturing machinery and equipments	5,973	2.1
1.4 Office machinery and computers	21,734	7.5
1.5 Mach. tools for quarrying and construction	64,411	22.1
1.6 Construction	93,991	32.3
1.6.1 Buildings	36,641	12.6

1.6.2 Constructions n.e.c.	57,350	19.7
1.7 Other n.e.c.	4,106	1.4
2. Residential construction	58,466	20.1
3. Government services	31,685	10.9
Total	291,265	100.0

In the Icelandic national accounts this classification needs at least one clarification. In the case of livestock the available data cover livestock which is used repeatedly or continuously to produce products. No information is available on livestock that produce output once only and should be classified as changes in inventories. Gross fixed capital formation by type of asset in 2005 is presented in table 5-12.

In addition to this breakdown by type of asset, a much more detailed breakdown is now published where the capital formation is broken down by activity of use. That breakdown is based on the groups and sub-groups classified by the rate of depreciation as presented in the Enterprise Accounts Register. The classification in the regularly published data is presented here. It is by industry and therefore it represents activity purchasing the assets.

Table 5-13 Gross fixed capital formation by activity 2005

	Million ISK	% of Total
Business sector investment total	201,114	69.0
01 Agriculture, hunting and related service activities	4,846	1.7
02 Forestry, logging and related service activities	1,248	0.4
05 Fishing, operation of fish hatcheries and fish farms	2,177	0.7
05.01 Fishing	1,908	0.7
05.02 Operation of fish hatcheries; fresh-water fishing	239	0.1
05.03 Service activities incidental to fishing	30	0.0
14 Other mining and quarrying	2	0.0
15 Manufacture of food products and beverages	2,736	0.9
15a Processing and preserving of fish and fish products	1,422	0.5
15b Other food manufacturing	1,315	0.5
17-19 Manufacture of textiles, wearing apparel & leather	-189	-0.1
20 Manuf. of wood and of prod. of wood and cork	135	0.0
21-22 Manufacture of pulp, paper and paper products	2,121	0.7
24 Manufacture of chemicals and chemical products	1,172	0.4
25 Manufacture of rubber and plastic products	-96	0.0
26 Manuf. of other non-metallic mineral products	1,965	0.7
27 Manufacture of basic metals	46,668	16.0
28 Manufacture of metal prod. except machinery and equipment	739	0.3
29 Manufacture of machinery and equipment n.e.c.	203	0.1
30 Electrical machinery and apparatus	-90	0.0
34-35 Manuf. of motor vehicles & other transp. eq.ment	635	0.2
36-37 Manufacture of furniture; manufacturing n.e.c.	635	0.2
40-41 Electricity, gas steam and hot water supply	50,058	17.2
45 Construction	11,857	4.1
50-52 Retail and wholesale	8,136	2.8
55 Hotels and restaurants	4,549	1.6
60 Land transport; transport via pipelines	2,334	0.8
61 Water transport	15	0.0
62 Air transport	4,117	1.4
63 Supporting and auxiliary transport activities;	7,099	2.4
62a Harbours	3,845	1.3
62b Airports	2,171	0.7
63c Supporting and auxiliary transport activities n.e.c.	1,082	0.4
64 Post and telecommunications	5,901	2.0
65-67 Financial intermediation and insurance	2,375	0.8
70 Real estate activities	21,674	7.4
71-72 Renting of machinery; Computer & related activ.	1,829	0.6

73 Research and development	-293	-0.1
74 Other business activities	5,924	2.0
80 Education	443	0.2
85 Health and social work	1,404	0.5
90-91 Sewage and refuse disposal and activities of membership organization n.e.c.	2,730	0.9
92 Recreational, cultural and sporting activities	2,157	0.7
93 Other service activities	155	0.1
98 Unclassified activity	3,741	1.3
Residential construction	58,466	20.1
75 Government services	31,685	10.9
75a Roads and bridges	8,060	2.8
75b Streets and sewers	7,418	2.5
75c Public buildings	10,727	3.7
75d Other public assets n.e.c.	5,481	1.9
Total	291,265	100.0

An even greater disaggregation by type of asset and by industry following the 5 digit ISAT activity classification is available but not published. However, this disaggregation is delivered on request, provided that requested data are not considered confidential. Within Statistics Iceland these detailed data are now used in compiling statistics on fixed assets in the most detailed breakdown. This project is at a development stage.

#### 5.10.5 Description of the calculations in individual activities

In the following a short description is given of the individual items of the gross fixed capital formation. An emphasis is put on the sources exploited and those methods which deviate from the more general description above, i.e. the Enterprise Accounts Register, the Land Registry and the financial accounts of the central and local governments.

## 5.10.5.1 Manufacture of basic metals and fabricated metal products (NACE 27 and 28)

In 2005 this group consisted of three aluminium and ferrosilicon plants. Not all of them were included in the Enterprise Account Register and therefore the necessary data has been collected directly from these enterprises. From 2007, all of them are included in the Enterprise Accounts Register but nevertheless data will be collected from them directly, at least when they are being enlarged. The reasons are both the size of these activities and the timeliness of direct collection compared with alternative sources.

#### 5.10.5.2 Electricity and hot water supply and distribution of water (NACE 40 and 41)

Included in these two groups are a few big power companies. Some of them are government owned and exempt from income tax. Therefore they are excluded from the Enterprise Accounts Register and the major part of the information on the gross fixed capital formation in these groups is collected directly from the enterprises.

#### **5.10.5.3 Construction (NACE 45)**

The vast majority of investment data in this activity is derived from the Enterprise Accounts Register. What is missing here is the investment of government units such as airports and harbours. These units are market producers and defined out of the government sector in national accounts but the data on investment are collected from the central government account.

#### **5.10.5.4** Air transport (NACE 62)

The main airlines in Iceland are frequently engaged in a major trade of aircrafts. The treatment of this trade can be complicated and normally it is solved on an individual basis. In all cases

additional information are collected from the enterprises and data from the Register is not sufficient.

## 5.10.5.5 Financial intermediation, insurance and auxiliary activity (NACE 65, 66 and 67)

Most of the enterprises in these activities are now included in the Enterprise Accounts Register. However, the investment data of these enterprises are derived from their published accounts and by direct additional information when necessary. Checks are made on an individual basis in these activities in order to avoid double-counting.

#### 5.11 Acquisitions less disposal of intangible fixed assets

According to ESA95, paragraph. 3.105b), the acquisitions less disposals of intangible fixed assets in the national accounts can be sub-divided by type of assets into four subgroups:

- 1. Mineral exploration
- 2. Computer software
- 3. Original works in entertainment, art and literature
- 4. Other intangible fixed assets

Included under item 4, other intangible fixed assets, are items like the registration costs of new enterprises, operation permits, costs of experimental work, market research etc.

Expenditure on mineral exploration is negligible in Iceland but there is a similar case of exploration such as drilling in the search for geothermal water reservoirs. Provided that these expenditures are capitalized in the company accounts, they are treated as gross fixed capital formation irrespective of whether the search is successful or not. However, no distinction is made between tangible and intangible fixed assets here and all capitalized exploration is classified together with tangible fixed assets. In calculating consumption of fixed capital formation of such unsuccessful expenditure no special arrangements have been made. This implies that the average service life of that particular item has been used in calculating the consumption of these assets instead of immediate write-off.

Prior to the implementation of ESA95 in the year 2000, no special attempt was made to include software in national accounts, with the consequence that the only software included was software bundled with hardware. During the implementation of ESA95 some rough estimates were made for software expenditures. These estimates were based on some easily available indicators like VAT turnover in some specified industries, a special investigation by a committee on the purchases of the central government for one year (1996) and a special study carried out by the National Research Council. Figures were also available on exports and imports of software. Based on these few indicators simplified supply and use tables were constructed presenting continuous time series for the period 1990-1999. These methods showed the total value of investment in software as 3,877 million kronur in 1999 and it had increased from 418 million kronur in 1990 at current prices. Later years were based on projections. These figures were presented as preliminary estimates. When the Enterprise Accounts Register was implemented as the main source of capital formation in 2002, no separate estimates were added to the totals in order to cover computer software. This was justified by stating that for the time being the most suitable method was to follow the bookkeeping practises of the enterprises.

These methods were considered to be inadequate and therefore Statistics Iceland conducted a special survey in early 2003 to investigate investment in computer software. A questionnaire was sent to the providers of these services such as wholesale traders, software producers etc. In processing the survey the emphasis was to identify that kind of software which was not likely to be capitalized in the company accounts. By doing that, allowance was made for the fact that the threshold value for the maximum value allowable for expensing according to the tax laws was

considerably higher than the reference value according to ESA95. In ESA95 the limit is 500 Euros in 1995 prices. In Icelandic tax laws comparable values were approximately three times higher. The result of the survey was presented as follows:

Table 5-14 Computer software expensed in the company accounts which should be capitalized in national accounts

Minor software systems	1,514 1,54	
Major repair	1,877 1,3	46
Million ISK	2001 20	02

In the 2003 September version of the annual national accounts, the value of gross fixed capital formation was increased by these figures and previous years subsequently revised by using projections or more precise backward calculations. The estimates for the year 2003 and onwards are extrapolated mainly by taking notice of annual changes in VAT turnover in ISAT activity 72.2, Software consultancy and supply. Included in the turnover in activity 72.2 are some enterprises not representative for this purpose and they are eliminated in this case. Services purchased that are required to install software (i.e. installation costs) are recorded as GFCF if such costs are capitalized in the Enterprise Accounts Register. Other related costs connected software such as expenditure for planning, design, programming and change of ownership are included in the recording of GFCF provided that these costs are capitalized in the Enterprise Accounts Register.

Expenditure similar to mineral exploration, such as drilling expenditure in the search for geothermal water, is not distinguished from tangible fixed assets in presentations.

So far no direct attempt has been made to measure own-account software formation. This means that the treatment is the same as in the Enterprise Accounts Register. If these items are capitalized in the EAR, then they are recorded as GFCF, otherwise not.

The last two items of intangible fixed assets mentioned above are entertainment, literary or artistic originals such as original films, sound recordings, manuscripts etc. and other intangible fixed assets. So far no attempt has been made explicitly to cover these items in Icelandic national accounts. However, these items might implicitly be capitalized in the company accounts and therefore already included.

#### 5.12 Acquisitions to the value of non-produced nonfinancial assets

There are two groups in this category of product transactions:

- 1. Major improvements to non-produced non-financial assets
- 2. Costs of ownership transfer for non-produced non-financial assets

The first group covers only soil improvement work in agriculture such as drainage, land improvement etc. Information on this is available from agricultural statistics. The size of this is of trivial importance. In 2005 the value was 244 million Icelandic kronur and that value is included in capital formation in structures in agriculture. The data source is a detailed and specialized business accounts compiled and processed by the Agricultural Economic Institute. The source is the same as described in section 3.7 above where the construction of production accounts in agriculture is described.

The second group should cover the costs of transfers of ownership (estate agents, lawyers, stamp duties, public sales income relating to courts of law) of land and natural resources etc. Since the costs of transferring the ownership of land can seldom be estimated independently of the costs of transferring the ownership of the buildings and installations on that land, the aggregate costs of

transferring the ownership of land and real estate are considered to be part of gross fixed capital formation in buildings and structures as described in Section 5.10. The same does not refer to the costs of transfer of ownership for non-built up land. In that case the commission fee to the estate agent is implicitly included on the supply side (the production approach). On the use side a corresponding transaction is not yet secured but the balancing procedure of the supply and use table will eliminate discrepancy of this kind.

Here it is assumed that the cost of ownership transfer of industrial and government assets is already included in the Enterprise Accounts Register and the government accounts. In the case of dwellings, costs of ownership transfer are made by using following sources:

- The total market value of all dwellings sold during the year
- The sales margin percentage of real estate agencies
- The output of activity 70.31 Real estate agency

The Land Registry of Iceland collects detailed data on all ownership transfer of all dwellings and construction for industrial use. This data collection covers among others data on the market value and location of each unit. The data on the average sales margin of real estate agencies are obtained directly from several agencies. The total costs of ownership transfer should be a multiple of the market value and the sales margin. That multiple is regularly compared with the output of activity 70.31 and a notice is also taken of the fact that the output of this activity should also include sales margin of industrial construction.

Finally, stamp duties are added to the estimate. The breakdown of these calculation is given in table 5-15.

Table 5-15 Cost of ownership transfer

Million ISK	2002	2003	2004	2005
1. Market value of sold dwellings	111,522	141,839	191,579	245,644
2. Sales margin of real estate agencies	1.6%	1.6%	1.6%	1.6%
3. Sales margin	1,784	2,269	3,065	3,930
4. Stamp duties	428	541	756	1,015
5. Cost of ownership transfer, total	2,213	2,810	3,821	4,945

#### 5.13 Changes in inventories

In ESA95 inventories consists of following categories:

- Materials and supplies
- Work-in-progress
- Finished goods
- Goods for resale

Icelandic national accounts do not allow this disaggregation of inventories. Besides that there exists a certain discrepancy between the output and expenditure approaches. Therefore these two approaches have to be discussed separately.

On the production side changes in inventories from the beginning to the end of the year in all branches of industry are recorded in the business accounts. To enable output, intermediate consumption and changes in inventories to be calculated correctly in the national accounts in accordance with the ESA95 definitions, a price correction has to be made to the corresponding items in the business accounts, since businesses tend to register the value of their (final) stocks at historic cost or at the last recorded acquisition price of the individual goods. When the prices of the

enterprises' products are rising, and the change in the inventories of finished goods in the business accounts is calculated as the difference between the stocks at the end and at the start of the accounting period, the result will include a holding gain which does not reflect any physical change in the inventories or in the output of goods during the accounting period. Even if, for example, the physical inventories have remained the same throughout the whole of the accounting period, and therefore by definition there has not been any change in the inventories of finished goods as a result of production during the period, there will still be an increase in the inventories in the business accounts as a result of price rises during the period. If the output value in the period is calculated on the basis of uncorrected business accounts as output = sales + changes in inventories of finished goods, output and value added will be overvalued. Conversely, if prices fall the enterprises' output will be undervalued.

During periods of inflation, holding gains likewise have an effect on inventories of raw materials, with intermediate consumption being undervalued and value-added overvalued. On both the output and the input sides, the use of business accounting principles overvalues value-added in times of general inflation. When there is general deflation, the opposite occurs. When inflation or deflation rates are high, errors in measuring value added and hence GDP can be substantial if there is no price correction. Even if price levels are generally more or less stable, major fluctuations in relative prices can lead to substantial holding gains or losses on inventories in the economy.

In the processing of primary statistics for use in Icelandic national accounts, a price correction is made to the business accounts figures for changes in inventories of finished goods and goods for resale in order to get as close as possible to the theoretically correct estimate of changes in inventories according to ESA95. No price correction is calculated for the consumption of raw materials on the production side.

The calculation of these correction items was considered to be of extreme importance in Iceland due to the high inflation the Icelandic economy suffered from during many decades in the last century. As a consequence of that, a scheme of rather complicated inflation adjustments was developed in business accounting. This was gradually introduced but from 1979 it became compulsory in income tax law to have all business accounts, returned to tax authorities, adjusted for inflation. This method which was abolished in 2002 will not be described here in detail. It will only be mentioned that the purpose was to eliminate the effects of inflation on changes in inventories, to record real interest instead of nominal interest and revalue the assets and liabilities of the balance sheet. Of these three items two appeared in the operating account, i.e. the inventories or stock appreciation and the correction of interest expenses. These two were grouped together in an item called financial income or expenses in the operating account. In constructing production accounts they were not used directly. Instead stock appreciation was calculated separately and subtracted from the revenue in order to arrive at the item output in the production account. Although these methods have been abolished in the income tax law the stock appreciation is continuously used in national accounting and can be described as follows.

In calculating the stock appreciation use is made of the value of stocks at the beginning and the end of the relevant years. These figures are collected from the aggregated balance sheets of each branch of industry and are recorded at the price level prevailing at each point of time. Then the values at the beginning and the end of the year are valued at the average prices of the year. The difference at constant prices reflects the volume change. The changes in value at current prices less the changes at constant prices show the price changes, which is the stock appreciation. The output value in the production accounts is reduced by this amount. This calculation is carried out for all branches of industry. The price index applied was the original version of the credit terms index. That index was a weighted average of two indices, the cost of living index, having the weight 2/3, and the building cost index, having the weight 1/3. With two exceptions this general price index was used for estimating stock appreciation in all activities. The exceptions are the fish processing and the wholesale and retail distribution of gasoline and other petroleum products. In these branches more specified indices were used.

Due to the decrease of inflation during the last few years the importance of these calculations of stock appreciation is diminishing. For the same reason, the price adjustment calculations were eliminated from 2002 in the tax laws but made optional for an interim period over next three years. Independently from the changes in tax laws, inventories can be adjusted for price changes in the production accounts in the national accounts and these methods are still followed throughout the production approach. In most recent years some simplified versions of the index numbers are now employed and the former credit term index has been replaced by the CPI. It must be kept in mind that the purpose of these corrections is to value the changes in inventories at the average prices of the year, or the "quantity" measure using the SNA terminology (SNA 6.68). These aspects are still valid despite substantially lower rate of inflation. On the production side, these calculations are undertaken for all activities. Apart from these price adjustments of inventories it can be stated that accounting standards are followed and therefore recurrent losses are taken into account. Finally, it should be emphasised that these price adjustments are entirely recorded on the output side of the production side although it could be stated that some of these adjustments refer to intermediate consumption. However, this simplification has no impact on GDP.

On the expenditure side, data collection and the data coverage is quite different. Information is needed on a quarterly basis and within the time limits of quarterly accounts, i.e. within 75 days from the reference quarter. That requires data collection directly from the enterprises. This data collection has been gradually increased and now it covers statistics on inventory at the end of each month in following products:

- Aluminium products
- Ferrosilicon products
- Marine products
- Imported fuel
- Medicines

With the exception of imported fuel these statistics of inventories covers only finished goods but excludes work-in-process, materials and supplies and goods for resale. Data collection of medicines has started recently but it has not yet been incorporated in these statistics.

The data collection of marine products is based on a big sample, around 80% of the value, data on imported fuel are almost of a complete coverage and data on aluminium and ferrosilicon are of a complete coverage. Data on the inventories are available in tons at the end of each month. The changes in each quarter of the year are valued at the average export prices of each quarter and the annual changes are derived as the sums of the quarters. The results are verified as far as possible and especially for marine products the production, derived as export +/- changes in inventory, at constant prices, is compared with volume changes of the fish catch at constant prices. Frequently some discrepancy occurs in individual quarters and then some corrections are made in order to reach an acceptable consistency between changes in fish catch and changes in marine products.

Data collection on the changes in inventories of other items has not yet been undertaken. That means for example, that imported goods, other than fuel, are not included in inventories. If the imported goods are for final use the impact on GDP is zero because the goods are directly transferred to consumption or investment instead of inventories. However, in the case of imported goods for intermediate use, changes in inventories are more of concern. Inventories of such products from the beginning to the end of each quarter can fluctuate considerably. An increase in these inventories will subsequently reduce the level of GDP from the expenditure side because this increase is recorded as an import without any increase in inventories. The size of this effect is unknown. It will definitely be levelled out over some periods of time but could easily result in erroneous fluctuations of GDP from the expenditure side. The production side will not be affected so this can be one of the reasons for discrepancies between the production and expenditure side. Statistics Iceland intends to solve problems of this type by extending the data collection of stocks

of imported goods as well as exported. In the meantime, Statistics Iceland has attempted to make some correction of the imports of materials used in aluminium production in quarters where an obvious discrepancy occurs between the volume of imported goods and production of aluminium. These corrections have been made from the first quarter of 2006.

**Table 5-16 Changes in inventories** 

Million ISK	2000	2001	2002	2003	2004	2005
A. Expenditure approach						
1. Changes in inventories by products, total	2,494	-2,084	-182	-1,453	-918	-862
1.1 Marine products					-1,024	1,931
1.2 Aluminium	2,521	-2,057	-95	-694	554	-1,134
1.3 Ferrosilicone	-27	-27	-87	-759	-487	-1,187
1.4 Imported fuel	•••		•••	•••	39	-473
B. Production approach						
2. Changes in inventories by activity, total	-1,661	-8,761	-15	918	-7,356	-671
2.1 Marine products	1,559	92	-126	1,132	-1,612	-491
2.2 Aluminium	67	-511	-85	-57	-161	154
2.3 Ferrosilicone	83	-28	132	109	-319	-35
2.4 Wholesale of fuels etc.	-111	-328	-12	-41	-104	-63
2.5 Other activities	-3,259	-7,986	76	-225	-5,160	-236

Table 5-16 shows changes in inventories as they are published from the expenditure side. For comparison figures are also shown which are implicitly included in the output side. These figures are derived from the company accounts and price corrected by Statistics Iceland. They are not published. A breakdown of figures from the expenditure side is not published either.

The difference between these two sources looks striking. The figures for changes in inventory of aluminium and ferrosilicon products as they appear in the expenditure approach ought to be the most reliable ones. The output approach gives some additional information on changes in inventory of marine products and other activities. These sources indicate that some downward adjustments are necessary of GDP from the expenditure approach, especially in 2001 and 2004, or at the range of 0.7%-0.8% of GDP.

Table 5-17 gives a numerical example of the calculation of the inflation adjustment of inventories on the production side for the year 2005.

Table 5-17 Numerical example of inflation adjustments of inventories in 2005

Million ISK	Marine	Alumi-	Ferro-	Wholesale	Other
	products	nium	silicone	of fuels etc.	activities
1. Inventories 1/1/2005	9,514	2,374	1,399	6,334	168,278
2. Inventories 31/12/2005	9,115	2,552	1,377	6,334	169,729
3. Changes of inventories before adjustments (3.=21.)	-399	179	-22	_	1,451
4. Inflation adjustments					
4.1 Inventories 1/1 at the average prices of the year	9,531	2,378	1,401	6,345	168,572
4.2 Inventories 31/12 at the average prices of the year 4.3 Changes in invent. at the aver, prices of the year	9,040	2,531	1,366	6,282	168,336
(4.3=4.2-4.1)	-491	154	-35	-63	-236
4.4 Actual inflation adjustments (4.4=34.3)	91	25	14	63	1,687
5. Price index used for inflation adjustments,					
CPI less housing cost					
5.1 Annual average 2005	229.6	229.6	229.6	229.6	229.6
5.2 January 2005	229.2	229.2	229.2	229.2	229.2
5.3 January 2006	231.5	231.5	231.5	231.5	231.5

Finally it must be emphasised that the data on changes in inventories in the production approach is considered to be of complete coverage. The main obstacle of not using it is late availability. These data are only available more than 15 months after the respective year, i.e. when the 3<sup>rd</sup> version of

the expenditure approach is released, simultaneously as the 1<sup>st</sup> version of the production approach. Statistics Iceland intends to incorporate the changes in inventories from the production approach into both approaches in future whenever major revisions are undertaken. In the meantime Statistics Iceland intends to extend considerably direct collection of changes of inventories at quarterly basis in order to minimise the discrepancy described above.

#### 5.14 Acquisition less disposal of valuables

Acquisition less disposal of valuables represents a new main category of gross capital formation. Valuables represent material assets but are not considered as fixed assets. The purpose of this acquisition is to "increase value" or at least to "retain value. Valuables are antiques and art in the form of paintings, stamps and various collectors' pieces.

In the Icelandic national accounts this item is not directly recorded. However, if the enterprises capitalise any purchases of valuables then these purchases are counted, otherwise not. So far the only data available on valuables are imported valuables of trivial importance. These valuables are all classified as household final consumption, not fixed capital formation.

#### 5.15 Exports of goods

#### 5.15.1 Data sources and coverage

In 2005 exported goods accounted for 194,934 million kronur or 60% of total exports of goods and services and 19% of GDP.

Statistics on exports and imports of goods are compiled on a monthly basis by Statistics Iceland on the basis of custom data. Data are primarily based on customs declarations for imports and exports. The customs authorities register these declarations and Statistics Iceland has on-line access to the data. The data are checked and corrected as far as possible. Frequently the importer or exporter concerned is contacted in order to obtain further information or make corrections. Data on external trade is gathered from other sources as well. Thus the *Icelandic Maritime Administration* and the *Icelandic Civil Aviation Administration* supply information regarding purchases and sales of ships and aircraft and the importers or exporters concerned are contacted for further details. Statistics Iceland sends out inquiries regarding trading of ships and aircrafts abroad by Icelandic companies, quarterly to larger traders and yearly to SME's. The Maritime Administration provides information on ships sent for conversions abroad. The companies concerned are subsequently contacted for closer details. As regards improvements of foreign vessels carried out by Icelandic companies, information is obtained from the relevant companies.

In general, Statistics Iceland follows the guidelines of the "United Nations: International Trade Statistics, Concepts and Definitions" as regards what to include in external trade statistics, how and when. The statistics extend to merchandise trade, and by a general definition any imports or exports which add to or subtract from the stock of material resources of a country should be included in external trade statistics. A distinction is made between two systems of international trade statistics, the general trade system and special trade system. The main difference between these systems involves the method of registering goods imported to customs bonded warehouses and free zones. According to the general trade system an item of goods is registered as import on entry into a bonded warehouse or free zone, whereas according to the special trade system such an item would be registered on entry into a country from a bonded warehouse or free zone. In Iceland the general trade system was replaced by the special trade system as of mid-year 1998.

In the time of recording the main rule is that exports/imports of goods are recorded at physical transfer, estimated by the time of customs clearance. However, there is an exception to this rule, like trade in ships and aircraft which are not registered in Iceland but bought or sold by Icelanders are recorded at change in ownership.

For further clarification of the borderline cases in recording the external trade of goods in Iceland a following examples are given of the goods included and excluded.

Examples of items included in Icelandic external trade statistics:

- Non-monetary gold
- Postal items exceeding the value of 25,000 ISK
- Goods for processing
- Goods with a high value of service content (computer software etc.)
- Marine vessels and aircraft that engage in international transport
- Fish landed from foreign fishing vessels in Icelandic ports
- Fish sold abroad from Icelandic vessels and from convenience-flag vessels owned by Icelandic nationals
- Goods on financial lease (one year or more)
- Goods returned
- Major repair and renovation

Examples of items not included in Icelandic external trade statistics:

- Goods in transit
- Goods on temporary admission (e.g. imports or exports related to various trade fairs and exhibitions)
- Bunkers, stores, ballast and dunnage acquired abroad for Icelandic vessels or aircraft
- Illegal trade
- Goods consigned by the government to its embassies and diplomatic representatives abroad and goods supplied to foreign embassies and diplomatic representatives stationed in Iceland
- Monetary gold
- Goods on operational lease (less than one year)
- Repair trade
- Samples of small value
- Fish landed in Icelandic ports by convenience-flag fishing vessels owned by Icelandic nationals

As listed above, major repair and innovation is included in the trade statistics but repair trade is not. Here, major repair refers to major improvements of ships and aircrafts. All other repair is excluded from trade statistics and classified as trade in services.

Illegal trade in goods, like smuggled goods, is not included in Icelandic external trade statistics. This is not in conformity with ESA 95 paragraph 3.135 k). However, according to the UN manual on external trade in goods, illegal trade should be excluded from external trade statistics but recorded separately. So far, SI has not collected any data on smuggled goods and no change is foreseen. When smuggled goods are observed in imports these goods are deleted.

As a few borderline cases it could be mentioned that trade in electricity, gas and water by pipelines is not applicable in the Icelandic trade statistics and therefore not existing. Livestock transported across frontiers and goods delivered by a resident enterprise to its non-resident affiliates and vice

versa are included. Government exports including goods financed by grants and loans are included if recorded at positive value on the customs declarations.

Goods in transit through Iceland is not recorded as exports and imports. This is in accordance with the UN manual.

#### 5.15.2 The classification of trade

#### **HS** classification

The classification of goods in external trade is based on the nomenclature of the Icelandic Customs Tariff. The current tariff entered into force on 1 January 1988 according to the Customs Act No. 96/1987, amending the Customs Act No. 55/1987. It is based on the international Nomenclature of the Customs Cooperation Council in Brussels. The international classification is entitled to the Harmonized Commodity Description and Coding System, also known in abbreviated form as HS. The Harmonized System was adopted by an international convention of the Customs Cooperation Council signed in Brussels in June 1983 and published in 1985. Iceland was party to this convention and ratified it in June 1986. The HS code entered into force in most of the member states of the Customs Cooperation Council on 1 January 1988. The HS is a six-digit nomenclature in which the first two digits form chapters numbered 01-97, the goods being classified according to material. States that have signed the Harmonized System Convention have committed themselves to employ this six-digit system while being free to use a more detailed classification with a greater number of digits at the national level. Most of these states make use of more than six digits, some of them as many as ten. The Icelandic Customs Tariff is an eight-digit classification that complies with the six digits of the HS with the addition of two digits that are used in some instances for a more detailed breakdown according to Icelandic requirements. The HS includes just over 5,000 numbers whereas there are close to 6,800 numbers in the current Icelandic Tariff. A detailed analysis of exports and imports by HS numbers is found at the Statistics Iceland website.

#### The SITC classification

The Standard International Trade Classification, SITC, laid down by the United Nations Statistics Division, is intended for classifying goods for the production of statistics based on the principle of aggregating related goods into groups and divisions. In conjunction with the adoption of the HS classification, the SITC underwent a third revision. The SITC itself remained more or less intact, while the revision mainly involved the creation of a key linking the HS code and the SITC. Statistics Iceland adopted SITC, Rev. 3, in the beginning of 1988 when the new Customs Tariff entered into force.

A detailed analysis of exports and imports by SITC is found at Statistics Iceland website.

#### Classification by commodities

In 2001 the Icelandic SI classification of exports was abolished and replaced by a new classification by commodities. In the new classification, goods are grouped together as marine products, agricultural products, manufacturing products and other products as the older classification. However, the new classification is a pure commodities classification as far as possible, whereas the older one was a mixture of commodities and branches of processing. As an example of the new classification, marine products are now classified by species of fish regardless to how it is processed. After these changes, the classifications of exports by commodities and by branches of processing are linked in a matrix which allows the construction of two-dimensional tables on these subjects. A detailed analysis of exports by the SI classification is found at Statistics Iceland website.

#### **Branches of processing**

In 2001, the Icelandic classification of exports by branches of processing was revised and changed, mainly by a substantial increase in breakdown. After these changes, the classifications of exports

by branches of processing and by commodities are linked in a matrix which allows the construction of two-dimensional tables on these subjects. This type of presentation is found at Statistics Iceland website

#### **Broad Economic Categories (BEC)**

In Icelandic publications on external trade statistics for 1969-1987, imports were classified by economic categories into consumer goods, intermediate goods and capital goods. This was an Icelandic classification that was abolished in 1988 when it was substituted by the Classification by Broad Economic Categories issued by the Statistical Office of the United Nations. This is a relatively simple classification, divided into a total of 19 categories that are aggregated into 7 main sections. The version used by Statistics Iceland in external trade statistics has two additional categories for ships and aircraft.

A detailed analysis of exports and imports by the BEC classification is found at Statistics Iceland website.

#### **Countries**

Statistics Iceland defines countries according to the international standard ISO-3166. Divisions between countries are based on country of consumption as regards exports and country of production as regards imports. Thus an attempt is made to identify the final destination of exported goods and the country of origin in case of imports rather than country of sale or purchase or the importing or exporting country as the case may be. On occasion, however, exporters have no knowledge of the final destination of their merchandise nor importers of the country of origin and in such cases the importing or exporting countries are registered.

#### 5.15.3 The valuation

The value of an imported item of goods is presented at both cif and fob value while exports are presented at fob value only. The fob (free on board) value means the price for the item when it is on board whatever means of transport in the country of export. Cif (cost, insurance, freight) value also includes costs induced until the item is unloaded in the country of import. This chiefly involves freight rates and insurance costs. It is customary for external trade statistics to present imports at their cif value and exports at their fob value. In national accounting and various statistical analyses, however, both these methods have been applied to present imports at Statistics Iceland website. According to the nature of the case, this rule, however, does not apply to fresh fish sold in foreign ports. In order to determine prices for this category of exports, certain cost items are subtracted from the gross-price value in varying proportions, depending on the country.

Until February 2008, the value of imports in Icelandic kronur (ISK) was reached by converting the foreign currency value of the commodity to Icelandic kronur based on the selling exchange rate of the currency concerned. The value of exports, on the other hand, was based on the buying rates of exchange. Also until February 2008, the reference rate of exchange was a so-called customs exchange rate, which is the official exchange rate as registered by the Central Bank of Iceland on the 28th of the previous month or, in case that this date was not a working day, then the first following working day was used. From February 2008 onwards, the exchange rate applied each day is the mid exchange rate of the previous day or last working day. For statistical purposes these changes are a big step forward especially in view of the fluctuations of currencies during last years. Owing to these reforms Statistics Iceland intends to make necessary backward calculations of external trade. These calculations might go back to 2000 or 2001.

Another change was also made in 2008. Before that time the Central Bank converted the foreign currency value of exports and imports to ISK by using the mid exchange rate. Now these methods have been changed by using the corresponding buying and selling rates of the previous day.

#### 5.15.4 Mirror statistics

From the very beginning of all statistical production in Iceland the external trade statistics of goods have been considered to be of high quality. The most suitable way to verify such a belief is to study the bilateral trade discrepancy between two countries by comparing the registered export from one country to another with the corresponding import statistics to the receiving country. This is called mirror statistics. A study of this kind was undertaken at the Nordic level in 1997 and 1998 and covered the period 1992-1996. This Nordic mirror exercise was never meant to be a global reconciliation of the trade figures. Instead a partial approach was chosen and the first step of the investigation was to analyze the discrepancy at HS-2 level. In the case of Iceland mirror statistics were launched between Iceland and Denmark for the year 1995. Denmark was chosen for comparison with Icelandic data as being the country where the greatest discrepancies occurred regarding flows in both directions. A comparison of Icelandic imports with Danish exports and Icelandic exports with Danish imports revealed that in both cases the Danish figures exceeded the Icelandic ones.

Icelandic imports minus Danish exports amounted to 14 million ECU, a discrepancy of minus 10 percent. Chapter 27, Mineral fuel; chapter 84, Machinery and chapter 30, Pharmaceutical products accounted for most of the discrepancy relating to this particular flow. This discrepancy was not investigated further.

Icelandic exports minus Danish imports amounted to minus 7.4 million ECU, or minus 6.4 percent. HS chapter 16, Preparation of meat and fish, etc. accounted for 3.9 million ECUs, or 65 percent of this discrepancy. A further comparison of the Danish and Icelandic data in HS chapter 16 showed that the greatest discrepancy occurred in the trade of herring and caviar substitutes.

Explanations were not found to the overall discrepancy. However, evidence was found of a mix-up in the use of HS codes. An example was goods exported from Iceland as raw material (salted lumpfish roes in HS6 030520). These same goods were recorded as imports into Denmark as processed goods (semi-conserved lumpfish roes in HS6 160430, caviar and caviar substitutes). The mix-up in the use of HS codes was only a part of the explanation. Others were left unexplained for further investigation but two explanations might be plausible. One is confusion between country of first entry and country of destination. Another source of discrepancy might be the conversion between fob and cif values. In evaluating the discrepancy observed and whether it is likely to be a Danish or Icelandic problem, Statistics Iceland is of the opinion that the coverage of the external trade statistics is quite good. However, some problems exist with timing, especially regarding exports. Different timing could be part of the explanation of the differences between Icelandic and Danish figures, but other possible explanations could be that, for export, transit trade from Iceland might be recorded as import into Denmark. Also there is always the possibility of incorrect use of country code.

Within the Nordic statistical offices there is a great interest for repeating such research programme for more recent years with the purpose to improve the quality and the comparability of the external trade statistics.

Table 5-18 Exports and Imports of goods and services 2005

	Million ISK	% of GDP
Gross Domestic Product	1,026,397	100.0
Merchandise exports, fob	194,935	19.0
Marine products	110,457	10.8
Aluminium and ferro silicon	42,198	4.1
Ships and aircraft	9,674	0.9
Other	32,606	3.2
Merchandise imports, fob	288,034	28.1
Balance of goods	-93,099	-9.1
Service receipts	129,516	12.6
Travel	25,752	2.5

Transportation	68,274	6.7
FISIM	1,256	0.1
Other	34,234	3.3
Service expenditures	163,676	15.9
Travel	61,540	6.0
Transportation	55,525	5.4
FISIM	3,043	0.3
Other	43,568	4.2
Balance of services	-34,161	-3.3
Balance of goods and services	-127,260	-12.4

#### 5.16 Exports of services

#### 5.16.1 The current methods

In sections 5.16.2 -5.16.5 below a description is given of the current methods applied in collecting and processing data on exports of services. However, these methods will shortly be drastically revised as further described in section 5.16.6.

#### 5.16.2 The compilation

Since the sources and methods are the same for exports and imports of services the description in this section refers to both.

In 2005 exported services accounted for 129,516 million kronur or 39.9% of the total exports of goods and services. The same year exported services amounted to 12.6% of GDP. The data on exports and imports of services are compiled by the Statistics and IT Department of the Central Bank of Iceland. The data are on a quarterly basis. The present data sources do not allow a distinction of services by partner countries. The Central Bank publishes on a quarterly basis the following breakdown of exports and imports of services:

- Transportation
- Travel
- Other services

For national accounts purposes Statistics Iceland receives from the Central Bank a more detailed breakdown of these items containing at least following items:

- Transportation
  - Air transport
    - Passenger fares
    - Freight
    - Other
  - Sea transport
    - Passenger fares
    - Freight
    - Other
- Travel
  - Health care
  - o Education
  - Other
- Other services
  - Communication services
  - Insurance services

- Construction services
- Financial services
- Computer and information services
- Other business services
- Cultural and recreational services
- Government services
  - Embassies and consulates
  - NATO base (closed down in 2006)

The compilation of data on exports and imports of services is based on a variety of sources. The banks and other authorised intermediaries of foreign exchange report regularly to the Central Bank on transactions according to the International Transactions Reporting System (ITRS) – the settlement system. The central government, the Central Bank, banks and other financial institutions, as well as certain large enterprises, submit monthly or quarterly information on their foreign trade and external positions. Annual surveys are also conducted to collect various data from legal entities on trade in services, investments and external borrowing. The data are prepared in accordance with the standard and codes of the International Monetary Fund (IMF) as published in the Balance of Payment Manual 5th edition (BPM5). Resident institutional units are defined in conformity with BPM5 as those that have a centre of economic interest in Iceland. As a member of the EEA and by virtue of agreements with Eurostat, Iceland additionally implements the European statistical standards. However, some deviations are unavoidable due to the lack of sufficient data sources.

Figures in these sources are frequently recorded on a cash basis, not on accruals basis as required by the national accounts. From 2009 Statistics Iceland is responsible for the calculation of foreign trade in services. Before that, the Central Bank of Iceland was responsible for the calculation. The Central Bank's data source was mainly a settlement system and the transactions were recorded on cash basis. When the project was moved to Statistics Iceland the main data source became data from enterprises involved in external trade in services. The enterprises are required to deliver information on accruals basis and majority of the enterprises deliver data in that way. However, regarding insurance services, audiovisual services and royalties and licence fees the enterprises have difficulties in deliver the data on accruals basis.

The normal procedure is to record the flows gross but in exceptional cases for small units flows might be recorded net in the sense that expenditure abroad are subtracted from income received abroad by the same unit.

#### 5.16.3 The transportation

Transportation, freight and passenger and port services are based on surveying the main Icelandic airlines and shipping companies and estimating other companies' data according to bank reports on foreign transactions. As mentioned above, the imports of goods are recorded on a fob basis. This means that the freight incomes of Icelandic shipping companies connected with the transportation of goods from foreign countries to Icelandic ports are not included in the exports of services if the importer is Icelandic. Instead these transactions are treated like transactions between domestic transactors. Obviously this will lower the level of export and import figures without affecting either the external balance on goods and services or the level of GDP.

The share of air transport is mainly based on information from the two largest airlines in Iceland. In this case purchases abroad of intermediate consumption are registered gross to a great extent. Other carriers, such as charter flight carriers mainly operating abroad, may be registered on a net basis where the source of information is the Bank's report of external transactions.

In the same way, the sea transport included in services consists only of Icelandic shipping companies' incomes from exports as well as operation between foreign ports. In the case of using vessels owned by foreign companies to import goods to Iceland, these services are registered as

imports of services. As far as possible the intention is to register on a gross basis the oil and other intermediate consumption products purchased abroad by Icelandic vessels. The sale of oil from Icelandic oil companies to foreign vessels in Icelandic harbours, as well as other services, is now recorded as exports of goods. Previously these kinds of goods were recorded in the services account. Purchases of fuels etc. of foreign aircrafts in Icelandic airports were previously recorded in the services account but it is now recorded as exports of goods.

#### 5.16.4 Travel

Travel, hospital, educational and other travel services are estimated from foreign exchange transactions reported by banks and payment card companies. Iceland has not been able to distinguish between business and personal travel services from prevailing data sources.

Tourism, both as expenditure and income, is based on the Central Bank's report of foreign transactions for these items. The intention is to register these statistics on gross basis but in some cases this is impossible. Tourist bureaux are an example. Their expenses abroad may be deducted from their incomes in foreign currency. A use is also made of the credit card turnover, both the use of foreigners on the domestic market and Icelanders abroad.

#### 5.16.5 Other services

Other services are mainly estimated from bank reports on foreign exchange transactions supplemented with information obtained from direct reporting by entities. Disaggregated services items are not published in the statistical bulletins of the Central Bank, but are available in the data bank maintained for the users of balance of payments statistics.

Data on exports and imports of insurance services are gathered according to the recommended breakdown in the EBOPS manual, that is life insurance and pension funding, freight insurance, other direct insurance, reinsurance and auxiliary services. The data are gathered on gross insurance premiums and gross insurance claims basis. So far no data has been published on exports and imports of insurance and pension services but the recommended method of estimating insurance service charges published in the EBOPS manual will be used for the estimation, that is, by calculating the insurance service charge ratio over a medium- to long-term period.

In trade of software Statistics Iceland has not tried to distinguish between customized software and mass produced software. However, Statistics Iceland assumes that majority of imported software is mass produced software imported for sale in stores (included in trade in goods) and majority of exported software is customized software and mass produced software delivered via the Internet (included in trade in services).

Statistics Iceland assumes that Icelandic software producers in general do not export software on physical carriers, only via the Internet. As a result of that, export of software is only included in external trade of services. This assumption is supported by almost non existing data for exports of software goods.

In external trade in services, data on computer services and royalties and licence fees are collected. Regarding royalties and licence fees, distinction is made between computer software licence fees and other royalties and licence fees. Regarding computer services no attempts has been made to identify payments related to software. Statistics Iceland has not yet published services data according to this distinction but publication of detailed classification is planned for the data of the whole year 2009.

The NATO base at Keflavik Airport was operated until the autumn 2006 when it was closed down. The base was defined out of Icelandic territory in national accounts. In the rest of the world account

the transactions between the defence force and the Icelandic economy were registered in the services account instead of exports (and imports) of goods as was the correct treatment.

Data is available on purchases of Icelandic diplomats abroad, based on Central government expenditure. This source is exploited.

#### 5.16.6 Forthcoming revised methods

In 2006 it was decided that new methods should be developed to collect data on external trade in services. The ITRS system (the settlement system) operated by the Central Bank was considered as inadequate and therefore it should be replaced, partly or entirely, by direct data collection from the enterprises. Simultaneously it was decided that the new data collection should be transferred from the Central Bank to Statistics Iceland. This decision was made in a good cooperation between these two institutions. A project group was formed within Statistics Iceland with a representative from the Central Bank for organizing the project and decide on the methods to be applied. Statistics Denmark and Statistics Norway were visited to learn from their experience in implementing similar methods. The preparation work is now making a good progress, questionnaires are constructed, classifications to be used have been decided and a few methods of data collection have been considered. The methods of sample selection have not yet been decided but most likely the sample size of big enterprises will be around 100 and the sample will be drawn out of the settlement system. The remaining part, or the small service enterprises, will most likely be identified from the settlement system with an emphasis on specific and service oriented activities.

The time schedule now followed is to start the new data collection from the 3<sup>rd</sup> quarter of 2008 and operate the new collection along with the former one for at least two quarters. Provided that this time schedule will hold, statistics following the new system will be published from the first quarter of 2009.

#### 5.16.7 The reliability

In section 8.7 below a short description is given on the reliability of the current account data by comparing the balance on current account and the balance on the financial and capital account. To some extend this description also refers to external trade on goods and services.

#### 5.17 Imports of goods

In 2005 imported goods accounted for 288,034 million kronur or 63.8% of the total imports of goods and services. The same year the imported goods amounted to 28.1% of GDP.

Reference should be made to Section 5.15, since sources and methods are the same for imports as for exports of goods.

#### 5.18 Imports of services

In 2005 imported services accounted for 163,676 million kronur or 36.2% of the total imports of goods and services. The same year the imported services amounted to 15.9% of GDP.

Reference should be made to Section 5.16, since sources and methods are the same for imports as for exports of services. In section 5.16.6 a description is given of the forthcoming revised methods. These revisions also refer to imports of services where applicable.

### Chapter 6.

# The balancing procedure or integration procedure, and validating the estimates

#### 6.1 GDP balancing procedure

Apart from occasional research in historical national accounts going back to 1870, current national accounts stretch back to 1945. From 1945 and up to 1957, the income approach was the only method applied. For the period 1957 to 1960, GDP was calculated both from the income and the expenditure side, the latter calculation giving a 10 to 12% higher result than the former. The first balancing procedure was applied for that period by increasing the income level by a fixed rate of 10% for all three years. From 1957 the expenditure method was the only method applied in national accounts until the year 1973 when the output method was completed for the first time. During that period, therefore, there was no balancing procedure between the different approaches.

From 1973 onwards both the expenditure and output methods were applied. However, the history of the balancing procedure is much shorter because most of the time these methods were applied more or less independently. The difference, the statistical discrepancy, was explicitly presented and no actual balancing procedure was undertaken. The difference varied considerably from year to year. The difference was biggest in 1977-1986 at around 6-7% of GDP. In more recent years the difference was in the range 2-4%. The expenditure approach always produced higher estimates.

Difference of this magnitude was considered unacceptable by the National Economic Institute, at that time the compiler of the national accounts in Iceland. In an attempt to eliminate this difference it was decided in early 1996 to prioritise the construction of supply and use tables in Iceland. This work was started several times but not completed. In 1997, Eurostat, after visiting Iceland, made an assessment of the quality of national accounts in Iceland, based on a report from the National Economic Institute. One of the concluding remarks from Eurostat was the importance of constructing supply and use tables and regularly balancing the output and expenditure approaches. This proposal reinforced the work on supply and use tables which was already started. A financial support from Eurostat also supported this work considerably.

The first year chosen for the balancing procedure was 1992 and the work was completed in July 1999. In constructing the supply and use table for that year the first problem to face was the lack of production statistics. With the exception of fish processing industries and the power intensive industries production statistics of an acceptable reliability for other branches of manufacturing did not exist. Statistics Iceland started to compile production statistics, or rather sales statistics of manufacturing industry, but the first year of compilation was 1996 so this source could not be utilised. Owing to the lack of production statistics of domestically produced goods and services there was no other option than to make use of the production accounts by branches of industry when defining the rows of the table. The level of detail in the rows of the table was set at the most available disaggregated classification of industries, and the number of industries ended up as 148 activities. The activity classification applied was the ISIC-classification rev.1 from 1958 (not 1968), which was slightly modified in 1968 and 1970.

This work was both troublesome and time consuming. However, it was worthwhile and extremely fruitful and the most important result of this work was the elimination of the statistical discrepancy between output and expenditure methods. Apart from the construction of the supply and use table the production approach had been revised considerably upwards, and this had reduced the original difference by approximately 6-8 billions each year. After the upward revision of the production

approach and before the balancing procedure started, the remaining difference for the year 1992 was 10.6 billion, or 2.7% of GDP. That difference was eliminated in the balancing procedure by distributing the difference almost proportionally between intermediate consumption, household final consumption, increase in stocks and gross fixed capital formation. The supply side was kept unchanged as well as the government final consumption and exports on the use side of the table because these items were considered to be most reliable.

Table 6-1 Statistical discrepancy 1973-1997

Million ISK		Discrepancy	
	GDP	GDP <sub>exp</sub> less GDP <sub>outp</sub>	% of GDP
1973	1,006	21	2.1
1974	1,464	41	2.8
1975	2,091	70	3.3
1976	2,941	139	4.7
1977	4,247	265	6.2
1978	6,584	493	7.5
1979	9,728	695	7.1
1980	15,686	989	6.3
1980 a new base	15,982	1,131	7.1
1981	24,860	1,525	6.1
1982	39,020	2,740	7.0
1983	67,696	5,325	7.9
1984	89,440	4,886	5.5
1985	122,026	7,775	6.4
1986	161,561	10,924	6.8
1987	210,348	3,986	1.9
1988	258,780	6,585	2.5
1989	318,780	21,194	6.6
1990	371,437	29,694	8.0
1990 a new base	371,437	1,196	0.3
1991	401,610	7,670	1.9
1992	401,445	6,014	1.5
1993	414,168	12,164	2.9
1994	440,286	14,612	3.3
1995	454,013	13,327	2.9
1996	487,509	18,043	3.7
1997	526,322	22,527	4.3

The final result was an increase in GDP according to the production approach of 5.1 billion kronur or 1.3% but a reduction in GDP according to the expenditure approach by 1.4% or 5.6 billions. Household final consumption and gross fixed capital formation were reduced by the same percentage, i.e. 1.4%.

Table 6-2 The GDP figures for Iceland 1992 before and after the balancing procedure

Million ISK			Difference
	Output	Expenditure	Expenditure
	approach	approach	minus output
Published figures			
1. GDP	386.994	397.632	10.638
2. Difference as % of Expenditure			2,7
After the balancing procedure			
3. GDP	392.053	392.053	_
4. A change from published figures	5.059	-5.579	-10.638
5. The change in %	1,3	-1,4	

When this balancing procedure was completed in July 1999, the year 1992 was the only year available of balanced supply and use tables. At that time the National Economic Institute considered this

first table as a special research project and for the time being the institute decided not to incorporate these results into the regular published series of national accounts. It was considered necessary to postpone the implementation until the work has been repeated for more years and the results compared and checked carefully and consistent time series constructed. The implementation of ESA95 was also at the final stage at that time with foreseeable changes for GDP and its main aggregates.

The work on supply and use tables continued after the completion of the supply and use table of 1992. The next year chosen was the year 1997. That year was completed in early 2002, both according to the former ISIC classification and the Icelandic version of NACE, rev. 1, named ÍSAT 95. The number of activities in the year 1997 was 146 according to the former ISIC classification.

The work on the supply and use tables for the year 1997 confirmed earlier suspicions of overestimation of household final consumption. Therefore household final consumption was lowered by some 4.9 billion kronur or 1.7%. This was done on a selective basis, based on indications from the supply and use table. The expenditure groups mainly lowered were clothing and footwear, furniture and furnishings, medical care and health expenses, leisure spending such as travelling expenses as well as the cost of use and ownership of vehicles.

The balancing procedure was facilitated by new and downwardly revised figures on gross fixed capital formation as described in section 5.10 above. That resulted in a more than 6 billion kronur reduction or 6% of GFCF.

After the reduction of household final consumption and gross fixed capital formation the remaining balance amounted to less than 1% of GDP. That balance was eliminated by reducing the intermediate consumption of all industries on a proportional basis. By doing that the assumption was made that the intermediate consumption is the least reliable item after an explicit adjustment has been made to household final consumption and capital formation. Thus the statistical discrepancy was eliminated for the year 1997. The following years the discrepancy has been eliminated in the same way by merely adjusting the intermediate consumption of all industries proportionately. So the discrepancy is not published any more.

Supply and use tables are now constructed on a regular basis. After the completion of the table for 1997 a new table was constructed for the year 2001. At that time the activity breakdown used was much less than before, i.e. the two digit classification A60, the Icelandic version of NACE, rev.1 and the results were incorporated into the balancing procedure of the major revision in September 2005. The number of activities used in the supply and use tables has varied from time to time as can be shown in the following:

- Year 1992: 148 activities, ISIC-classification rev.1 from 1958
- Year 1997: 146 activities, ISIC-classification rev. 1 from 1958
- Year 2001: 60 activities, ÍSAT 95, the Icelandic version of NACE, rev.1
- Year 2002: 239 activities, ÍSAT 95, the Icelandic version of NACE, rev.1
- Year 2003: 449 activities, ÍSAT 95, the Icelandic version of NACE, rev.1
- Year 2004: Same breakdown as 2003
- Year 2005: Same breakdown as 2004

Since 2001 the supply and use tables have been constructed annually and now, in early 2008, the table of the year 2005 is in process. The breakdown by activities is relatively detailed.

# 6.2 The sources and methods used in compiling the supply and use tables 2002-2003

The activities in the 2002 S&U tables were broken down by 239 industries and classified by ÍSAT 95, which is identical with NACE rev. 1, at 3 digit level with the exception of fishing and fish processing where 5 digit levels was followed. The input/output (I/O) table was disaggregated into 292x245 matrix table and classified by ÍSAT 95 and also on 3 digit level and again with the exception of fisheries and fish processing. The trade industries were on 4 digit level on the supply side.

The 2003 S&U tables were broken down by 449 industries and classified by ÍSAT 95 at 4 digit level with the exception of the trade industries where 3 digit levels was followed and fisheries and fish processing where 5 digit level was followed as before. The 2003 S&U tables were also more itemized by components. On the supply side VAT and other taxes on products were divided into (i) value added tax (VAT), (ii) excise duty and (iii) tariffs, custom duties and other specified duties. On the use side government final consumption was divided between central- and local government final consumption. The 2003 I/O table was disaggregated into 595x329 matrix table at 4 digit levels but this time the trade industries on the input side were on 3 digit levels.

In constructing the S&U tables the main data source on the output side is the production accounts used in the production approach of national accounts as described in chapter 3 above. This output makes the first column of the supply and use table. These production accounts are derived from the Enterprise Accounts Register which is enterprise oriented, not establishment oriented, and due to that fact the production accounts are in many cases heterogeneous in the sense that the proportion of non-characteristic output is high. On the other hand the number of accounts is available down to 5 digit ÍSAT level which gives over six hundred industries. A breakdown by so many activities in the working documents facilitates in many cases the determination of output to the using industry.

Sold manufactured goods are now available on an annual basis and this source is used as a supporting material to the production accounts. That source is classified by products and it facilitates the identification of the products behind the production accounts where all product classification is lacking and only the total values exist.

The second column of the table is the import column. It is a vector where all imported goods have been classified by the producing industry. These values in addition to the domestic output give the total supply on the domestic market. Trade and transport margin is added to these values to reach the values at market prices by activity.

A minor problem occurred as foreign trade is classified by CPA. Discrepancy was found between output at basic prices and imports or exports in some fisheries and fish processing industries. These imports and exports figures were therefore corrected before the balancing procedure could begin.

The distribution of import and export of services are one of the most difficulties to overcome in the 2002 and 2003 S&U tables. The balance of service account was constructed by the Central Bank of Iceland until recently when it was moved to Statistics Iceland. In constructing these tables the most detailed information could not be utilized owing to confidentiality.

The estimation of the size of the trade margin is the output value at basic prices in the trade industries (50, 51 and 52). Excluded from this on the other hand is large part of industry 50.20 (maintenance and repair of motor vehicles) and industry 52.70 (repair of personal and household goods). The distribution of this value is based on various sources. Among these sources are some information already utilized in estimating the household final consumption. The following can be mentioned:

- Direct information from leading enterprises in the retail trade on the trade margin by some groups of goods.
- Some indicators from the Competition Investigation Agency.
- Enterprises' accounts.
- Trade statistics, data on imports and importers.

The size of the transport margin to be distributed SI uses the output value at basic prices in industry 60.24 (freight transport by road) and a small fraction of industries 61.00 (water transport) and 62.00 (air transport). This value is distributed according to intermediate consumption for corresponding industry.

On the use side the intermediate consumption of each delivering industry is broken down. Here the Enterprise Accounts Register is of a limited use whereas it only shows the total value of raw materials purchased without any breakdown by products. Therefore other sources of information has to be exploited and in preparing this research work, additional information were collected directly from leading enterprises in some specified activities. An emphasis was especially laid on activities where the intraindustry relationships were rather complicated. For the time being is was decided not to send out standardized questionnaires, in stead it was considered sufficient to contact enterprises by telephone and ask them about the actual or percentage breakdown of raw material purchased according to their accounts as well as some other main operating expenses. Enterprises in following industries were contacted:

- Fishing and fish processing
- Manufacturing of other food products
- Power intensive industries
- Electricity and hot water supply
- Air transport services

On the use side of the table three other columns remains to be described here.

Household Final Consumption Expenditure and Government Final Consumption Expenditure were available classified by COICOP and COFOC and this detailed classification was used to reclassify these expenditures by producing activity.

The Gross fixed Capital Formation was mainly derived from the Enterprise Accounts Register as described in section 5.10 above. This classification is rather disaggregated by type of product and purchaser. Nevertheless the problem remains of reclassifying the expenditure by producing activity and ensure harmony in classification of imports within the same activity as the imports are classified in the production accounts.

#### 6.3 The final balancing

An annual construction of supply and use tables can be considered a big step forward. However, it is a matter of concern that the completion of the annual table is lagging behind in time and therefore the result so far can only be used for backward revision but the result has not yet been incorporated into current estimates on a regular basis. Statistics Iceland intends to speed up this process so the supply and use tables can be used as a central and an integrated part of the current national accounts estimates and for the balancing procedure of all the estimates.

However, in the meantime other and less sophisticated methods have to be applied for balancing. These methods simply involve a distribution of the discrepancy between output and expenditure approach proportionally on intermediate consumption of industries. The size of this discrepancy is

shown in table 6-3 before final balancing procedure has been undertaken. The discrepancy is shown for the period from 1997 onwards but since then all published figures were balanced and no discrepancy shown. From that time the size of the discrepancy has fluctuated from less than 1% and up to 5.5% in 2006 when it reaches the peak level.

Another point worth considering is that at the beginning of the period the expenditure approach showed a higher result and the discrepancy was eliminated by reducing the intermediate consumption. During the last six years, i.e. 2003-2008, the opposite has occurred and the expenditure approach has turned out to be lower than the output approach. Increasing difference during the period 2003-2006 is a matter of concern but that development is somewhat going back in the recent years.

During these years the discrepancy was eliminated by increasing the intermediate consumption proportionally. In the balancing work of the supply and use table of 2005, more sophisticated methods will be applied and the discrepancy will be investigated more thoroughly on an industrial basis. This might also result in a revision of the expenditure approach like happened in 1992, 1997 and 2001.

Table 6-3 Statistical discrepancy expenditure and output approaches 1997-2008

	1 , 1	1 11	
Million ISK		Discrepancy	
	GDP	GDP <sub>exp</sub> less GDP <sub>outp</sub>	% of GDP
1997	526,322	24,008	4.6
1998	588,367	21,577	3.7
1999	632,399	6,790	1.1
2000	683,747	1,319	0.2
2001	771,893	11,278	1.5
2002	816,450	5,417	0.7
2003	841,322	-14,269	-1.7
2004	928,889	-24,368	-2.6
2005	1,026,718	-42,004	-4.1
2006	1,168,577	-63,806	-5.5
2007	1,308,518	-46,418	-3.5
2008	1,477,647	-28,910	-2.0

# Chapter 7. Overview of allowances and adjustments for exhaustiveness

#### 7.1 The exhaustiveness of tax data

The most important data source in constructing production accounts in Iceland is the Enterprise Accounts Register which consists of company accounts of all legal enterprises in standardized form. The question of exhaustiveness can therefore be directed to the question of exhaustiveness of tax data compared with other data sources like surveys. In view of this it is worth evaluating in a few words the advantages and disadvantages of the use of the company accounts. A few points will be covered:

- The quality of the basic available information
- The coverage, including underreporting
- The treatment of income in kind in tax sources

In evaluating the quality of the tax data one should bear in mind that the compilation of operating accounts and production accounts by Statistics Iceland is based on the Enterprise Accounts Register which is now of almost a complete coverage. Therefore, the problem of sampling error which existed until 2001 when unincorporated enterprises were covered in the Enterprise Accounts Register has now almost disappeared.

Another point worth mentioning is the quality of the Enterprise Accounts Register itself. Here it is worth to distinguish between the first and the second version of the Register. Statistics Iceland receives the first version of each year at the end of the consecutive year. That version is received before auditing of any kind by tax authorities. The second version, i.e. the final version of the Register is received one year later. The difference between these two versions is mainly that the second version covers more companies owing to late delivery of tax returns. Some minor and regular auditing by tax authorities has also occurred from the first to the second revision.

More comprehensive auditing by tax authorities is undertaken later. In fact it is questionable how important this auditing is from the national accounts' point of view. It must be kept in mind that all business accounts above a certain size limit of firms are already audited by chartered accountants before being submitted to the tax authorities. Many of the individual results of the fiscal audits also concern matters such as contributions to the owners' equity reserves and other irrelevant corrections for the national accounts purposes. Nevertheless it could be of some assistance to incorporate the appropriate part of the fiscal audit into national accounts. The question is how accessible this information is. Often the audit refers to several years and the results are difficult to disentangle for individual years. Also the results often become available after a delay of many years. The final result of this auditing is difficult to identify but a very rough estimate some years ago indicated that the size of this auditing could be up to 0.5 percent of GDP, and most likely diminishing over time according to internal sources from the tax authorities. So far the result of these fiscal audits is not carried back to the original fiscal data; instead it is only the extra tax recovered which is registered. For the use in national accounting these might cause problems because it is not clear whether the increased tax originates from undeclared income or overestimation of intermediate consumption.

The second point mentioned above is the question of coverage or underreporting. This point is closely related to the first one but often more difficult to confirm. In recent years at least three

studies in this field have been undertaken. All these studies were undertaken by special committees established by the Minister of Finance.

The first committee reached the conclusion in 1986 that similar figures for the year 1985 were 5-7 percent. The second study was published in 1993. The mandate of the committees was to investigate the magnitude of tax evasion. The committee applied four different methods in attempting to reach its results.

One of these methods was the investigation of the magnitude of the statistical discrepancy between the output and expenditure approaches in national accounting. This discrepancy proved to be of the order of 5-7 percent during the period 1975-1992 and varied a little within the period.

Another method was more oriented towards specific industries well known for underreporting. According to this method all industries were classified into eight groups depending on the risk of tax evasion in each branch of industry. The highest risk of evasion was assumed to be in that part of the construction activity particularly providing services to households and in various personal services. With many reservations the result, following this method, was that the magnitude of the income evasion of all branches could be in the range of 3-9.9 percent. The highest and lowest values were considered to be unlikely and the most likely average was considered to be 4.6 percent. The only use of national accounts data in this method was the weighting of the specific industries to estimate the total underreporting but the risk percentage in each of the eight groups was entirely the committee's estimate.

Other methods applied by the committee will not be described here but the overall conclusion of the committee was that the amount of income not declared to tax authorities could be estimated as 4½ percent of GDP in 1992.

The third committee to investigate the tax evasion was appointed in 2002 by the Minister of Finance. That committee consisted of the Director of Internal Revenue, Director of Tax Investigation and the Director of Customs. The committee's report was finalized in December 2004. The main results were that tax evasion in the form of underreporting of income and turnover eligible to VAT has decreased in recent years. However, the committee was of the opinion that advanced and organized tax evasion has increased especially in connection with external transactions. The size of the tax evasion is estimated as 8.5% to 11.5% of the total tax revenue of central and local governments. This corresponds to 3.2% to 4.3% of GDP.

In evaluating the exhaustiveness of GDP from the results of these three committees, a few comments must be made. As far as the conclusion of tax evasion is based on the difference between the output and expenditure approach of national accounts, one has to be very cautious and many reservations have to be made, as the committees do. The reason is that a comparison at the aggregate level of GDP does not show differences that are cancelled out due to the high level of aggregation. Furthermore, it is not the opinion of Statistics Iceland that the level of GDP as presented by the expenditure approach is superior to the level of GDP resulting from the production approach. Therefore the possibility of overestimating GDP according to expenditure approach cannot be ruled out. From the time the two first committees had submitted their reports, the National Economic Institute and now Statistics Iceland have further developed the methods applied in national accounting. That has been done by balancing the output and expenditure methods and thereby the discrepancy has disappeared from the published data.

In this context it should also be mentioned that to some degree tax evasion was already incorporated in Icelandic national accounts. This was reflected in the sample selection of the company accounts up to the year 1997. Undoubtedly most of the tax evasion is practised in small enterprises with inadequate bookkeeping standards and abnormal cost structure – for example registering as intermediate consumption some expenses which are in fact compensation of employees or operating surplus. Errors of this type were automatically eliminated by the sampling technique followed where these small enterprises were underrepresented in the samples. In grossing up these samples

the effects of abnormal cost-structure were substantially reduced provided that cost structure of the bigger enterprises are better representing the actual cost structure of the small enterprises than the small enterprises in the sample. By using the Enterprise register from 1997 onwards the sample size increased considerably and large number of small firms were then included. That might lead to the absurd result that the increased sample, or actually a complete coverage, is inferior in quality to the smaller sample previously used!

Above the exhaustiveness of tax data is mainly directed to the output approach. The tax data is also used intensively in the expenditure approach as described in chapter 5. The Enterprise Accounts Register plays an important role in estimating gross fixed capital formation as described in section 5.10 and the VAT turnover and the Enterprise Accounts Register is also used intensively in estimating household final consumption, cf. section 5.7.3. Provided that the result of the third tax evasion committee is correct the quality of these sources has improved and therefore also the exhaustiveness of these sources. In section 3.25 a comparison is made between VAT calculated from national accounts data 1997-2002 and the actually collected VAT during the same period. The result of this comparison as presented in table 3-25 does not indicate a decrease in the discrepancy between these two series.

The above studies are more speculations of a general character meant to evaluate the overall quality of the tax data. The results have not been taken into account. The numerical impact is also unclear.

# 7.2 Supply and use tables, trade margin and employment data

In Chapter 6 a description is given of the present situation in constructing supply and use tables. They are now constructed on an annual basis but the completion of the tables is lagging behind in time and therefore the result so far can only be used for backward revisions. One of the biggest steps forward in an attempt to improve exhaustiveness is to speed up this process and enable the use of these tables for current estimates. The existence of such tables would also ensure a harmony between the value of trade margin on household final consumption and the trade margin actually produced according to the production approach. To some extent this is already done because the trade margin as measured in distributive trade is used as the total of the column trade margin in supply and use tables. The allocation of trade margin between items on the expenditure side is problematic and therefore direct calculation of the trade margin on individual activities has been estimated as a further check.

The main source of employment data is the Pay-as-you-earn Register as described in section 3.1. In present form this register has existed since 1998 and it is useful in many activities like a check on the value of wages and salaries in some specific activities. However, the processing of this register for statistical purposes is not yet completed and still there exist some discrepancies in classification of many companies in this register and other registers like the Enterprise Accounts Register and the VAT register. When the processing of the register has been completed it will open the possibilities of establishment oriented statistics. It will also inform about the number of employees and employers as well as the full time equivalence of the employment. This employment data will be the only source of employment because the Enterprise Accounts Register does not contain any such data. Therefore this new source cannot be helpful in the case of exhaustiveness.

In some cases the potential for using the supply and demand of building materials such as cement investigated for validating construction output. Especially this is the case for preliminary estimates and also in validating suspicious estimates, for example in the case of residential construction.

The output of the constructing activity is of a special concern. Due to a considerable subcontracting where one company sells to another the meaning of the total output is of a mixed character. However, this subcontracting is considered not to have an impact on the value added.

# 7.3 Payments in kind to employees and other adjustments

#### 7.3.1 Payments in kind to employees

The third point mentioned in section 7.1 in evaluating the tax sources was the treatment of income in kind. Several types of income in kind exist in Iceland. The following ones can be mentioned:

- Business cars used for private purposes
- Mileage allowances
- Travel tickets supplied free of charge or at reduced prices to employees
- Travel allowances
- Food allowances and accommodation provided free of charge or at reduced prices to employees, rent-free dwellings and dwellings let to employees at below-market rents, free telephone at home etc.
- Various employees' allowances

Other types of income in kind do exist in Iceland, but they are of less importance. In general income or benefits in kind are fully taxable under Icelandic tax law. However the application of the tax rules is different and it is often difficult to verify if income in kind have been granted and if so to identify their real value. Prior to the implementation of ESA95 in 2000 the attempt to re-estimate this income from bookkeeping practices was restricted to a few of these items. Simultaneously with the implementation of ESA95, various adjustments were made in this area. These corrections were mostly based on the Enterprise Accounts Register for the relevant years. The most important ones will be described below and an overview of these corrections is given in table 7-1 below.

Income in kind in the form of the usage of cars can exist in two different forms. The first one is the usage of business cars, owned by the employer, for private purposes. In this case the tax authorities impute income to the beneficiary equivalent to 20 percent of the original value of the cars during the first three years of their lifetime, then 15 percent after that without any cut-off threshold. From the employees' point of view these imputations definitely do not exceed the actual benefits received. Most likely this is an underestimate. These calculated incomes are taxable and can be derived from the Payroll Register. However in the Enterprise Accounts Register an item called "imputed payments in kind" is separately distinguished. This item is meant to cover:

- The operating expenses of business cars used by employees for personal usage
- Food allowances
- Rent-free dwellings or dwellings let to employees considerably below the market rate

This item, the imputed payments in kind, is already included in compensation of employees in the production accounts. However it is considered to be considerably underestimated. That opinion is based on a comparison made with comparable figures derived from the Payroll Register from 1996 and previous years. Therefore it is assumed that a considerable part of such payments has been recorded as other expenses in the Enterprise Accounts Register. Hence, it was decided to increase this by an amount corresponding to the expected underestimate. In 2005 that amounted to almost 2100 million kronur. From 1996 onwards the amount has been increased by the annual increase of wages and salaries according to the PAYE-Register. This amount is distributed by industries proportionally to the total compensation of employees in each industry. Compensation of employees was increased by that amount and intermediate consumption decreased by the same amount. Now, Statistics Iceland intends to revise these methods by making use of Payroll Register for some newer year and use the annual changes of this particular item of the Payroll Register instead of overall changes of wages and salaries.

Another form of income in kind from using cars is mileage allowances. In many industries it is quite common that employees receive a certain mileage allowance for using their own cars for business purposes. In many cases this usage for business purposes is questionable and often just an excuse for receiving tax-free income. Nevertheless, in some cases there is a use of the cars for business purposes so here it is a matter of judgement as to how to treat these payments. Until the implementation of ESA95 in the year 2000 no corrections were made in national accounts which meant that all these expenses were registered as intermediate consumption. Now this has been corrected in the way that the item "mileage allowances" is separately distinguished in The Enterprise Accounts Register. That item represents the total amount paid to the employees for using their cars for work. Part of this amount is definitely for business purposes and therefore intermediate consumption. In determining the division between intermediate consumption and consumption of employees it was decided to make use of the information available from the total tax returns of individuals. This source showed that on average the tax authorities acknowledge 60% of the actual mileage allowances as intermediate consumption. Based on that knowledge it was decided that 40% of the amount of the item "mileage allowances" should be reclassified as compensation of employees instead of intermediate consumption. The amount reclassified following this procedure was around 1.200 million kronur in 2005.

The airlines supply *travel tickets* to their employees free of charge or at considerably reduced prices. These incomes in kind are not treated as taxable income by tax authorities but in national accounting an imputation is recommended. No definite estimate was available until the introduction of ESA 95 in August 2000. Then the value of these tickets was estimated around 25 million kronur in 1999, so it is negligible in Iceland. The importance of this kind of tickets has even decreased in recent years and therefore it was decided not to make such imputations any more and eliminate earlier estimates.

Another and more important item is travel allowances, i.e. a certain amount per day, paid to employees when they are travelling for business purposes. In most cases these payments are supposed to cover both accommodation and other travel expenses but in some cases these payments could include an element of income in kind when these payments are considerably higher than reasonable travel expenses. The tax authorities accept most of these allowances as expenses for the employees. In the Enterprise Accounts Register this item is separately distinguished and recorded as other expenses not wages and salaries. According to ESA95 that part of travel allowances which is intended for meals and drinks is defined as wages and salaries in kind. In travel allowances to the government employees a distinction is made between accommodation, 60%, and other travel allowances, 40% of total. These proportions were rounded off to 50/50 implicitly reflecting the opinion that these allowances are generous in many cases and often involve income in kind. Therefore as a practical solution half of the travel allowances are defined as a payment for meals and drinks and that part has been reclassified from intermediate consumption in the production accounts to compensation of employees. The amount reclassified in 2005 was around 1.800 million kronur.

Free telephones at home are another type of income in kind which was taken into consideration during the implementation of ESA95 in 2000. This income is taxable in principle but Statistics Iceland is not aware of any special attempt made by tax authorities to handle this. Examples of employees receiving benefits of this kind were all permanent employees of Post and Telecommunication, now Iceland Telecom Ltd, Members of Parliament and some other groups like retirement pensioners in the lowest income brackets. These groups do not pay any subscription fee, including some usage, but have to pay for usage above that included in the normal fee. In recent years the output in NACE 64.20 has been increased by some 46 million kronur as a rough indicator of free telephones. The methods here will be taken into consideration, especially in view of the fact that it is getting more common that companies supply their employees with mobile phones and pc at home free of charge. This type of income is much more important but not yet recorded.

Another form of income in kind is *rent-free dwellings* and dwellings let to employees at below-market rents. Income of this type is taxable and according to the tax rules this income is estimated

as 2.7% of the real estate evaluation of the corresponding dwellings per annum and proportionally for shorter periods of time. No direct information is available on the value of these benefits. This form of benefits especially exists in the case of government officials living outside the Capital region. In the government accounts the operating costs of these dwellings are included in other expenses, i.e. intermediate consumption and no corrections have been undertaken when these accounts have been processed for national accounts purposes. No direct information is available for the moment to identify the value of these benefits but the tax assessments data indicates that taxable income of this kind are negligible. Whatever the truth is, no direct adjustment has been made in national accounts to cover this type of income in kind. As far as this item is actually registered in the Enterprise Accounts Register it should be a component of the item "Employees' allowances."

Finally, there are other *various Employees' allowances* recorded in The Enterprise Accounts Register. This is the biggest single adjustment item, amounting to almost 11000 million kronur in 2005 and entirely transferred from intermediate consumtpion to compensation of employees. Some of the biggest components deserve some explanation. The characteristics of these items from others above are mainly that these items never involve any cash payments to the employees.

One of these items is the operating costs of canteens and free meals. This item is difficult to handle. Some information was available from the previously used Payroll Register which reports the assessed value of free meals. In the year 1991 this value amounted to 389 million kronur or 0.2 percent of total compensation of employees. Most likely this figure only covers a part of actual benefits, i.e. full meals or payment actually made in the absence of canteens. In addition to these payments it is quite common that employees can buy meals in canteens, often at considerably reduced prices. No adjustments which correspond to this were made in the national accounts until the ESA95 implementation. The operating costs of these canteens are difficult to identify in company accounts. Whenever information was visible these expenses were classified as compensation of employees but in most cases these expenses were unidentified among other items in intermediate consumption. A rather rough investigation was carried out from the company accounts available which indicated that the operating costs of canteens might be some 0.48% of the compensation of employees. Prior to the availability of the Enterprise Accounts Register for the year 1997, a correction of this size was carried out in all industries. However, after the intensive utilization of the Enterprise Accounts Register this special correction was not carried out separately but assumed to be already included in the item "Employees' allowances". It is assumed that this will lead to a correct treatment of canteens (i.e. the actual payments made by employees would be deducted).

The item "Employees' allowances" in the Enterprise Accounts Register contains various other items which are provided free of charge or at reduced prices by employers. Tax authorities give instructions on the cost items which should be classified under here. Besides operating costs of canteens, most of them are clearly of the character of being compensation of employees, like cloths, sports and recreational facilities, crèches for the children of employees. Under the item "employees' allowances" there might be some items which should not be treated as compensation of employees in national accounts, like employees' annual festival. Borderline cases might also occur but possible overestimation of income in kind under this item might be offset by underestimation of income in other items.

There are no explicit adjustments for *tips* in Icelandic national accounts because tipping does not exist in Iceland except in exceptional cases.

A summary of the payment in kinds described above is given in item 1 in table 7-1. The total amounted to 15,870 million ISK in 2005. Owing to the character of these payments, so far it has not been considered necessary to make any explicit adjustments in the calculation of household consumption because of these payments. Thus it is assumed that for example the household consumption expenditure of *business cars used for private purposes* is already included in the present estimates of the operation of personal transport equipments. *Travel allowances* are another item of payments in kind and in that case an attempt is made only to record as payments in kind

that part of allownces which cover meals and drinks but not accommodation. These expenditure on meals and drinks are already estimated from sources independent of travel allowances. For similar reasons it can be argued that the remaining payments in kind, mentioned above, are estimated in such a way that no adjustments are needed in the calculation of household final consumption. An exception is the *operating costs of canteens and free meals*. In that case an explicit estimate already exist in COFOG item 11 of household final consumption where the expenditure of canteens are included and based on turnover in NACE 55.51.

## 7.3.2 Other adjustments

In addition to the adjustments made for exhaustiveness in the case of payments of kind to employees several other adjustments are worth mentioning. These adjustments are summarized in table 7-1 and each of them is described in the following.

Net recording of wholesale and retail trade. According to ESA95 the output of wholesale and retail trade is defined as the trade margin which is the difference between the actual or imputed price realized on a good purchased for resale and the price that would have to be paid by the actual distributor to replace the good. This means that the output as defined in national accounts of these industries is the turnover according to company accounts less the value of goods purchased for resale. The output in national accounts is therefore considerably lower than the turnover in company accounts which is recorded on a gross basis. In 2005 this difference amounted to 398 billion ISK.

Net recording of insurance services. The output of insurance in ESA95 is different from company accounts in the sense that in ESA95 the output is defined as the difference between the premiums received and claims paid plus total premium supplements which are equal to the income from the investment of the insurance technical reserves. According to the estimates this difference amounted to 9.6 billion ISK.

Capitalized software. Because of the lack of knowledge of the actual bookkeeping practices in Iceland, the assumption is made that the expenditure on software were expensed in the company accounts and not capitalized. Due to that and in order to ensure consistency between output and expenditure approach, the total amount of software estimated as fixed capital formation on the expenditure side in the national accounts was allocated to individual activities and the company expenses were reduced subsequently to derive intermediate consumption. The allocation by industries was based on the percentage distribution by industries of the total purchase of computers, printers and similar equipment as recorded in the EAR for each year. The total amount allocated in that way was 3.7 billion kronur in 2005.

Changes in inventories, price correction. In company accounts and the Enterprise Accounts Register stocks are valued at the prices of the beginning and the end of the year and therefore a component of holding gains is included. This has to be removed from the production accounts. It is done by revaluing the stocks at the beginning and the end each year at the annual average prices of that year. The difference, positive or negative is added to the sale of the year to reach at the output (production) of the year. In 2005 this correction amounted to 1625 million ISK.

Threshold value for capital goods has a more general coverage than just for computer software. According to Icelandic tax law the threshold value determines the maximum value for individual items to be accepted as current expenditure. Items above that limit must be capitalized, that is recorded as fixed capital formation. This limit exceeds the ESA95 guidelines which use 500 Euros in 1995 prices as the limit. Until the utilization of the EAR from 1997 onwards no attempt was made to adjust the production accounts to ESA95 and the bookkeeping practices. The EAR makes some adjustments possible because one of the items specified in the Register under operating expenses is named "small assets, not capitalized". Items recorded under this category are small equipments and tools. According to Icelandic tax laws the threshold value is approximately five times higher than the reference value in ESA95. Therefore it is assumed that a considerable part of

these items should be capitalized and not expensed. In an absence of firm data it is estimated that half of the value of these items should be capitalized instead of expensed. The impact of this adjustment is a reduction of intermediate consumption of market producers by 3.6 billion kronur in 2005 and a corresponding increase of value added and operating surplus.

Taxes on production and subsidies on production reallocated. Business accounts do not give separate figures for these items. Only one fifth of the taxes on production are directly identified in industries. The most important is the group Dwelling services, (NACE 70.20). In other cases these items are most often classified among various operating expenses, subsidies as negative expenses, in company accounts, i.e. intermediate consumption, and these items have to be rearranged and classified among the components of value added. In the final balancing procedure between the output and expenditure approaches the total amount of these items as recorded in the government accounts are considered to be definitive. The difference between these amounts and the amount observed in the individual activities is recorded as a balancing item in estimating total value added from the production approach. The amount observed in the individual activities is lower than the governments accounts show and therefore the balancing item is positive. Intermediate consumption is reduced consequently because it is supposed that these items were included among operating expenses in the company accounts. The correction item for subsidies has an opposite sign. The impact of this adjustment is 20.4 billion ISK for taxes and 10.4 billion for subsidies with an opposite sign.

Renting of fishing quotas is classified as ordinary expenses in business accounting and in Enterprise Accounts Register. From national accounts point of view these expenses are not intermediate consumption but rather property income for the receiver and most likely a rent. The size of this correction item is 782 million ISK in 2005. The intermediate consumption is reduced by that amount and the operating surplus increases consequently.

Gifts, donations to charities etc are expensed in the Enterprise Accounts Register but such expenses are not recognized as intermediate consumption in national accounts. Therefore corrections have to be made and for that reasons intermediate consumption were reduced by 987 million ISK in 2005 and operating surplus increased consequently.

Table 7-1 The main adjustments from the Enterprise Accounts Register to national accounts definitions

Million ISK		Intermediate	Value	Compensa.	Operating
	Output	consumption	added	of employee	surplus
1. Payments in kind to employees		-15,870	15,870	15,870	
1.1 Business cars for private purposes		-2,093	2,093	2,093	
1.2 Mileage allowances		-1,223	1,223	1,223	
1.3 Travel allowances		-1,776	1,776	1,776	
1.4 Various Employers´ allowances		-10,778	10,778	10,778	
2. Other adjustments	-409,440	-427,212	17,772		9,135
2.1 Net record. of wholesale and retail tr.	-398,232	-398,232			
2.2 Net recording of insurance services	-9,583	-9,583			
2.3 Changes in inventories, price correction	-1,625		-1,625		
2.4 Software capitalized		-3,737	3,737		3,737
2.5 Threshold value for capital goods		-3,629	3,629		3,629
2.6 Taxes on production reallocated		-20,474	20,474		
2.7 Subsidies on production reallocated		10,212	-10,212		
2.8 Renting of fishing quotas		-782	782		782
2.9 Gifts, donations to charities etc.		-987	987		987
<b>3.</b> Total adjustments ( <b>3.=1.+2.</b> )	-409,440	-443,082	33,642	15,870	9,135
4. Total as % of GDP			3.3		

Table 7-1 gives a summary of the adjustments described above. These adjustments have added some 3.3 percent to total value added in the economy at 2005.

# 7.4 Hidden activity

In addition to payments in kind, hidden activity deserves some attention. Explicit supplements to the output of such activity are only made in a limited number of activities. One example and by far the biggest one is the NACE activity 45.49 Own account construction and repair. The total output of this activity amounted to 11,225 million kronur in 2005. Apart from FISIM no intermediate consumption is estimated. The breakdown of this activity is shown in table 7-2.

Table 7-2 The output of Own account construction and repair, 2005

	Million ISK
Own account activity of farmers in residential construction and outhouses' construction and repair	621
Black work and maintenance of residential construction	8,151
Repair of residential construction	2,453
Total	11,225

Hidden activity occurs to some extent in these activities. A rough estimate indicates that one third of the total output might be hidden activity and it is included in the figures in table 7-2. These estimates are very rough but a notice is taken of the share of apartment houses versus one family houses. The apartment houses are delivered by the contractors near the final stage of completion whereas the one family houses are delivered at a much earlier stage. Therefore the share of hidden activity is assumed to be much higher in the one family houses.

Explicit adjustments of hidden activities in other activities are rare and these adjustments are fewer now than before when the unincorporated enterprises were not covered by the Enterprise Accounts Register. That came into force in 2001. However, in some cases the grossing up factor still exist due to a general knowledge of underreporting. Activities of special concern here are:

- 55.2 Camping sites and other provision of short-stay accommodation
- 60.22 Taxi operation
- 93.24.1 Freight transport by delivery vans

These activities are characterized by unincorporated enterprises and a high rate of self-employed persons. In the case of taxi operation the VAT Register is not useable for grossing up because this activity is not subject to VAT. Therefore the Payroll Register is taken into consideration as well as other vital sources like household expenditure surveys. In an attempt to cover underreporting the grossing up factor in these activities is increased by 5-10%. In the case of taxi operation the level was adjusted upward several years ago, around 1997, and the level from that time is extrapolated by annual changes in revenues of paired comparision of enterprises in that activity.

Excluded from these adjustments are illegal activities although ESA95 explicitly states that all economic activities, regardless of their legal status, should be included within the accounts. Statistics Iceland is definitely aware of the importance of recording illegal activity and an attempt should be made to cover such activity. However, there is not yet any time schedule available.

# 7.5 Household expenditure surveys and household final consumption

In section 5.7.5 above a comparison is made between the household expenditure survey 2005 and household final consumption as estimated in national accounts. The overall result shows that the level of the Household expenditure survey is 0.8% higher than the Final Consumption Expenditure in the Domestic Market. This is the overall result after necessary adjustments have been made by skipping incomparable items. These items are actual and imputed rent, purchases of vehicles and direct purchases in the domestic market by non-resident households.

As stated in section 5.7.5 the result of this comparison compared with previous results shows that the overall difference is small like before but what is most striking is that the deviation between individual sub-items is much smaller now than it was before. That might indicate that the quality of either or both of these estimates has increased during the last decade.

# Chapter 8. The transition from GDP to GNI

## 8.0 Introduction and reference framework

As the name indicates, gross national income (GNI) is an income concept, but it is calculated on the basis of gross domestic product (GDP). GNI is calculated by adjusting GDP for primary income flows to and from the rest of the world. Primary income consists, on the one hand, of tax and subsidy transactions to and from the EU and, on the other hand, compensation of employees, interest, dividends, reinvested profits from direct investment in the rest of the world, property income attributed to insurance policyholders and, finally, rents.

Value of each foreign currency transaction is converted into the value at national currency by using the quarter's average exchange rate (mid-rate).

The Statistics and IT Department of the Central Bank of Iceland collects data on these income components for the balance of payments statistics. The data are collected on a quarterly basis. The published breakdown of these components in 2005 was as follows:

Table 8-1 The transition from GDP to GNI, 2005

	Million ISK
1.Gross Domestic Product	1.026.397
2. Primary incomes receivable from the rest of the world	-36.605
2.1 Compensation of employees receivable	4.639
2.2 Property income receivable	85.258
2.2.1 Dividens and reinvested earnings	65.023
2.2.1.1 Direct investment, Income on equity	58.800
2.2.1.2 Portfolio investment, Income on equity (dividends)	4.577
2.2.1.3 Direct investment, Other income	1.646
2.2.2 Interest payments	20.235
2.2.2.1 Other investment	20.137
2.2.2.2 Portfolio investment, Income on debt (interest)	1.332
2.2.2.3 FISIM correction	-1.234
2.3 Compensation of employees payable	1.533
2.4 Property income payable	124.970
2.4.1 Dividents and reinvested earnings	66.606
2.4.1.1 Direct investment, Income on equity	64.618
2.4.1.2 Portfolio investment, Income on equity (dividends)	1.558
2.4.1.3 Direct investment, Other income	430
2.4.2 Interest payments	58.364
2.4.2.1 Other investment	13.708
2.4.2.2 Portfolio investment, Income on debt (interest)	48.026
2.4.2.3 FISIM correction	-3.370
3. Gross national income at market prices	989.792

The definition of residence plays an important role in estimation of the primary income receivable from and payable to the rest of the world. Residents and non-residents are defined in accordance to Act No 87/1992 on Foreign Exchange. Resident refers to any individual permanently resident in Iceland in accordance with the provisions of the Act on Legal Domicile, irrespective of nationality. The same shall apply to an Icelandic national and his dependants residing in other countries that is employed there by the Icelandic State with an embassy, permanent delegation or consulate and

accepts remuneration from the Icelandic Treasury, or is employed by an international organization to which Iceland is party.

Act on Legal Domicile no 21/1990 states that a person residing in Iceland for six months or longer has to obtain a legal domicile in Iceland. A person that resides and intends to reside in Iceland for employment or educational purposes for longer than 3 months can have a legal domicile in Iceland.

Resident also refers to any legal person registered as legally domiciled in Iceland, stated to be resident in Iceland in its articles of association, or in effect managed in Iceland; Icelandic branches of legal persons domiciled outside Iceland are regarded as residents.

In sections 8.1 to 8.6 below a description is given of the main sources and methods used in estimating the individual components of primary incomes to and from the rest of the world. In the following a short summary is given of these sources and methods.

The data on *compensation of employees* are now entirely derived from bank reports on foreign transactions, i.e. settlement statistics. These flows are on a cash basis, not on an accrual basis. What are actually recorded are payments net, i.e. net of taxes and consumption abroad. The only exception from the use of settlement statistics was direct information on the compensation of employees of Icelandic residents working at the NATO base at Keflavik Airport. But the base was closed down in autumn 2006.

The data on *interests* are collected from banks, central government and other main debtors of foreign loans in the corporations sectors. Information is collected on new loans, interest rates and the duration of the loans. From this and similar information from previous years the actual payments are calculated. Interest payments are recorded on an accrual basis from 2005 onwards.

Data on *dividends* received by corporations from abroad or payable abroad are obtained on the basis of an annual survey to enterprises. Settlement statistics are also used. Both sources record these flows at the date of payment. The Central Bank tracks annual reports of companies listed on the stock market and therefore it is able to accurately pinpoint the exact time when dividends are paid out. Dividends paid by other companies are usually recorded on the forth quarter. Flows of dividends are recorded before deduction of taxes.

Reinvested earnings on foreign direct investment constitute that part of a company's results which are not distributed to the shareholders but are retained in the company. These earnings are calculated by the Central Bank as the difference between the company's total profit after tax and the distributed profit. Data on distributed profits are obtained via the direct reporting from foreign owned companies in Iceland and from domestic companies in Iceland in the case of their investment abroad.

In the first quarter of 2009 The Central Bank of Iceland revised its methodology for recording profits from the "all inclusive" to the current operating performance concept which implies excluding holding gains and losses from recorded profits. Because previous years, 2006-2008, included many extraordinary events were holding gains and losses significantly affected reinvested earnings the CBI provided revised figures according to the new methodology for that period.

In the case of *mutual funds* only the actual payments between countries are recorded. So far no attempt has been made to record reinvested earnings of these funds. No adjustment is made to *property income* attributed to insurance policy holders retained by insurance corporations, standardized guarantee schemes or pension funds.

# 8.1 Compensation of employees

This item comprises, on the income side, the compensation paid by non-resident employers to resident employees and, on the expenditure side, the compensation paid by resident employers to non-resident employees. These transactions do not include social contributions as required by the manual.

The data on compensation of employees are mainly derived from bank reports on foreign transactions, i.e. settlement statistics. These flows are on a cash basis, not on an accrual basis.

Direct information was also collected from the NATO base at Keflavik Airport on compensation of employees of Icelandic residents working at the base because it was defined outside Icelandic domestic territory. The base was closed down in autumn 2006. The Central Bank of Iceland has estimated that in 2002 information on approximately ¾ of the total compensation of employees from abroad came from direct enquiry to employers (mainly from the NATO base) but information about the rest and all payments to abroad come from the settlement statistics. After the closure of the NATO base, information on the compensation of employees to and from abroad are entirely derived from the settlement statistics.

Payments under this item, other than payments from the NATO base, are recorded net. This means, as an example, that if an Icelander is temporarily working abroad, only those payments actually transferred home are recorded. Therefore, the payments are net of taxes and consumption abroad.

No estimates are available on the compensation of employees to Icelandic residents working at foreign embassies in Iceland. Figures exist on the total amount of Icelandic kronur bought by the foreign embassies but no distinction has been made so far between wages and other expenses of the embassies. Foreign embassies in Iceland change foreign currency into ISK. No breakdown is available between compensation of employees and other expenses of the foreign embassies.

Data on payments to Icelandic embassies are derived from the Financial Management Authority on a quarterly basis. Compensation of Icelandic residents working in Icelandic embassies abroad is treated like transactions between residents in Iceland. Compensation of employees to non-residents working at Icelandic embassies abroad has not been separated from other expenses of the embassies abroad. However this data must be available at the Financial Management Authority.

# 8.2 Taxes on production and imports

Taxes on production and imports in the context of Balance of Payments are not applicable in Iceland. Payment from Iceland to the European Economic Area Financial Mechanism is treated as current transfers to abroad.

## 8.3 Subsidies

Subsidies in the context of Balance of Payments are not applicable in Iceland.

## 8.4 Interest

The data are collected from banks, central government, the electricity power companies, transportation companies and several holding companies. These are the main debtors of foreign loans and they are surveyed quarterly on interest payments and at the end of each year for position and actual payments.

Information is collected on new loans, interest rates and the duration of the loans. From this and similar information from previous years the actual payments are calculated.

Interest on foreign long-term borrowing has been calculated on their due for payment date but from 2005 onwards the interest has been recorded on an accrual basis.

There is currently no correction for tax withheld at source on interest income received from and paid to the rest of the world. Iceland has a double taxation agreement with most of the countries in Europe and North-America. Non-residents in any of those countries have the right to pay their tax in their home country. The same applies for interest receipts of Icelandic residents abroad. This applies both to individuals and other legal persons (companies).

## 8.4.1 Interest expenses

- Long term loans and bonds: The Central Bank receives reports on foreign long term loans and bonds from all public and private companies in Iceland. Those reports include all items necessary, like principal amount, interest rate, maturity etc. to calculate interest flows.
- Short term loans: The Central Bank receives monthly reports from all financial companies on their stock of short term liabilities. Those stocks are used to calculate interest flows using the average of LIBOR-USD and EURIBOR interest rates.
- *Deposits:* The Central Bank receives monthly reports from all deposit institutions in Iceland on their stock of deposit liabilities. Those stocks are used to calculate interest flows using an average interest rate offered by those deposit institutions.
- Domestic securities issue, held by non-residents: The Central Bank receives monthly reports from The Icelandic Securities Depository on the stock of all securities that are issued in Iceland and held by non-residents. Those stocks are used to calculate interest flows using the appropriate market interest rate for each and every instrument.
- *Central bank debt:* The Statistics department of the Central Bank receives a quarterly report from the Accounting department of the bank.
- FDI-debt: FDI companies report their paid interest expenses to Central Bank.

# 8.4.2 Interest receipts

- Long and short term loans and bonds: The Central Bank receives reports on the stock of foreign lending to non-residents from all financial companies. Those stocks are used to calculate interest flows using the average of LIBOR-USD and EURIBOR interest rates.
- *Deposits:* The Central Bank receives monthly reports from all deposit institutions in Iceland on their stock of deposit assets. Those stocks are used to calculate interest flows using the average of LIBOR-USD and EURIBOR interest rates.
- Central bank interest receipts: The Statistics department of the Central Bank receives a quarterly report from the Accounting department of the bank.
- FDI-lending: FDI companies report their interest receipts to CBI.

# 8.5 Distributed income of corporations

The distributed income of corporations is dividends but withdrawals of quasi-corporations are neglected. Data on dividends received by corporations from abroad or payable abroad are obtained on the basis of an annual survey to enterprises. Settlement statistics are also used. Both sources record these flows at the date of payment. The Central Bank tracks annual reports of companies

listed on the stock market and therefore it is able to accurately pinpoint the exact time when dividends are paid out. Dividends paid by other companies are usually recorded on the forth quarter. Flows of dividends are recorded before deduction of taxes.

This item also includes reinvested interest and dividend income in mutual funds which issue accumulation units. Owing to increased liberalisation of capital movement to and from Iceland for more than a decade, it is getting more and more popular to invest in foreign securities. Portfolio investments in equities, especially in mutual funds, are proportionately very important. Many of these funds pay little or no dividends to their owners. Instead, a considerable part of their profit is simultaneously reinvested and the shareholders get most of their return in the form of an increased market price of the equity. This increase is a combination of holding gain and property income. The problem then arises how to distinguish between these two. Doing nothing means that very little or no property income at all is recorded from abroad from mutual funds of this character. That is apparently an underestimate. Under Commission Decision 97/157/EC, Euratom, reinvested earnings in such funds are considered to be property income for the owners of the investment certificates. Statistics Iceland prefers to interpret that decision in such a way that the property incomes of these funds consist of interest, dividends, and rental on fixed assets etc. but excluding realised as well as unrealised holding gain or losses. The Central Bank of Iceland follows the IMF's Balance of Payment manual and interprets this now more or less in the same way. However, the Central Bank emphasizes the practical differences of implementing the Commission Decision. The result has been that so far no correction is made for reinvested interest and dividend in mutual funds and what is recorded are only the actual payments between countries.

This problem of eliminating holding gains and losses of mutual funds (UCIs´) is similar to that of reinvested earnings. The Central Bank is developing new methods to solving this as mentioned in section 8.6.

# 8.6 Reinvested earnings on foreign direct investments

Foreign direct investment is an investment that reflects the objective of an entity in one country to establish a long term investment relationship in an enterprise in another country. That is done by acquiring 10% or more of the ordinary shares of an enterprise to gain significant influence in decision making. Direct investment is divided between outward investment by Icelandic residents (assets) and inward investment by non-residents (liabilities). Bank's loan to their affiliates other than permanent equity is exempt.

The Central Bank of Iceland performs survey with detailed questionnaire on various matters concerning foreign direct investment, including profits and dividends. The survey targets two distinguished groups: local foreign direct investors to determine outward investment and local foreign direct investment enterprises for inward investment.

Icelandic foreign direct investors are resident entities that have acquired, either directly or indirectly, 10% or more of shares in non- resident enterprises. Icelandic foreign direct enterprises are resident enterprises that have at least one foreign entity holding 10% or more of its shares.

Necessary condition for both groups is that the foreign direct investment leads to an ownership of 10% or more of an enterprise in one country by an investor resident in another country. Therefore foreign direct investment is carefully distinguished from portfolio investment which is defined as investment where ownership is less than 10% of shares.

Each group, direct investors and direct investment enterprises, report different form of questionnaire. It is possible for the same entity to belong to both groups.

The survey collected is based on a census approach. Given the relative small size of Iceland's economy, an attempt is made to include all the elements of the population in the survey.

Sources used to determine the elements of the survey: For outward investment media coverage plays an important role. Available annul statements are used to search for foreign assets that can possible belong to FDI. For inward investment the same sources are used but additional sources include Iceland's business registry. Non-resident entities are identified by their identification number assigned by Registers Iceland. The Central Bank of Iceland operates an ITRS system. In the system all currency trade within the resident banks are recorded and assigned a description key. FDI has a special key in the system and by observing currency movements related to FDI it is possible to see what entities are responsible for the investment. These sources are also used to verify information from the survey.

Data is collected for the compilation of annual FDI statistics and quarterly balance of payments and external position. The largest elements in the population are surveyed quarterly and others annually. Those surveyed annually and non-respondents are given quarterly estimates.

Reinvested earnings on foreign direct investment constitute that part of a company's results which are not distributed to the shareholders but are retained in the company. Reinvested earnings are profits less dividends due for payment. A positive sign (+) in front of the figure for reinvested earnings occurs when investors reinvest earnings within the relevant enterprise, thereby increasing their equity capital. A negative sign (-) in front of the figure for reinvested earnings occurs when the equity capital of subsidiaries is depleted, either by an operating loss or because dividends paid to shareholders exceed earnings.

In the first quarter of 2009 The Central Bank of Iceland revised its methodology for recording profits from the "all inclusive" to the current operating performance concept which implies excluding holding gains and losses from recorded profits. Companies are asked to report operating profits after tax and exclude all holding gains and losses. Because previous years, 2006-2008, included many extraordinary events were holding gains and losses significantly affected reinvested earnings the CBI provided revised figures according to the new methodology for that period. Revised figures were generated by surveying those companies that had reported a critical part of the total value of profit or losses for the period in question. By far the most significant revisions were in outward FDI due to holding losses of foreign subsidiaries in 2008.

Dividends are earnings paid out to shareholders from common and participating preferred stock and are recorded in the quarter they are paid out to shareholders.

# 8.7 Reliability

By definition, the balance on the current account as described above should be equal to the balance on the financial and capital account since a current surplus is deployed either on the outward investment or debt reduction, while a deficit needs to be met by foreign borrowing or asset depletion. Because each item of the real and financial flows is measured independently, errors or omissions in measurement of the current or financial data will cause imbalance in the statistics. These errors and omissions are presented quarterly but as a residual aggregate, i.e. a net figure, so errors in individual items of the balance of payments may cancel each other out if they have opposite signs. Thus, the errors and omissions item is not an absolute indicator of the data quality. In 2005, errors and omissions amounted to 26.941 million ISK or 2.6% of GDP. This item was positive in the sense that the inflow on the capital and financial account was lower by this amount than necessary to finance the deficit on current account. In 2004 the errors and omissions were negative by almost the same amount.

It is the opinion of the Central Bank of Iceland that the main explanations of these errors are:

• **Time-lag**: Individual items may not be measured at correct time when the transactions took place, e.g. purchases of ships, borrowing, portfolio investments, etc. Other things (prices and exchange rates) being equal, the lag should evened out over several periods of measurement.

- Valuation errors: Prices of individual items may be mismeasured, both in foreign and domestic currency. Exchange rate volatility has magnified this problem in Iceland, especially when combined with a time-lag.
- **Volume errors**: Over- or underestimation due to human error in reporting or estimation of trade or financial flow between resident and non-resident.

What is important here from the point of view of national accounts is that it is the opinion of the Central Bank that a persistent negative error can most likely be traced to underestimated investment abroad. If that is the case this has no impact on the GDP but the GNI will be underestimated.

# Chapter 9. FISIM: Calculation, allocation and impact on GNI

## 9.1 Introduction

In September 2005, Statistics Iceland introduced a comprehensive revision of the national accounts back to 1990, and to some extent all the way back to 1980. This revision included the adoption of chain linking in the calculation of volume changes, the smoothing of breaks in time series going back to 1980, as well as other changes. The aim had been to adopt, alongside these changes, a new methodology for estimating financial intermediation services indirectly measured. Progress on this project was slower than planned and it was inevitable to postpone it. However, the project was completed a little later and the allocation of FISIM was completed and incorporated in the published national accounts in March 2006. The allocation of FISIM was estimated back to 1980.

The FISIM calculations are defined in Council Regulation (EEC) no 448/98 of 16 February 1998 and implemented by Council Regulation (EC) No 1889/2002 of 23 October 2002.

Table 9-1 shows the impact of FISIM on GDP and its components on the expenditure side for the year 2005.

Table 9-1 Output of FISIM and its impact on GDP 2005

A. Output of FISIM, Million ISK	
1. Household final consumption	11,282
1.1 FISIM on FIs´ liabilities	9,878
1.2 FISIM on FIs´ assets	1,404
2. Government final consumption	1,665
2.1 FISIM on FIs´ liabilities	612
2.2 FISIM on FIs´ assets	1,052
3. Exports	1,256
4. Imports	3,043
5. Intermediate consumption	35,293
6. FISIM total	52,539
B. Percentage breakdown of FISIM %	
1. Household final consumption	21.5
2. Government final consumption	3.2
3. Exports, FISIM on FIs´ assets	2.4
4. Imports, FISIM on FIs´ liabilities	5.8
5. Intermediate consumption	67.2
6. FISIM total	100.0
C. GDP by the expenditure approach, Million ISK	
1. Household final consumption	610,638
2. Government final consumption	252,617
3. Gross fixed capital formation	291,265
4. Changes in inventories	-862
5.Gross domestic final expenditure	1,153,658
6. Exports of goods and services	324,450
7. Less: Imports of goods and services	451,710
8. Gross Domestic Product	1,026,398

D. Impact of FISIM on GDP, %	
1. Household final consumption	1.8
2. Government final consumption	0.7
3. Gross fixed capital formation	0.0
4. Changes in inventories	0.0
5.Gross domestic final expenditure	1.1
6. Exports of goods and services	0.4
7. Less: Imports of goods and services	0.7
8. Gross Domestic Product	1.1

## 9.2 Data needed to calculate FISIM and available data

The calculations of bank services using the new methodology require extensive data decomposed in a particular manner. Information on the following for lending institutions is required:

- Asset income (lending rates) of deposit money banks classified by sector as defined in the national accounts.
- Liability expenditure (borrowing rates) of deposit money banks by sector.
- Reference interest rates of two kinds:
  - o Internal reference rate.
  - External reference rate.
- The stocks of interest bearing assets and liabilities.

A difficulty associated with asset income and liability expenditure is that neither variable is directly available from the data as compiled by the Central Bank of Iceland, neither by loan (asset) or deposit (liability) form.

Moreover, lending is done in various currencies although care is exercised in balancing assets and liabilities. Assets and liabilities in Icelandic kronur do not match. Among domestic assets are shares and real estate that do not earn interest for the purposes of calculating banking services. An effort is made to match indexed kronur assets and liabilities, as well as assets and liabilities in the various currencies.

Since sufficiently detailed figures for asset income and liability expenditure by lending and deposit forms for the various sectors of the economy do not exist, acceptable approximations need to be employed. However, detailed information is available on the stocks of assets and liabilities classified by borrowers and creditors. It was decided to base estimations on these stocks by using particular interest rate assumptions. The interest rates chosen were active interest rates on interest bearing assets and liabilities on the Icelandic financial market. The interest rates are calculated by the Financial Supervisory Authority (FSA) based on information provided by the commercial banks and the six largest savings banks.

These calculations are based on:

- Total interest on all interest earning assets, that is, interest income.
- Total interest on all interest bearing liabilities, that is, interest expenditure.

The difference between these two figures, the interest differential, represents the income of financial institution from intermediating between savers and debtors. This income also represents a cost that needs to be allocated among borrowers and creditors. In that allocation, reference rates play a key role.

# 9.3 Options regarding domestic reference rates

In the United Nations' System of National Accounts 1993 (SNA 1993) reference interest rates are defined in article 6.128 as the pure cost of borrowing funds, that is the net cost of borrowing excluding any risk premium and fees for financial intermediation. SNA recommends the use of interbank lending rates for this purpose. This was also the outcome of a pilot study of member countries of the European Union aimed at allocating banking services.

FISIM for lending is then calculated as the difference between lending rates and the reference rate while FISIM for deposits is calculated as the difference between reference rates and deposit rates. Total FISIM is the sum of FISIM for lending and deposits.

In selecting an internal reference rate for the Icelandic national accounts, three options were considered:

- Interbank lending rate (REIBOR)
- Interest on certificates of deposits in the Central Bank
- The Central Banks Repo rate, i.e. policy rate.

Interbank lending rates are the rates banks charge each other in their transactions. LIBOR (London Interbank Offer Rate) is a well known reference rate in loan transactions. Attempts have been made to develop a domestic REIBOR market and Eurostat's regulation on reference rates calls for the use of interbank rates. Interbank rates are determined in the market for the liquid funds of financial institutions. This market is very limited in Iceland and appears to be mainly active as a day loan market. For this reason, the interbank rate cannot be used as a reference rate.

Another option would be to use interest rates on Central Bank certificates of deposits as an approximation for interbank rates. These rates come close to interbank rates but are recorded more precisely than interbank rates. Both these rates are free of risk premium. On the other hand, the interest rate on certificates of deposits is determined by domestic interest rates while domestic bank lending rates also reflect rates on on-lent foreign borrowing. Interest rates on certificates of deposits are, therefore, relatively high compared with lending rates, as a matter of fact higher than lending rates for some years. FISIM for lending would thus be unrealistically low if these rates were used as the basis for the reference rate.

The third option is to use the Central Bank's reporate, i.e. policy rate which the Bank charges in its repurchase transactions with financial institutions. The reporarket is very active and policy rates primarily impact short-term lending rates. Table 9-1 shows that the annual average of the Central Bank's policy rates is sometimes higher than the average for bank lending rates. Under these circumstances, the Central Bank's policy rate cannot be used as the basis for the reference rate.

Given that none of these three options, interbank rates, rates on certificates of deposits, and the policy rate of the Central Bank can be used as a basis for the reference rate a decision was made to use the average of active lending and borrowing rates calculated by the FSA as discussed above.

One question is whether the reference rate should be in the middle between lending and borrowing rates or closer to one of them. Here it should be noted that information is not available on which is more pronounced, downward or upward pressure on interest rates. The reference rate is, therefore, set as the average of lending and borrowing rates as calculated by the FSA.

It should be pointed out that the approach used here represents a considerable simplification but it is difficult to come up with something better.

Two exceptions are made to the general rule of dividing the interest rate differential evenly between assets and liabilities. On the one hand, the interest differential for the Housing Financing

Fund is calculated directly based on information provided by the Fund. On the other hand, it is known that risk premium on external loans are very low.

Table 9-2 Lending and deposit interest rates 1995-2004

Percent					Average of
			Commercial	Commercial	Commercial
	Interest on	Policy rate	banks	banks	banks lending
	Central bank CD	(Repo rate)	lending rate	deposit rate	and deposit rate
1995			8,95	4,82	6,88
1996			8,85	4,93	6,89
1997	6,70	6,82	8,63	5,02	6,82
1998	7,00	7,15	7,84	4,77	6,30
1999	7,77	8,02	9,00	6,06	7,53
2000	9,95	10,19	9,53	6,85	8,19
2001	10,59	10,75	10,68	7,73	9,21
2002	7,93	8,18	7,64	5,06	6,35
2003	4,85	5,11	6,39	3,83	5,11
2004	5,42	5,78	5,76	3,47	4,62

For external loans, an external reference rate is needed. Interest rates on foreign loans can be estimated on the basis of interest payments abroad and the stock of foreign debt. Such rates are much lower than the reference rate which supports the views that risk premium on foreign loans are low. In determining this risk premium, two approaches are feasible. One is to look to reference rates used in other countries. The other is to lower the interest differential by a fixed percentage.

The reference rates of seven countries, Denmark, Sweden, Finland, Belgium, the Netherlands, Luxembourg, and France for the period 1995-2003 were reviewed. These were compared with the interest rate on the stock of foreign debt. For some years, the average rate on foreign debt was lower than foreign reference rates which would generate a negative FISIM. A decision was therefore taken not to use these reference rates but instead to lower the average interest differential on foreign loans by a fixed percentage, 75 percent. The interest differential on the lending of financial institutions was increased by the same percentage.

The figures above show declining lending and deposit rates, as well as narrowing interest rate differentials. In recent years, interest rate differential in percentage points has declined and the balance sheets of financial institutions increased. Three factors account for this:

- The domestic borrowing of financial institutions has increased and interest differentials are lower than for traditional deposits.
- External borrowing has increased sharply and the difference between lending and borrowing rates on foreign currency is very low.
- Financial institutions have acquired marketable securities, i.e. securities issued by the Treasury and the Housing Finance Fund. These securities provide collateral in repurchase transactions with the Central Bank. Marketable securities held by these institutions are in fact part of their liquidity management.
- Underlying assets related to forward contracts for the purchase and sale of foreign exchange appear on both sides of the balance sheet with an insignificant interest differential.

# 9.4 Stocks of deposits and loans

Figures for the classification of lending and assets are obtained from the Statistics and IT Department of the Central Bank of Iceland. These are also available on its website. Information on lending is in accordance with the published classification. The classification of deposits by acti-

vities is only available from 2003 onwards, and for previous years it has been estimated based on the average for the two first years available, i.e. 2003 and 2004.

Information on borrowing and other assets are available on the Bank's website under the headings "The Accounts of Deposit Money Accounts" and "The Position of Various Financial Institutions".

Figures for lending are of three types:

- Traditional bank lending with marketable securities classified separately.
- Traditional lending of other financial institution, including marketable securities.
- Other interest earning assets.
  - o Deposit in or liability to the Central Bank.
  - o Marketable securities, mainly treasury securities and Housing Financing Fund bonds.
  - Other interest bearing assets, especially Central Bank deposits and foreign assets.

Borrowing and other interest accruing liabilities are classified to the extent that information allows.

- Domestic borrowing is largely from pension funds and to some extent from individuals.
- Liabilities to the Central Bank
- Foreign borrowing is divided into two components.
  - o Borrowing represents loans contracted for the long term, three to five years.
  - Other loans, represent short term transactions.

Tables 9-3 and 9-4 show the available breakdown of stocks of assets and debts of deposit money banks used for calculating FISIM.

Table 9-3 Breakdown of stock of DMB's assets used in calculating FISIM 2005

	Million ISK
Deposit Money Banks´ lending	
Central government	25,977
Local government	47,589
Financial intermediation - institutions	256,121
Enterprises	
Agriculture	10,714
Fishing	64,603
Fish processing	42,684
Wholesale and retail trade	150,199
Manufacturing	140,006
thereof; Processing of agriculture products	2,882
thereof; Processing of fish and fish products	0
Construction contractors	80,873
Transport, storage and communication	53,092
Electricity, hot water and cold water	14,513
Other service activities	548,610
Individuals	813,760
Non-residents	408,858
Unspecified activity	16,364
Total DMB's lending	2,565,135
Listed securities	
Other construction contractors,	0
Manufacturing,	5,377
Agriculture	1
Construction	0
Electricity, hot water and cold water	33

Transport, storage and communication	22
Fish and fish processing	8
Other service activities	654
Other service activities	100
Enterprises, total	6,194
Local government	46
Central government	5,476
Credit institutions other than banks	84,683
Non-residents	2,259
Unspecified activity	97
Households	0
Listed securities, total	98,754
Other assets of Deposit Money Banks	
Financial leasing contracts	9,370
Foreign assets	521,064
Central bank	-21,635
Deposit Money Banks	99,319
Treasury bills	1,220
Other assets of DMBs, total	609,338
Total interest bearing assets	3,273,226

	Million ISK
Deposits	
1. Central government	13,008
2. Local government	7,444
3. Financial intermediation	58,217
thereof: Pension Funds	9,938
thereof: Insurance companies	6,118
4. Enterprises	174,317
4.1 Agriculture	2,351
4.2 Fishing	8,827
4.3 Mining and quarrying and Manufacturing	17,820
thereof; Processing of agriculture products	1,090
thereof; Processing of fish and fish products	5,181
4.4 Electricity, hot water and cold water	3,594
4.5 Construction	10,010
4.6 Wholesale and retail trade	21,578
4.7 Transport, storage and communication	12,294
4.8 Other service activities	97,844
5. Households	329,858
6. Non-residents	33,285
7. Unspecified activity	3,012
Deposits, total	619,140
Other borrowing of the Deposit Money Banks	
Domestic borrowing of the credit system	235,774
Foreign borrowing of the credit system	1,719,970
Possible import. Banking service 0,20%	3,440
Other credit institutions	
Domestic borrowing	682,107
Foreign borrowing	19,087
Total interest bearing debts	3,276,079

## 9.5 Calculation of FISIM

When reference rates have been determined and information is available on the stocks of deposits and loans it is possible to calculate FISIM. As the reference rate is placed in the centre between lending and deposit rates, FISIM becomes the product of the average loan stock for each year and one half of the interest differential in percentage points. The average loan stock for each year is calculated as the average of the beginning and end-year values. FISIM is calculated for liabilities and assets in the degree of detail feasible. The sum shows FISIM as a whole and it can be compared with the previous approach under which FISIM was calculated as the interest differential of deposit money banks as recorded in their annual accounts. The results for 1996-2003 showed that for most years the difference is within 5 percent, although two years, 1996 and 2003, represent exceptions.

# 9.6 Export and import of FISIM

The deposit and loan classification of financial institutions counts foreign entities. Banking services allocated to foreign entities are counted as exports. Imported FISIM is estimated as 0.175 percent of foreign borrowing. There are indications that there is a premium of 17.5 basis points over LIBOR in foreign borrowing through medium-term notes. This FISIM is included in the external interest payments of banks. Imported FISIM is a net addition to internal FISIM. Imported FISIM is a part of foreign interest payments.

# 9.7 Allocation of FISIM among intermediate consumption, private consumption and government final consumption

The classification of interest earning assets and liabilities of financial institutions is used to estimate what share of FISIM that should be allocated to households and the government sector, that is as government final consumption.

FISIM on household deposits is entirely allocated to households as consumers. FISIM on household liabilities is allocated in such a way that 70% are estimated as dwelling loans, 5% as loans to households as owner of unincorporated enterprises and 20% as loans to households as consumers. This percentage share is guesswork taking into account that in many cases mortgage loans are also taken to finance consumer goods, like cars. Therefore, available statistics does not allow breakdown of deposits or loans to households by disposal.

The share of FISIM allocated to public consumption is estimated based on the loan classification of financial institutions. FISIM for imports and exports are estimated as described above.

What remains of FISIM is allocated to intermediate consumption by activity, based mainly on relative gross factor income.

# 9.8 Impact of FISIM on GDP

As is to be expected, the revisions described here lead to some increases in GDP. The reason is that a part of banking services which was previously recorded as intermediate consumption is now recorded in private consumption, public consumption, exports, and imports. On the whole, GDP for each year increases by about 1 percent in current prices. Private consumption shows the largest increase, or more than 1.2 percent, although somewhat more in recent years. Moreover, the share of various industries within GDP changes somewhat as banking services were previously subtracted undivided from the total value added whereas now it is allocated on an industrial basis.

# Chapter 10. Main classifications used

# 10.1 Classifications used for the production approach

In the production approach, Iceland's national accounts are calculated on the basis of establishments by industry, not by products. More precisely, owing to the lack of establishment statistics, the enterprise statistics are most frequently used as a substitute for establishments. For these reasons the main classification used for the production approach is the classification of industries. The classification followed is the ÍSAT95 classification which is the Icelandic version of the NACE rev.1 classification. In the Icelandic version there are divergences from NACE mainly in fishing and fish processing where the Icelandic version is more disaggregated. In these cases the Icelandic version goes down to five-digit level.

Table 10-1 below shows the most detailed classification used for the construction of production accounts. In the relevant sections of Chapter 3 the numerical values of output, intermediate consumption and value added are shown for each industry.

The total number of industries in the production approach is very high or 371 but as a consequence of the fact that the production accounts of all these industries are based on enterprise statistics many of these production accounts are rather heterogeneous in the sense that the proportion of non-characteristic output is thought to be high.

The level of publication from these 371 industries is flexible but it varies between sections (A,B, C... etc.); subsections (DA, DB...etc); divisions on two digit level or groups on five digit level. Normally the regular publication is limited to four digit level except in the case of fishing and fish processing where the five digit level is of an interest. In the case of fishing and fish processing a special effort has been undertaken to disaggregate the enterprise statistics by obtaining additional breakdown by establishments from the biggest enterprises.

**Table 10-1 Classifications of industries** 

Icelandic	English  01 Agriculture, hunting and related service activities  01.1 Growing of corps; market gardening; horticulture	
01 Landbúnaður og dýraveiðar 01.1 Jarðyrkja og garðyrkja		
01.11 Kornrækt, grasrækt og önnur jarðrækt	01.11 Growing of cereals and other crops n.e.c.	
01.11.1 Kornrækt, grasrækt og önnur ræktun, þó ekki kartöflurækt	01.11.1 Growing of cereals and other crops, except potatoes	
01.11.2 Kartöflurækt	01.11.2 Growing of potatoes	
01.12 Ræktun grænmetis, ylrækt og garðplöntuframleiðsla	01.12 Growing of vegetables, horticultural specialties and nursery products	
01.12.1 Ræktun grænmetis og garðplöntuframleiðsla	01.12.1 Growing of vegetables and nursery products	
01.12.2 Blómarækt	01.12.2 Growing of flowers and pot plants	
01.13 Ræktun ávaxta og berja	01.13 Growing of fruit, nuts, beverage and spice crops	
01.2 Búfjárrækt	01.2 Farming of animals	
01.21 Nautgriparækt	01.21 Farming of cattle, dairy farming	
01.22 Sauðfjárrækt og hrossarækt	01.22 Farming of sheep, goats, horses, asses, mules and hinnies	
01.22.1 Sauðfjárrækt	01.22.1 Farming of sheep	
01.22.2 Hrossarækt	01.22.2 Farming of horses	
01.23 Svínarækt	01.23 Farming of swine	
01.24 Alifuglarækt	01.24 Farming of poultry	
01.25 Önnur búfjárrækt	01.25 Other farming of animals	
01.25.1 Blönduð búfjárrækt	01.25.1 Farming of mixed livestock	

01.25.2 Loðdýrabú 01.25.2 Farming of fur animals 01.25.9 Önnur ótalin búfjárrækt 01.25.9 Other farming of animals n.e.c. 01.3 Blandaður búskapur jarðyrkju og búfjárræktar 01.3 Growing of crops combined with farming of animals (mixed farming) 01.4 Þjónusta við jarðyrkju og búfjárrækt önnur en 01.4 Agricultural and animal husbandry service activities, dýralækningar except veterinary activities 01.41 Þjónusta við jarðyrkju og garðyrkju 01.41 Agricultural service activities 01.41.1 Þjónusta við jarðyrkju 01.41.1 Service activities related to agriculture 01.41.2 Skrúðgarðyrkja 01.41.2 Service activities related to horticulture 01.42 Þjónusta við búfjárrækt önnur en dýralækningar 01.42 Animal husbandry service activities, except veterinary 01.5 Dýraveiðar og tengd þjónusta 01.5 Hunting, trapping and game propagation including related service activities 02 Skógrækt, skógarhögg og tengd þjónusta 02 Forestry, logging and related service activities 02.0 Skógrækt, skógarhögg og tengd þjónusta 02.0 Forestry, logging and related service activities 02.01 Skógrækt og skógarhögg 02.01 Forestry and logging 02.02 Þjónusta tengd skógrækt og skógarhöggi 02.02 Forestry and logging related service activities 05 Fiskveiðar 05 Fishing, operation of fish hatcheries and fish farms 05.0 Fiskveiðar og fiskeldi; þjónusta við fiskveiðar 05.0 Fishing, operation of fish hatcheries and fish farms 05.01 Fiskveiðar 05.01 Fishing 05.01.1 Togaraútgerð 05.01.1 Operation of trawlers 05.01.2 Útgerð vinnsluskipa 05.01.2 Operation of fish processing vessels 05.01.3 Útgerð fiskiskipa yfir 10 brl., þó ekki togara og 05.01.3 Operation of fishing vessels larger than 10 GRT, except trawlers and processing vessels vinnsluskipa 05.01.4 Smábátaútgerð 05.01.4 Operation fishing boats smaller than 10 GRT 05.01.5 Útgerð hvalveiðiskipa 05.01.5 Operation of whalers 05.02 Fiskeldi; veiði í ám og vötnum 05.02 Operation of fish hatcheries and fish farms; fresh-water fishing 05.02.1 Seiðaeldi 05.02.1 Hatchery production 05.02.2 Onshore and cage fish farming 05.02.2 Land- og kvíaeldi 05.02.3 Hafbeitarstöðvar 05.02.3 Ocean ranching 05.02.4 Eldi sjávardýra 05.02.4 Marine farming 05.02.5 Management and fishing in rivers and lakes 05.02.5 Ræktun og veiði í ám og vötnum 05.03 Þjónusta við fiskveiðar 05.03 Service activities incidental to fishing 14 Nám og vinnsla annarra hráefna úr jörðu 14 Other mining and quarrying 14.1 Grjótnám 14.1 Quarrying of stone 14.11 Grjótnám til bygginga og mannvirkjagerðar 14.11 Quarrying of stone for construction 14.12 Kalksteins-, gifs- og krítarnám 14.12 Quarrying of limestone, gypsum and chalk 14.13 Flögubergsnám 14.13 Quarrying of slate 14.2 Malar-, sand- og leirnám 14.2 Quarrying of sand and clay 14.21 Malar- og sandnám; vikurnám 14.21 Operation of gravel and sand pits 14.22 Leirnám, þ.m.t. vinnsla postulínsleirs 14.22 Mining of clays and kaolin 14.3 Nám og vinnsla á steinefnum til efnaiðnaðar og 14.3 Mining of chemical and fertilizer minerals áburðargerðar 14.4 Saltvinnsla 14.4 Production of salt 14.5 Nám og vinnsla annarra ótalinna hráefna úr jörðu 14.5 Other mining and quarrying n.e.c. 15 Matvæla- og drykkjarvöruiðnaður 15 Manufacture of food products and beverages 15.1 Slátrun og kjötiðnaður 15.1 Production, processing and preserving of meat and meat products 15.11 Slátrun, vinnsla og geymsla kjöts, þó ekki alifuglakjöts 15.11 Production and preserving of meat 15.12 Slátrun, vinnsla og geymsla alifuglakjöts 15.12 Production and preserving of poultry meat 15.13 Kjötiðnaður 15.13 Production of meat and poultry meat products 15.2 Vinnsla sjávarafurða 15.2 Processing and preserving of fish and fish products 15.20 Fiskvinnsla 15.20 Processing and preserving of fish and fish products 15.20.1 Frysting fiskafurða 15.20.1 Processing of frozen marine products 15.20.2 Saltfiskverkun 15.20.2 Processing and preparation of salted fish products, except herring 15.20.3 Síldarsöltun 15.20.3 Processing and preparation of salted herring 15.20.4 Hersla 15.20.4 Processing and preparation of whole stockfish

15.20.5 Processing and preparation of dried fish fillets

15.20.7 Manufacture of fish meal and crude fish oils

15.20.8 Canning and preserving of marine products

15.20.6 Preparation of fresh marine products

15.20.5 Harðfiskverkun

15.20.6 Vinnsla á fersku sjávarfangi

15.20.8 Lagmetisiðja og framleiðsla sjávarrétta

15.20.7 Mjöl- og lýsisvinnsla

15.20.9 Önnur ótalin fiskvinnsla

15.22 Hvalvinnsla

## 15.3 Vinnsla ávaxta og grænmetis

15.31 Vinnsla á kartöflum

15.32 Framleiðsla ávaxta- og grænmetissafa

15.33 Önnur ótalin vinnsla ávaxta og grænmetis

#### 15.4 Framleiðsla jurta- og dýraolíu og feiti

15.41 Framleiðsla óhreinsaðrar olíu og feiti

15.42 Framleiðsla hreinsaðrar olíu og feiti

15.43 Framleiðsla smjörlíkis og svipaðrar feiti til manneldis

#### 15.5 Mjólkuriðnaður

15.51 Mjólkurbú og ostagerð

15.52 Ísgerð

## 15.6 Framleiðsla á kornvöru, mjölva og mjölvavöru

15.61 Framleiðsla á kornvöru

15.62 Framleiðsla á mjölva og mjölvavöru

#### 15.7 Fóðurframleiðsla

15.71 Fóðurframleiðsla

15.71.1 Framleiðsla húsdýrafóðurs

15.71.2 Framleiðsla fiskeldisfóðurs

15.71.3 Framleiðsla þörungamjöls

15.72 Framleiðsla gæludýrafóðurs

#### 15.8 Annar matvælaiðnaður

15.81 Brauðgerðir og bakarí

15.82 Kex- og kökuframleiðsla

15.83 Sykurframleiðsla

15.84 Súkkulaði- og sælgætisgerð; kakóframleiðsla

15.85 Framleiðsla á pastavörum og svipuðum vörum

15.86 Te- og kaffiframleiðsla

15.87 Krydd- og bragðefnaframleiðsla

15.88 Framleiðsla á jafnblönduðum matvælum, sjúkra- og sérfæði

15.89 Annar ótalinn matvælaiðnaður

## 15.9 Drykkjarvöruiðnaður

15.91 Framleiðsla eimaðra áfengra drykkja

15.92 Framleiðsla á hráum spíritus

15.93 Framleiðsla á léttu víni

15.94 Framleiðsla annarra ávaxtavína

15.95 Framleiðsla á vermút og svipuðum víntegundum

15.96 Bjórgerð

15.97 Maltgerð

15.98 Framleiðsla gosdrykkja og svipaðra drykkja

## 17 Textíliðnaður

17.1 Forvinnsla og spuni á textíltrefjum

17.2 Vefnaður

17.3 Frágangur á textílum

## 17.4 Framleiðsla á tilbúinni textílvöru annarri en fatnaði

17.40 Framleiðsla á tilbúinni textílvöru annarri en fatnaði

17.40.1 Seglagerðir

17.40.2 Framleiðsla textílvöru til heimilis- og innanhússnota

17.40.9 Önnur framleiðsla á tilbúinni textílvöru

## 17.5 Framleiðsla annarrar textílvöru

17.51 Framleiðsla á teppum og mottum

17.52 Framleiðsla á köðlum, garni og netum; veiðarfæragerð

15.20.9 Processing and preserving of fish and fish products n.e.c.

15.22 Processing and preserving of whale products

## 15.3 Processing and preserving of fruit and vegetables

15.31 Processing and preserving of potatoes

15.32 Manufacture of fruit and vegetable juice

15.33 Processing and preserving of fruit and vegetables n.e.c.

## 15.4 Manufacture of vegetable and animal oils and fats

15.41 Manufacture of crude oils and fats

15.42 Manufacture of refined oils and fats

15.43 Manufacture of margarine and similar edible fats

## 15.5 Manufacture of dairy products

15.51 Operation of dairies and cheese making

15.52 Manufacture of ice cream

# 15.6 Manufacture of grain mill products, starches and starch products

15.61 Manufacture of grain mill products

15.62 Manufacture of starches and starch products

## 15.7 Manufacture of prepared animal feeds

15.71 Manufacture of prepared feeds for farm animals and fish farming

15.71.1 Manufacture of prepared feeds for farm animals

15.71.2 Manufacture of prepared feeds for fish farming

15.71.3 Manufacture of algae meal

15.72 Manufacture of prepared pet foods

#### 15.8 Manufacture of other food products

15.81 Manufacture of bread; manufacture of fresh pastry goods and cakes

15.82 Manuf. of rusks and biscuits; manuf. of preserved pastry goods and cakes

15.83 Manufacture of sugar

15.84 Manufacture of cocoa; chocolate and sugar confectionery

15.85 Manufacture of macaroni, noodles, couscous and similar farinaceous products

15.86 Processing of tea and coffee

15.87 Manufacture of condiments and seasonings

15.88 Manufacture of homogenised food preparations and dietetic food

15.89 Manufacture of other food products n.e.c.

## 15.9 Manufacture of beverages

15.91 Manufacture of distilled potable alcoholic beverages

15.92 Production of ethyl alcohol from fermented materials

15.93 Manufacture of wines

15.94 Manufacture of cider and other fruit wines

15.95 Manufacture of other non-distilled fermented beverages

15.96 Manufacture of beer

15.97 Manufacture of malt

15.98 Production of mineral waters and soft drinks

## 17 Manufacture of textiles

## 17.1 Preparation and spinning of textile fibres

17.2 Textile weaving

17.3 Finishing of textiles

## 17.4 Manufacture of made-up textile articles, except apparel

17.40 Manufacture of made-up textile articles, except apparel

17.40.1 Manufacture of sails, tents, etc.

17.40.2 Manufacture of made-up household textile

17.40.9 Manufacture of other made-up textile articles, except apparel, n.e.c.

## 17.5 Manufacture of other textiles

17.51 Manufacture of carpets and rugs

17.52 Manufacture of cordage, rope, twine and netting

17.52.1 Framleiðsla á köðlum, garni og netum

17.52.2 Veiðarfæragerð

17.53 Framleiðsla á trefjadúk, ekki ofnum, og vörum úr honum, þó ekki fatnaði

17.54 Framleiðsla annarrar ótalinnar textílvöru

#### 17.6 Framleiðsla á hekl- og prjónvoð

## 17.7 Framleiðsla á prjónaðri og heklaðri vöru

17.71 Sokkaframleiðsla

17.72 Peysuframleiðsla

#### 18 Fataiðnaður; sútun og litun loðskinna

18.1 Framleiðsla á leðurfatnaði

# 18.2 Framleiðsla á fatnaði, þó ekki leðurfatnaði, og fylgihlutum

18.21 Framleiðsla á vinnufatnaði

18.22 Framleiðsla á yfirfatnaði, þó ekki vinnufatnaði

18.23 Framleiðsla á undirfatnaði

18.24 Framleiðsla á öðrum ótöldum fatnaði og fylgihlutum

## 18.3 Sútun og litun loðskinna; framleiðsla úr loðskinnum

#### 19 Leðuriðnaður

19.1 Sútun á leðri

19.2 Framleiðsla á ferðatöskum, handtöskum og skyldum vörum og reiðtygjum

19.3 Framleiðsla á skófatnaði

## 20 Trjáiðnaður

20.1 Sögun, heflun og fúavörn á viði

20.2 Framleiðsla á krossviði, spónarplötum o.þ.h.

#### 20.3 Framleiðsla úr byggingartimbri og smíðaviði ásamt öðrum efniviði

20.30 Framleiðsla úr byggingartimbri og smíðaviði ásamt öðrum efniviði

20.30.1 Framleiðsla einingahúsa og byggingareininga úr viði og öðrum efniviði

20.30.9 Framleiðsla annars efnis til húsasmíða úr viði og öðrum efniviði

## 20.4 Framleiðsla á umbúðum úr viði

## 20.5 Framleiðsla annarrar viðarvöru; framleiðsla vöru úr korki, hálmi og fléttiefnum

20.51 Framleiðsla annarrar viðarvöru

20.52 Framleiðsla vöru úr korki, hálmi og fléttiefnum

## 21 Pappírsiðnaður

## 21.1 Framleiðsla á pappírskvoðu, pappír og pappa

21.11 Framleiðsla á pappírskvoðu

21.12 Framleiðsla á pappír og pappa

## 21.2 Framleiðsla á pappírs- og pappavöru

21.21 Framleiðsla á bylgjupappa og umbúðum úr pappír og pappa

21.22 Framleiðsla vöru til heimilis- og hreinlætisnota úr pappír og pappa

21.23 Framleiðsla á skrifpappír og skrifstofuvörum úr pappír og pappa

21.24 Framleiðsla veggfóðurs

21.25 Framleiðsla annarrar pappírs- og pappavöru

## 22 Útgáfustarfsemi og prentiðnaður

## 22.1 Útgáfustarfsemi

22.11 Bókaútgáfa

- 17.52.1 Manufacture of cordage, rope, twine and netting, except fishing nets
- 17.52.2 Manufacture of fishing nets
- 17.53 Manufacture of nonwovens and articles made from nonwovens, exc. apparel
- 17.54 Manufacture of other textiles n.e.c.

#### 17.6 Manufacture of knitted and crocheted fabrics

## 17.7 Manufacture of knitted and crocheted articles

- 17.71 Manufacture of knitted and crocheted hosiery
- 17.72 Manufacture of knitted and crocheted pullovers, cardigans and similar articles

## 18 Manufacture of wearing apparel; dressing and dyeing of fur

18.1 Manufacture of leather clothes

#### 18.2 Manufacture of other wearing apparel and accessories

18.21 Manufacture of work wear

18.22 Manufacture of other outerwear

18.23 Manufacture of underwear

18.24 Manufacture of other wearing apparel and accessories n.e.c.

# 18.3 Dressing and dyeing of fur; manufacture of articles of fur

# 19 Tanning and dressing of leather; manufacture of luggage, handbags, saddlery, harness and footwear

19.1 Tanning and dressing of leather

19.2 Manufacture of luggage, handbags and the like, saddlery and harness

19.3 Manufacture of footwear

# 20 Manufacture. of wood and of products of wood and cork, except furniture

20.1 Sawmilling and planing of wood, impregnation of wood

20.2 Manufacture of veneer sheets; manufacture of plywood, laminboard, particle board, fibre board and other panels and boards

## 20.3 Manufacture of builders' carpentry and joinery

20.30 Manufacture of builders' carpentry and joinery

20.30.1 Manufacture of prefabricated buildings and elements thereof, of wood and other materials

20.30.9 Manufacture of builders carpentry and joinery n.e.c.

## 20.4 Manufacture of wooden containers

# 20.5 Manufacture of other products of wood, of articles of cork, straw etc.

20.51 Manufacture of other products of wood

20.52 Manufacture of articles of cork, straw and plaiting materials

## 21 Manufacture of pulp, paper and paper products

## 21.1 Manufacture of pulp, paper and paperboard

21.11 Manufacture of pulp

21.12 Manufacture of paper and paperboard

## 21.2 Manufacture of articles of paper and paperboard

- 21.21 Manufacture of articles and containers of paper and paperboard
- 21.22 Manufacture of household and sanitary goods and of toilet requisites
- 21.23 Manufacture of paper stationery
- 21.24 Manufacture of wallpaper
- 21.25 Manufacture of other articles of paper and paperboard n.e.c.

# 22 Publishing, printing and reproduction of recorded media 22.1 Publishing

22.11 Publishing of books

- 22.11.1 Bókaútgáfa með starfrækslu eigin prentsmiðju
- 22.11.2 Bókaútgáfa án starfrækslu eigin prentsmiðju
- 22.12 Dagblaðaútgáfa
  - 22.12.1 Dagblaðaútgáfa með starfrækslu eigin prentsmiðju
  - 22.12.2 Dagblaðaútgáfa án starfrækslu eigin prentsmiðju
- 22.13 Tímaritaútgáfa
- 22.14 Útgáfa á hljóðrituðu efni
- 22.15 Önnur útgáfustarfsemi

## 22.2 Prentiðnaður og tengd starfsemi

- 22.21 Prentun dagblaða
- 22.22 Önnur prentun
  - 22.22.1 Offsett- og hæðarprentun
  - 22.22.2 Sáldprentun
  - 22.22.9 Önnur ótalin prentun
- 22.23 Bókband og frágangur prentaðs máls
- 22.24 Prentsmíð
- 22.25 Önnur starfsemi tengd prentiðnaði

## 22.3 Fjölföldun upptekins efnis

- 22.31 Fjölföldun hljóðritaðs efnis
- 22.32 Fjölföldun myndefnis
- 22.33 Fjölföldun tölvuefnis

#### 24 Efnaiðnaður

## 24.1 Framleiðsla á grunnefnum til efnaiðnaðar

- 24.11 Framleiðsla á iðnaðargasi
- 24.12 Framleiðsla á lit og litarefnum
- 24.13 Framleiðsla á öðrum ólífrænum grunnefnum til efnaiðnaðar
- 24.14 Framleiðsla á öðrum lífrænum grunnefnum til efnaiðnaðar
- 24.15 Framleiðsla á tilbúnum áburði o.fl.
- 24.16 Framleiðsla á plasthráefnum
- 24.17 Framleiðsla á gervigúmmíi til úrvinnslu

# 24.2 Framleiðsla á skordýra- og illgresiseyði og öðrum efnum til nota í landbúnaði

## 24.3 Framleiðsla á málningu, þekju-, fylli- og þéttiefnum

## 24.4 Framleiðsla á lyfjum og hráefnum til lyfjagerðar

- 24.41 Framleiðsla á hráefnum til lyfjagerðar
- 24.42 Lyfjagerð

# 24.5 Framleiðsla á sápu, hreingerningar- og fægiefnum, ilmvatni og snyrtivöru

- 24.51 Framleiðsla á sápu, hreinsi- og þvottaefnum, hreingerningar- og fægiefnum
- 24.52 Ilmvatns- og snyrtivöruframleiðsla

## 24.6 Annar efnaiðnaður

- 24.61 Framleiðsla á sprengiefnum
- 24.62 Límframleiðsla
- 24.63 Framleiðsla á rokgjörnum olíum
- 24.64Framleiðsla á efnum til ljósmyndagerðar
- 24.65 Framleiðsla á hljóð- og myndböndum, seguldiskum og segulböndum fyrir tölvur
- 24.66 Annar ótalinn efnaiðnaður

## 24.7 Framleiðsla gerviþráðar

## 25 Gúmmí- og plastvöruframleiðsla

## 25.1 Gúmmívöruframleiðsla

- 25.11 Framleiðsla á gúmmíhjólbörðum og hjólbarðaslöngum
- 25.12 Sólun notaðra hjólbarða
- 25.13 Önnur gúmmívöruframleiðsla

## 25.2 Plastvöruframleiðsla

- 22.11.1 Publishing of books and operation of own print shop
- 22.11.2 Publishing of books without operation of own print shop
- 22.12 Publishing of newspapers
  - 22.12.1 Publishing of newspapers and operation of own print shop
  - 22.12.2 Publishing of newspapers without operation of own print shop
- 22.13 Publishing of journals and periodicals
- 22.14 Publishing of sound recordings
- 22.15 Other publishing

## 22.2 Printing and service activities related to printing

- 22.21 Printing of newspapers
- 22.22 Printing n.e.c.
  - 22.22.1 Offset printing
  - 22.22.2 Silk screen printing
  - 22.22.9 Other printing n.e.c.
- 22.23 Bookbinding and finishing
- 22.24 Composition and plate-making
- 22.25 Other activities related to printing

## 22.3 Reproduction of recorded media

- 22.31 Reproduction of sound recording
- 22.32 Reproduction of video recording
- 22.33 Reproduction of computer media

## 24 Manufacture of chemicals and chemical products

## 24.1 Manufacture of basic chemicals

- 24.11 Manufacture of industrial gases
- 24.12 Manufacture of dyes and pigments
- 24.13 Manufacture of other inorganic basic chemicals
- 24.14 Manufacture of other organic basic chemicals
- 24.15 Manufacture of fertilizers and nitrogen compounds
- 24.16 Manufacture of plastics in primary forms
- 24.17 Manufacture of synthetic rubber in primary forms

# 24.2 Manufacture of pesticides and other agro-chemical products

# 24.3 Manufacture of paints, varnishes and similar coatings, printing ink and mastics

# 24.4 Manufacture of pharmaceuticals, medicinal chemicals and botanical products

- 24.41 Manufacture of basic pharmaceutical products
- 24.42 Manufacture of pharmaceutical preparations

# 24.5 Manufacture of soap and detergents, cleaning and polishing preparations, perfumes

- 24.51 Manufacture of soap and detergents, cleaning and polishing preparations
- 24.52 Manufacture of perfumes and toilet preparations

## 24.6 Manufacture of other chemical products

- 24.61 Manufacture of explosives
- 24.62 Manufacture of glues and gelatines
- 24.63 Manufacture of essential oils
- 24.64 Manufacture of photographic chemical material
- 24.65 Manufacture of prepared unrecorded media
- 24.66 Manufacture of other chemical products n.e.c.

## 24.7 Manufacture of man-made fibres

## 25 Manufacture of rubber and plastic products

## ${\bf 25.1\ Manufacture\ of\ rubber\ products}$

- 25.11 Manufacture of rubber tyres and tubes
- 25.12 Retreading and rebuilding of rubber tyres 25.13 Manufacture of other rubber products
- 25.2 Manufacture of plastic products

- 25.21 Framleiðsla á plötum, rörum o.b.h. úr plastefnum
- 25.22 Framleiðsla á umbúðaplasti
- 25.23 Framleiðsla á byggingarvörum úr plasti
- 25.24 Önnur plastvöruframleiðsla
- 25.24.1 Framleiðsla á plastvörum til nota í sjávarútvegi
- 25.24.9 Önnur ótalin plastvöruframleiðsla

## 26 Gler-, leir- og steinefnaiðnaður

## 26.1 Gleriðnaður

- 26.11 Framleiðsla á glerplötum
- 26.12 Skurður og vinnsla á glerplötum og rúðugleri
- 26.13 Framleiðsla gleríláta
- 26.14 Glerullarframleiðsla
- 26.15 Annar gleriðnaður

## 26.2 Framleiðsla á leirvöru til annarra nota en bygginga

- 26.21 Framleiðsla á nytjaleirmunum og skrautmunum
- 26.22 Framleiðsla á hreinlætistækjum úr leir og postulíni
- 26.23 Framleiðsla á einangrurum og einangrunarefni úr postulíni
- 26.24 Framleiðsla annarrar leirvöru til tæknilegra nota
- 26.25 Önnur leirmuna- og postulínsgerð
- 26.26 Framleiðsla eldfastrar leirvöru

## 26.3 Framleiðsla á flísum og hellum úr leir og postulíni 26.4 Framleiðsla á byggingarvörum úr brenndum leir

## 26.5 Framleiðsla á sementi, kalki og gifsi

- 26.51 Sementsframleiðsla
- 26.52 Kalkframleiðsla
- 26.53 Gifsframleiðsla

## 26.6 Framleiðsla á vörum úr steinsteypu, sementi og gifsi

- 26.61 Framleiðsla á byggingarefni úr steinsteypu
- 26.62 Framleiðsla á bygggingarefni úr gifsi
- 26.63 Framleiðsla tilbúinnar steinsteypu
- 26.64 Framleiðsla steinlíms
- 26.65 Framleiðsla á vörum úr trefjasementi
- 26.66 Framleiðsla annarrar vöru úr steinsteypu, sementi og

## 26.7 Steinsmíði

## 26.8 Annar steinefnaiðnaður, þó ekki málmiðnaður

- 26.81 Framleiðsla slípisteina og slípiefna
- 26.82 Steinullarframleiðsla, þakpappa-, malbiksframleiðsla o.fl.
- 26.82.1 Steinullarframleiðsla
- 26.82.2 Þakpappaframleiðsla
- 26.82.9 Annar ótalinn steinefnaiðnaður, þó ekki málmiðnaður

## 25.21 Manufacture of plastic plates, sheets, tubes and profiles

- 25.22 Manufacture of plastic packing goods
- 25.23 Manufacture of builders' ware of plastic
- 25.24 Manufacture of other plastic products
- 25.24.1 Manufacture of plastic products for the fisheries
- 25.24.9 Manufacture of other plastic products n.e.c.

## 26 Manufacture of other non-metallic mineral products

## 26.1 Manufacture of glass and glass products

- 26.11 Manufacture of flat glass
- 26.12 Shaping and processing of flat glass
- 26.13 Manufacture of hollow glass
- 26.14 Manufacture of glass fibres
- 26.15 Manufacture and processing of other glass including technical glassware

## 26.2 Manufacture of ceramic goods, other than for construction purposes

- 26.21 Manufacture of ceramic household and ornamental articles
- 26.22 Manufacture of ceramic sanitary fixtures
- 26.23 Manufacture of ceramic insulators and insulation
- 26.24 Manufacture of other technical ceramic products
- 26.25 Manufacture of other ceramic products
- 26.26 Manufacture of refractory ceramic products

## 26.3 Manufacture of ceramic tiles and flags

## 26.4 Manufacture of bricks, tiles and construction products, in baked clay

## 26.5 Manufacture of cement, lime and plaster

- 26.51 Manufacture of cement
- 26.52 Manufacture of lime
- 26.53 Manufacture of plaster

## 26.6 Manufacture of articles of concrete, plaster and cement

- 26.61 Manufacture of concrete products for construction purposes
- 26.62 Manufacture of plaster products for construction purposes
- 26.63 Manufacture for ready-mixed concrete
- 26.64 Manufacture of mortars
- 26.65 Manufacture of fibre cement
- 26.66 Manufacture of other articles of concrete, plaster and

## 26.7 Cutting, shaping and finishing of stone

## 26.8 Manufacture of other non-metallic mineral products

- 26.81 Production of abrasive products
- 26.82 Manufacture of other non-metallic mineral products n.e.c.
- 26.82.1 Manufacture of rock wool
- 26.82.2 Manufacture of roofing paper
- 26.82.9 Manufacture of other non-metallic mineral products

## 27 Manufacture of basic metals

#### 27.1 Manufacture of basic iron and steel and of ferro-alloys (ECSC)

## 27.2 Manufacture of tubes

- 27.21 Manufacture of cast iron tubes
- 27.22 Manufacture of steel tubes

## 27.3 Other first processing of iron and steel and production of non-ECSC ferro-alloys

- 27.31 Cold drawing
- 27.32 Cold rolling of narrow strips
- 27.33 Cold forming or folding
- 27.34 Wire drawing
- 27.35 Other first processing of iron and steel n.e.c.; production of non-ECSC ferro-alloys

## 27 Framleiðsla málma

## 27.1 Járn- og stálframleiðsla; framleiðsla spegiljárns

## 27.2 Röraframleiðsla

- 27.21 Framleiðsla steypujárns- og steypustálsröra
- 27.22 Framleiðsla járn- og stálröra

## 27.3 Önnur frumvinnsla á járni og stáli og framleiðsla járnblendis, þó ekki spegiljárns

- 27.31 Kalddráttur
- 27.32 Kaldvölsun flatjárns og flatstáls
- 27.33 Kaldmótun
- 27.34 Vírdráttur
- 27.35 Önnur ótalin frumvinnsla á járni og stáli; framleiðsla járnblendis, þó ekki spegiljárns

# 27.4 Frumvinnsla góðmálma og framleiðsla málma sem ekki innihalda járn

- 27.41 Framleiðsla góðmálma
- 27.42 Álframleiðsla
- 27.43 Blý-, sink- og tinframleiðsla
- 27.44 Koparframleiðsla
- 27.45 Framleiðsla annarra málma sem ekki innihalda járn

#### 27.5 Málmsteypa

- 27.51 Járnsteypa
- 27.52 Stálsteypa
- 27.53 Málmsteypa úr léttmálmum
- 27.54 Önnur málmsteypa

## 28 Málmsmíði og viðgerðir

## 28.1 Framleiðsla og viðgerðir á byggingarefni úr málmum

- 28.11 Framleiðsla og viðgerðir á burðarvirkjum og byggingareiningum úr málmi
- 28.12 Framleiðsla og viðgerðir á byggingarvöru úr málmum

## 28.2 Framleiðsla og viðgerðir geyma, kera og íláta úr málmum; framleiðsla miðstöðvarofna og -katla

- 28.21 Framleiðsla og viðgerðir geyma, kera og íláta úr málmum
- 28.22 Framleiðsla og viðgerðir miðstöðvarofna og miðstöðvarkatla

#### 28.3 Framleiðsla og viðgerðir á gufukötlum, þó ekki miðstöðvarkötlum

## 28.4 Eldsmíði, önnur málmsmíði og viðgerðir; sindurmótun

## 28.5 Meðferð og húðun málma; almenn vélsmiðjuþjónusta

- 28.51 Meðferð og húðun málma
- 28.52 Almenn málmsmiðjuþjónusta og blikksmíði

# 28.6 Framleiðsla og viðgerðir á hnífum, verkfærum og ýmis konar járnvöru

- 28.61 Framleiðsla og viðgerðir á hnífum, verkfærum og ýmis konar járnvöru
- 28.62 Framleiðsla og viðgerðir á verkfærum
- 28.63 Framleiðsla á lásum og lömum

## 28.7 Önnur málmsmíði og viðgerðir

- 28.71 Framleiðsla og viðgerðir á stáltunnum og svipuðum ílátum
- 28.72 Framleiðsla á umbúðum úr léttmálmum
- 28.73 Framleiðsla á vörum úr vír
- 28.74 Framleiðsla á boltum, skrúfum, keðjum og fjöðrum
- 28.75 Önnur ótalin málmsmíði og viðgerðir

## 29 Vélsmíði og vélaviðgerðir

# 29.1 Framleiðsla og viðgerðir hreyfla og hreyfilhluta, þó ekki í loftför, bíla og vélhjól

- 29.11 Framleiðsla og viðgerðir hreyfla og hverfla, þó ekki í loftför, bíla og vélhjól
- 29.12Framleiðsla og viðgerðir á dælum og þjöppum
- 29.13 Framleiðsla og viðgerðir á krönum og lokum
- 29.14 Framleiðsla og viðgerðir á legum, tannhjólum, drifum og drifbúnaði

## 29.2 Framleiðsla og viðhald véla til almennra nota

- 29.21 Framleiðsla og viðhald á bræðsluofnum og brennurum
- 29.22 Framleiðsla og viðhald á lyftitækjum, spilum og öðrum færslubúnaði
- 29.23 Framleiðsla og viðhald á kæli- og loftræstitækjum til annarra nota en heimilisnota
- 29.24 Framleiðsla og viðhald annarra véla til almennra nota

## 29.3 Framleiðsla og viðhald dráttarvéla og annarra véla til nota í landbúnaði og skógrækt

29.31 Dráttarvélasmíði og viðhald

## 27.4 Manufacture of basic precious and non-ferrous metals

- 27.41 Precious metals production
- 27.42 Aluminium production
- 27.43 Lead, zinc and tin production
- 27.44 Copper production
- 27.45 Other non-ferrous metal production

#### 27.5 Casting of metals

- 27.51 Casting of iron
- 27.52 Casting of steel
- 27.53 Casting of light metals
- 27.54 Casting of other non-ferrous metals

# 28 Manufacture of fabricated metal products, except machinery and equipment

## 28.1 Manufacture of structural metal products

- 28.11 Manufacture of metal structures and parts of structures
- 28.12 Manufacture of builders' carpentry and joinery of metal

# 28.2 Manufacture of tanks and containers of metal; manufacture of central heating radiators

- 28.21 Manufacture of tanks, reservoirs and containers of metal
- 28.22 Manufacture of central heating radiators and boilers

# 28.3 Manufacture of steam generators, except central heating hot water boilers

# 28.4 Forging, pressing, stamping and roll forming of metal; powder metallurgy

# 28.5 Treatment and coating of metals; general mechanical engineering

- 28.51 Treatment and coating of metal
- 28.52 General mechanical engineering

## ${\bf 28.6\ Manufacture\ of\ cutlery,\ tools\ and\ general\ hardware}$

- 28.61 Manufacture of cutlery
- 28.62 Manufacture of tools
- 28.63 Manufacture of locks and hinges

## 28.7 Manufacture of other fabricated metal products

- 28.71 Manufacture of steel drums and similar containers
- 28.72 Manufacture of light metal packaging
- 28.73 Manufacture of wire products
- 28.74 Manufacture of fasteners, screw machine products, chain and springs
- 28.75 Manufacture of other fabricated metal products, n.e.c.

## 29 Manufacture of machinery and equipment n.e.c.

# 29.1 Manufacture of machinery for the production and use of mechanical power, except aircraft, vehicle and cycle engines

- 29.11 Manufacture of engines and turbines, except aircraft, vehicle and cycle engines
- 29.12 Manufacture of pumps and compressors
- 29.13 Manufacture of taps and valves
- 29.14 Manufacture of bearings, gears, gearing and driving elements

## 29.2 Manufacture of other general purpose machinery

- 29.21 Manufacture of furnaces and furnace burners
- 29.22 Manufacture of lifting and handling equipment
- 29.23 Manufacture of non-domestic cooling and ventilation equipment
- 29.24 Manufacture of other general purpose machinery n.e.c.

## 29.3 Manufacture of agricultural and forestry machinery

29.31 Manufacture of agricultural tractors

29.32 Framleiðsla og viðhald annarra véla til nota í landbúnaði og skógrækt

#### 29.4 Framleiðsla smíðavéla og viðhald

## 29.5 Framleiðsla og viðhald annarra sérhæfðra véla

- 29.51 Framleiðsla og viðhald véla til málmvinnslu
- 29.52 Framleiðsla og viðhald véla til námuvinnslu, sementsframleiðslu, mannvirkjagerðar o.fl.
- 29.53 Framleiðsla og viðhald véla fyrir fiskiðnað og annan matvælaiðnað, drykkjarvöru- og tóbaksiðnað
  - 29.53.1 Framleiðsla og viðhald vélvirkra véla fyrir fiskiðnað og annan matvælaiðnað
  - 29.53.2 Framleiðsla og viðhald tölvustýrðra véla fyrir fiskiðnað og annan matvælaiðnað
  - 29.53.9 Framleiðsla og viðhald véla fyrir drykkjarvöruog tóbaksiðnað
- 29.54 Framleiðsla og viðhald véla fyrir textíl-, fata- og leðuriðnað
- 29.55 Framleiðsla og viðhald véla fyrir pappírsiðnað
- 29.56 Framleiðsla og viðhald annarra ótalinna sérhæfðra véla

#### 29.6 Vopna- og skotfæraframleiðsla

#### 29.7 Framleiðsla annarra ótalinna heimilistækja

- 29.71 Framleiðsla rafmagnstækja til heimilisnota
- 29.72 Framleiðsla heimilistækja, þó ekki rafmagnstækja

## 30 Framleiðsla á skrifstofuvélum og tölvum

## 30.0 Framleiðsla á skrifstofuvélum og tölvum

- 30.01 Framleiðsla á skrifstofuvélum
- 30.02 Framleiðsla á tölvum og öðrum gagnavinnsluvélum

29.32 Manufacture of other agricultural and forestry machinery

#### 29.4 Manufacture of machine-tools

#### 29.5 Manufacture of other special purpose machinery

- 29.51 Manufacture of machinery for metallurgy
- 29.52 Manufacture of machinery for mining, quarrying and construction
- 29.53 Manufacture of machinery for food, beverage and tobacco processing
  - 29.53.1 Manufacture of machinery for fish processing and other food processing
  - 29.53.2 Manufacture of electronic machinery for fish processing and other food processing
  - 29.53.9 Manufacture of machinery for beverage and tobacco processing
- 29.54 Manufacture of machinery for textile, apparel and leather production
- 29.55 Manufacture of machinery for paper and paperboard production
- 29.56 Manufacture of other special purpose machinery n.e.c.

#### 29.6 Manufacture of weapons and ammunition

#### 29.7 Manufacture of domestic appliances n.e.c.

- 29.71 Manufacture of electric domestic appliances
- 29.72 Manufacture of non-electric domestic appliances

## 30 Manufacture of office machinery and computers

- **30.0 Manufacture of office machinery and computers** 30.01 Manufacture of office machinery
  - 30.02 Manufacture of computers and other information processing equipment

# 31 Framleiðsla og viðgerðir annarra ótalinna rafmagnsvéla og - 31 Manufacture of electrical machinery and apparatus n.e.c. tækja

- 31.1 Framleiðsla og viðgerðir rafhreyfla, rafala og spennubreyta
- 31.2 Framleiðsla og viðhald á búnaði fyrir dreifingu og stjórnkerfi raforku
- 31.3 Framleiðsla á einangruðum vírum og strengjum
- 31.4 Framleiðsla og viðgerðir á rafgeymum og rafhlöðum
- 31.5 Framleiðsla og viðgerðir á ljósabúnaði og lömpum
- 31.6 Framleiðsla og viðgerðir raftækja í hreyfla og ökutæki auk annarra ótalinna raftækja
  - 31.61 Framleiðsla og viðgerðir raftækja í hreyfla og ökutæki
  - 31.62 Framleiðsla og viðgerðir annarra ótalinna raftækja

## 32 Framleiðsla og viðgerðir fjarskiptabúnaðar og -tækja

- 32.1 Framleiðsla og viðgerðir á rafeindalömpum og öðrum íhlutum rafeindatækja
- 32.2 Framleiðsla og viðgerðir útvarps- og sjónvarpssenda og tækja fyrir símtækni og símritun
- 32.3 Framleiðsla sjónvarps- og útvarpstækja, hátalara, loftneta og skyldrar vöru
- 33 Framleiðsla og viðhald á lækningatækjum, mæli- og rannsóknartækjum, úrum o.fl.
  - 33.1 Framleiðsla og viðhald á lækninga- og skurðlækningatækjum og hjálpartækjum
  - 33.2 Framleiðsla og viðhald á leiðsögutækjum og búnaði til mælinga, eftirlits og prófana
  - 33.3 Framleiðsla og viðhald á stjórnbúnaði fyrir iðnaðarframleiðslu
  - 33.4 Framleiðsla á sjóntækjum, ljósmyndavélum o.þ.h.
  - 33.5 Úr- og klukkusmíði
- 34 Framleiðsla vélknúinna ökutækja annarra en vélhjóla 34.1 Bílaverksmiðjur

- 31.1 Manufacture of electric motors, generators and transformers
- 31.2 Manufacture of electricity distribution and control apparatus
- 31.3 Manufacture of insulated wire and cable
- 31.4 Manufacture of accumulators, primary cells and primary batteries
- 31.5 Manufacture of lighting equipment and electric lamps
- 31.6 Manufacture of electrical equipment n.e.c.
  - 31.61 Manufacture of electrical equipment for engines and vehicles n.e.c.
  - 31.62 Manufacture of other electrical equipment n.e.c.

# 32 Manufacture of radio, television and communication equipment and apparatus

- 32.1 Manufacture of electronic valves and tubes and other electronic components
- 32.2 Manufacture of television and radio transmitters, apparatus for line telephony and line telegraphy
- 32.3 Manufacture of television and radio receivers, sound or video recording or reproducing apparatus
- 33 Manufacture of medical, precision and optical instruments, watches and clocks
  - 33.1 Manufacture of medical and surgical equipment and orthopaedic appliances
  - 33.2 Manufacture of instruments for measuring, checking, testing, navigating and other purposes
  - 33.3 Manufacture of industrial process control equipment
  - 33.4 Manufacture of optical instruments and photographic equipment
  - 33.5 Manufacture of watches and clocks
- 34 Manufacture of motor vehicles, trailers and semi-trailers 34.1 Manufacture of motor vehicles

## 34.2 Smíði yfirbygginga og framleiðsla tengi- og aftanívagna

## 34.3 Framleiðsla á íhlutum og aukahlutum í bíla

#### 35 Framleiðsla annarra farartækja

#### 35.1 Skipa- og bátasmíði

- 35.11 Skipasmíði og skipaviðgerðir
- 35.12 Smíði og viðgerðir skemmti- og sportbáta

#### 35.2 Smíði og viðgerðir járnbrautar- og sporvagna

## 35.3 Smíði og viðgerðir loftfara og geimfara

## 35.4 Framleiðsla bif- og reiðhjóla

- 35.41 Framleiðsla bifhjóla
- 35.42 Framleiðsla reiðhjóla
- 35.43 Framleiðsla og viðgerðir farartækja fyrir fatlaða

#### 35.5 Framleiðsla og viðgerðir annarra ótalinna farartækja

## 36 Húsgagnaiðnaður, skartgripa-, hljóðfærasmíði, sportvörugerð, leikfangagerð og annar iðnaður

## 36.1 Húsgagnaiðnaður

- 36.11 Sófa- og stólaframleiðsla; bólstrun
- 36.12 Framleiðsla á skrifstofu- og verslunarhúsgögnum, þó ekki stólum
- 36.13 Innréttingasmíði
- 36.14 Annar húsgagnaiðnaður og húsgagnaviðgerðir
- 36.15 Dýnuframleiðsla

## 36.2 Skartgripasmíði og skyld framleiðsla

- 36.21 Myntslátta
- 36.22 Skartgripasmíði og önnur ótalin gull- og silfursmíði
- 36.3 Hljóðfærasmíði
- 36.4 Sportvörugerð
- 36.5 Leikfangagerð

## 36.6 Margs konar ótalinn iðnaður

- 36.61 Framleiðsla óekta skartgripa
- 36.62 Burstagerð
- 36.63 Annar ótalinn iðnaður

## 37 Endurvinnsla

- 37.1 Endurvinnsla málma og brotajárns
- 37.2 Endurvinnsla á öðru en málmum

## 40 Rafmagns-, gas- og hitaveitur

- 40.1 Rafmagnsveitur
- 40.2 Gasveitur

## 40.3 Hitaveitur

## 41 Vatnsveitur

41.0 Vatnsveitur

## 45 Byggingarstarfsemi og mannvirkjagerð

## 45.1 Undirbúningsvinna á byggingarstað

- 45.11 Niðurrif bygginga og jarðvegsvinna
- 45.12 Boranir vegna bygginga og mannvirkja

## 45.2 Húsbyggingar og önnur mannvirkjagerð

## 45.3 Lagnavinna

- 45.31 Raf- og boðlagnir; starfsemi rafverktaka
- 45.32 Einangrun
- 45.33 Pípulagnir

## 45.4 Frágangur bygginga

- 45.41 Múrverk
- 45.42 Húsasmíði og uppsetning innréttinga
- 45.43 Lagning gólf- og veggefna, þó ekki úr viði
- 45.44 Málningarvinna og glerjun
- 45.44.1 Málningarvinna

- 34.2 Manufacture of bodies (coachwork) for motor vehicles; manufacture of trailers and semi-trailers
- 34.3 Manufacture of parts and accessories for motor vehicles and their engines

#### 35 Manufacture of other transport equipment

#### 35.1 Building and repairing of ships and boats

- 35.11 Building and repairing of ships
- 35.12 Building and repairing of pleasure and sporting boats

# 35.2 Manufacture of railway and tramway locomotives and rolling stock

35.3 Manufacture of aircraft and spacecraft

## 35.4 Manufacture of motorcycles and bicycles

- 35.41 Manufacture of motorcycles
- 35.42 Manufacture of bicycles
- 35.43 Manufacture of invalid carriages

## 35.5 Manufacture of other transport equipment n.e.c.

## 36 Manufacture of furniture; manufacturing n.e.c.

#### 36.1 Manufacture of furniture

- 36.11 Manufacture of chairs and seats
- 36.12 Manufacture of other office and shop furniture
- 36.13 Manufacture of other kitchen furniture
- 36.14 Manufacture of other furniture
- 36.15 Manufacture of mattresses

## 36.2 Manufacture of jewellery and related articles

- 36.21 Striking of coins and medals
- 36.22 Manufacture of jewellery and related articles n.e.c.

## 36.3 Manufacture of musical instruments

- 36.4 Manufacture of sports goods
- 36.5 Manufacture of games and toys

## 36.6 Miscellaneous manufacturing n.e.c.

- 36.61 Manufacture of imitation jewellery
- 36.62 Manufacture of brooms and brushes
- 36.63 Other manufacturing n.e.c.

## 37 Recycling

- 37.1 Recycling of metal waste and scrap
- 37.2 Recycling of non-metal waste and scrap

## 40 Electricity, gas steam and hot water supply

- 40.1 Production and distribution of electricity
- 40.2 Manufacture of gas; distribution of gaseous fuels through mains
- 40.3 Steam and hot water supply

## 41 Collection, purification and distribution of water

41.0 Collection, purification and distribution of water

## 45 Construction

## 45.1 Site preparation

- 45.11 Demolition and wrecking of buildings; earth moving
- 45.12 Test drilling and boring

# 45.2 Building of complete constructions or parts thereof; civil engineering

## 45.3 Building installation

- 45.31 Installation of electrical wiring and fittings, illumination and signalling systems
- 45.32 Insulation work activities
- 45.33 Plumbing

## 45.4 Building completion

- 45.41 Plastering
- 45.42 Joinery installation
- 45.43 Floor and wall covering
- 45.44 Painting and glazing
- 45.44.1 Painting

- 45.44.2 Glerjun
- 45.45 Annar frágangur bygginga
- 45.49 Annar frágangur bygginga

## 45.5 Leiga á vinnuvélum með stjórnanda

## 50 Sala, viðhald og viðgerðir á bílum o.fl.; bensínstöðvar

#### 50.1 Bílasala

- 50.10 Bílasala
  - 50.10.1 Bílasala með nýja bíla
  - 50.10.2 Bílasala með notaða bíla
- 50.2 Bílaviðgerðir og viðhald; hjólbarðaviðgerðir
- 50.3 Sala vara- og fylgihluta í bíla
- 50.4 Sala, viðhald og viðgerðir vélhjóla og torfærutækja, auka- og varahluta í þau
- 50.5 Bensínstöðvar

## 51 Umboðs- og heildverslun með annað en bíla og vélhjól

## 51.1 Umboðsverslun gegn þóknun eða skv. samningi

- 51.11 Umboðsverslun með hráefni úr landbúnaði, lífdýr, hráefni til vefjariðnaðar og hálfunna vöru
- 51.12 Umboðsverslun með eldsneyti, málmgrýti, málma og efnavöru
- 51.13 Umboðsverslun með timbur og byggingarefni
- 51.14 Umboðsverslun með vélar og vélbúnað, iðnaðarvélar, skip og loftför
- 51.15 Umboðsverslun með húsgögn, heimilisbúnað, járnvöru og verkfæri
- 51.16 Umboðsverslun með vefnaðarvöru, fatnað, skófatnað og leðurvöru
- 51.17 Umboðsverslun með matvöru, drykkjarvöru og tóbak
  - 51.17.1 Umboðsverslun með fisk og fiskafurðir
  - 51.17.2 Fiskmarkaðir
  - 51.17.9 Umboðsverslun með aðra matvöru en fisk, drykkjarvöru og tóbak
- 51.18 Umboðsverslun með aðra tiltekna vöru og vöruflokka
- 51.19 Umboðsverslun með margs konar vöru

## 51.2 Heildverslun með hráefni úr landbúnaði og lífdýr

- 51.21 Heildverslun með korn, fræ og dýrafóður
- 51.22 Heildverslun með blóm og plöntur
- 51.23 Heildverslun með lífdýr
- 51.24 Heildverslun með húðir, skinn og leður
- 51.25 Heildverslun með óunnið tóbak

## 51.3 Heildverslun með matvæli, drykkjarvöru og tóbak

- 51.31 Heildverslun með ávexti og grænmeti
- 51.32 Heildverslun með kjöt og kjötvöru
- 51.33 Heildverslun með mjólkurafurðir, egg, olíu til manneldis og feiti
- 51.34 Heildverslun með áfengi og aðra drykkjarvöru
- 51.35 Heildverslun með tóbaksvöru
- 51.36 Heildverslun með sykur, súkkulaði og sælgæti
- 51.37 Heildverslun með kaffi, te, kakó og krydd
- 51.38 Heildverslun með fisk og fiskafurðir
- 51.39 Heildverslun með önnur matvæli, drykkjarvöru og tóbak

## 51.4 Heildverslun með fatnað og varning til heimilisnota

- 51.41 Heildverslun með vefnaðarvöru
- 51.42 Heildverslun með fatnað og skófatnað
  - 51.42.1 Heildverslun með fatnað
  - 51.42.2 Heildverslun með skófatnað

- 45.44.2 Glazing
- 45.45 Other building completion
- 45.49 Own-account construction

# ${\bf 45.5} \ Renting \ of \ construction \ or \ demolition \ equipment \ with \\ operator$

# 50 Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of automotive fuel

#### 50.1 Sale of motor vehicles

- 50.10 Sale of motor vehicles
  - 50.10.1 Sale of new motor vehicles
  - 50.10.2 Sale of second hand motor vehicles

## 50.2 Maintenance and repair of motor vehicles

- 50.3 Sale of motor vehicle parts and accessories
- 50.4 Sale, maintenance and repair of motorcycles and related parts and accessories
- 50.5 Retail sale of automotive fuel

# 51 Wholesale trade and commission trade, except of motor vehicles and motorcycles

#### 51.1 Wholesale on a fee or contract basis

- 51.11 Agents involved in the sale of agricultural raw materials, live animals, textile raw materials
- 51.12 Agents involved in the sale of fuels, ores, metals and industrial chemicals
- 51.13 Agents involved in the sale of timber and building materials
- 51.14 Agents involved in the sale of machinery, industrial equipment, ships and aircraft
- 51.15 Agents involved in the sale of furniture, household goods, hardware and ironmongery
- 51.16 Agents involved in the sale of textiles, clothing, footwear and leather goods
- 51.17 Agents involved in the sale of food, beverages and tobacco
  - 51.17.1 Agents involved in the sale of marine products
  - 51.17.2 Fish markets
  - 51.17.9 Agents involved in the sale of food, beverages and tobacco, excl. marine products
- 51.18 Agents specializing in the sale of particular products or ranges of products n.e.c.
- 51.19 Agents involved in the sale of a variety of goods

## 51.2 Wholesale of agricultural raw materials and live animals

- 51.21 Wholesale of grain, seeds and animals feeds
- 51.22 Wholesale of flowers and plants
- 51.23 Wholesale of live animals
- 51.24 Wholesale of hides, skins and leather
- 51.25 Wholesale of unmanufactured tobacco

## 51.3 Wholesale of food, beverages and tobacco

- 51.31 Wholesale of fruit and vegetables
- 51.32 Wholesale of meat and meat products
- 51.33 Wholesale of dairy produce, eggs and edible oils and
- 51.34 Wholesale of alcoholic and other beverages
- 51.35 Wholesale of tobacco products
- 51.36 Wholesale of sugar and chocolate and sugar confectionery
- 51.37 Wholesale of coffee, tea, cocoa and spices
- 51.38 Wholesale of other food including fish, crustaceans and molluscs
- 51.39 Non-specialized wholesale of food, beverages and tobacco

## 51.4 Wholesale of household goods

- 51.41 Wholesale of textiles
- 51.42 Wholesale of clothing and footwear
  - 51.42.1 Wholesale of clothing
  - 51.42.2 Wholesale of clothing and footwear

- 51.43 Heildverslun með heimilistæki, útvarps- og sjónvarpstæki, lampa, rafmagnstæki o.þ.h.
- 51.44 Heildverslun með postulín, glervöru og hreingerningarefni
  - 51.44.1 Heildverslun með postulín og glervöru
  - 51.44.2 Heildverslun með hreingerningarefni
- 51.45 Heildverslun með ilmvatn og snyrtivöru
- 51.46 Heildverslun með lyf og lækningavörur
- 51.47 Heildverslun með annan varning til heimilisnota
  - 51.47.1 Heildverslun með húsgögn
  - 51.47.2 Heildverslun með teppi og önnur gólfefni
  - 51.47.3 Heildverslun með úr, sjóntæki og ljósmyndavörur
  - 51.47.4 Heildverslun með leikföng
  - 51.47.5 Heildverslun með bækur, blöð og ritföng
  - 51.47.9 Heildverslun með annan ótalinn varning til heimilisnota

# 51.5 Heildverslun með hráefni og hálfunnin efni önnur en efni úr landbúnaði

- 51.51 Heildverslun með fast, fljótandi og gaskennt eldsneyti og skyldar vörur
- 51.52 Heildverslun með óunna málma og málmgrýti
- 51.53 Heildverslun með timbur, byggingarefni og málningu
- 51.54 Heildverslun með járnvöru, vöru til pípu- og hitalagna og búnað til þeirra
- 51.55 Heildverslun með efnavöru
- 51.56 Heildverslun með önnur hráefni og hálfunnin efni
- 51.57 Heildverslun með úrgangsefni og brotajárn

#### 51.6 Heildverslun með vélar, tæki og hluti til þeirra

- 51.61 Heildverslun með smíðavélar til málm- og trésmíða
- 51.62 Heildverslun með vélar til mannvirkjagerðar
- 51.63 Heildverslun með vélar til vefjariðnaðar og sauma- og prjónavélar
- 51.64 Heildverslun með tölvur, skrifstofuvélar og -búnað
  - 51.64.1 Heildverslun með tölvur, ritvélar o.þ.h.
  - 51.64.2 Heildverslun með skrifstofubúnað
- 51.65 Heildverslun með annan búnað og vélar til nota í iðnaði, verslun, siglingum og flugi
  - 51.65.1 Heildverslun með veiðarfæri og fiskvinnsluvélar
  - 51.65.9 Heildverslun með annan ótalinn búnað og vélar til nota í iðnaði, verslun, siglingum og flugi
- 51.66 Heildverslun með landbúnaðarvélar og -tæki og hluti til þeirra

## 51.7 Önnur heildverslun

# 52 Smásala á öðru en bílum og vélhjólum; viðgerðir á hlutum til einka- og heimilisnota

## 52.1 Blönduð smásala

- 52.11 Blönduð smásala með matvöru, drykkjarvöru og tóbak sem aðalvörur
  - 52.11.1 Stórmarkaðir með minnst 400 m² verslunarrými
  - 52.11.2 Matvöruverslun með minna en 400 m² verslunarrými
  - 52.11.3 Söluturnar
- 52.12 Önnur blönduð smásala

# 52.2 Smásala á matvöru, drykkjarvöru og tóbaki í sérverslunum

- 52.21 Ávaxta- og grænmetisverslun
- 52.22 Kjötbúðir
- 52.23 Fiskbúðir
- 52.24 Smásala á brauði, kökum og sætabrauði
- 52.25 Áfengisverslun
- 52.26 Tóbaksverslun

- 51.43 Wholesale of electrical household appliances and radio and television goods
- 51.44 Wholesale of china and glassware, wallpaper and cleaning materials
  - 51.44.1 Wholesale of china and glassware
  - 51.44.2 Wholesale of cleaning materials
- 51.45 Wholesale of perfume and cosmetics
- 51.46 Wholesale of pharmaceutical goods
- 51.47 Wholesale of other household goods
  - 51.47.1 Wholesale of furniture
  - 51.47.2 Wholesale of carpets and other floor covering materials
  - 51.47.3 Wholesale of watches, optical and photographic goods
  - 51.47.4 Wholesale of toys
  - 51.47.5 Wholesale of books, periodicals and stationery
  - 51.47.9 Wholesale of other household goods, n.e.c.

# 51.5 Wholesale of non-agricultural intermediate products, waste and scrap

- 51.51 Wholesale of solid, liquid and gaseous fuels and related products
- 51.52 Wholesale of metals and metal ores
- 51.53 Wholesale of wood, construction materials and sanitary equipment
- 51.54 Wholesale of hardware, plumbing and heating equipment and supplies
- 51.55 Wholesale of chemical products
- 51.56 Wholesale of other intermediate products
- 51.57 Wholesale of waste and scrap

#### 51.6 Wholesale of machinery, equipment and supplies

- 51.61 Wholesale of machine tools
- 51.62 Wholesale of construction machinery
- 51.63 Wholesale of machinery for textile industry, and of sewing and knitting machines
- 51.64 Wholesale of office machinery and equipment
  - 51.64.1 Wholesale of computers, typewriters etc.
  - 51.64.2 Wholesale of office equipment
- 51.65 Wholesale of other machinery for use in industry, trade and navigation
  - 51.65.1 Wholesale of fishing gear and fish-processing machinery
  - 51.65.9 Wholesale of other machinery for use in industry, trade and navigation, excl. for fisheries
- 51.66 Wholesale of agricultural machinery and accessories and implements, including tractors

## 51.7 Other wholesale

# 52 Retail trade, except of motor vehicles and motorcycles; repair of personal goods

## 52.1 Retail sale in non-specialized stores

- 52.11 Retail sale in non-specialized stores with food, beverages or tobacco predominating
  - 52.11.1 Supermarkets
  - 52.11.2 Foodstores less than 400 m<sup>2</sup>
  - 52.11.3 Kiosks
- 52.12 Other retail sale in non-specialized stores

# 52.2 Retail sale of food, beverages and tobacco in specialized stores

- 52.21 Retail sale of fruit and vegetables
- 52.22 Retail sale of metal and metal product
- 52.23 Retail sale of fish, crustaceans and molluscs
- 52.24 Retail sale of bread, cakes, flour confectionery and sugar confectionery
- 52.25 Retail sale of alcoholic and other beverages
- 52.26 Retail sale of tobacco products

52.27 Önnur smásala á matvöru, drykkjarvöru og tóbaki í sérverslunum 52.3 Smásala lyfja og hjúkrunarvöru, snyrti- og hreinlætisvöru

52.31 Apótek

52.32 Smásala lækninga- og hjúkrunarvöru

52.33 Snyrtivöru- og sápuverslun

52.4 Önnur smásala nýrrar vöru í sérverslunum

52.41 Vefnaðarvöruverslun

52.42 Fataverslun

52.42.1 Kvenfataverslun

52.42.2 Herrafataverslun

52.42.3 Barnafataverslun

52.42.4 Blönduð fataverslun

52.43 Skó- og leðurvöruverslun

52.43.1 Skóverslun

52.43.2 Leðurvöruverslun

52.44 Smásala með húsgögn, teppi, lampa o.fl til heimilisnota

52.44.1 Húsgagnaverslun

52.44.2 Teppaverslun

52.44.3 Gluggatjaldaverslun

52.44.4 Lampa- og raftækjaverslun

52.44.5 Búsáhaldaverslun

52.45 Smásala á heimilistækjum, útvarps- og sjónvarpstækjum

52.45.1 Smásala á heimilistækjum

52.45.2 Smásala á útvarps- og sjónvarpstækjum

52.45.3 Smásala á hljómplötum, geisladiskum o.þ.h.

52.45.4 Hljóðfæraverslun

52.45.9 Smásala á heimilistækjum, útvarps- og sjónvarpstækjum

52.46 Smásala á járnvöru, byggingavöru, málningu og gleri

52.46.1 Byggingar- og járnvöruverslun

52.46.2 Málningar- og veggfóðurverslun

52.47 Bóka- og ritfangaverslun

52.48 Önnur smásala í sérverslunum

52.48.1 Gleraugna- og sjóntækjaverslun

52.48.2 Ljósmyndavöruverslun

52.48.3 Skartgripaverslun

52.48.4 Úraverslun

52.48.5 Gjafavöruverslun

52.48.6 Sportvöruverslun

52.48.7 Leikfangaverslun

52.48.8 Blómaverslun

52.48.9 Garðplöntustöðvar; túnþökusala

52.49 Önnur smásala í sérverslunum, frh.

52.49.1 Gæludýraverslun

52.49.2 Listmuna- og listaverkaverslun; gallerí

52.49.3 Smásala á tölvum, skrifstofuvélum, símum og fjarskiptabúnaði

52.49.4 Smásala á tjaldvögnum

52.49.5 Smásala á reiðhjólum

52.49.6 Smásala á barnavögnum og búnaði fyrir smábörn

52.49.9 Önnur ótalin smásala í sérverslunum

52.5 Smásala með notaða muni í verslunum

52.6 Smásala utan verslana

52.61 Póstverslun og önnur fjarverslun

52.62 Markaðir

52.63 Önnur smásala utan verslana

52.7 Viðgerðir á hlutum til einkanota og heimilisnota

52.71 Viðgerðir á skóm og öðrum leðurvörum

52.27 Other retail sale of food, beverages and tobacco in specialized stores

# 52.3 Retail sale of pharmaceutical and medical goods, cosmetic and toilet articles

52.31 Dispensing chemists

52.32 Retail sale of medical and orthopaedic goods

52.33 Retail sale of cosmetic and toilet articles

## ${\bf 52.4\ Other\ retail\ sale\ of\ new\ goods\ in\ specialized\ stores}$

52.41 Retail sale of textiles

52.42 Retail sale of clothing

52.42.1 Retail sale of women' clothing

52.42.2 Retail sale of men's clothing

52.42.3 Retail sale of child's clothing

52.42.4 Retail sale of clothing, not classified

52.43 Retail sale of footwear and leather goods

52.43.1 Retail sale of footwear

52.43.2 Retail sale of leather goods

52.44 Retail sale of furniture, lighting equipment and household articles n.e.c.

52.44.1 Retail sale of furniture

52.44.2 Retail sale of carpets

52.44.3 Retail sale of curtains

52.44.4 Retail sale of articles for lighting

52.44.5 Retail sale of household articles and equipment n.e.c.

52.45 Retail sale of electrical household appliances and radio and television goods

52.45.1 Retail sale of household appliances

52.45.2 Retail sale of radio and television goods

52.45.3 Retail sale of sound recordings; records, CDs, cassettes, etc.

52.45.4 Retail sale of musical instruments

52.45.9 Retail sale of electrical household appliances and radio and television goods

52.46 Retail sale of hardware, paints and glass

52.46.1 Retail sale of hardware

52.46.2 Retail sale of paint and wallpaper

52.47 Retail sale of books, newspapers and stationery

52.48 Other retail sale in specialized stores

52.48.1 Retail sale of optical equipment

52.48.2 Retail sale of photographic equipment

52.48.3 Retail sale of jewellery

52.48.4 Retail sale of watches, clocks etc.

52.48.5 Retail sale of souvenirs, craftwork etc.

52.48.6 Retail sale of sports goods

52.48.7 Retail sale of toys and games

52.48.8 Retail sale of flowers, plants, etc.

52.48.9 Retail sale of nursery products, turf etc.

52.49 Other retail sale in specialized stores, contd.

52.49.1 Retail sale of pets

52.49.2 Retail sale of works of art; galleries

52.49.3 Retail sale of computers, office equipment, telephones and telecommunication equipment

52.49.4 Retail sale of trailers and semi trailers

52.49.5 Retail sale of bicycles

52.49.6 Retail sale of prams and baby equipment

52.49.9 Retail sale in specialized stores, n.e.c.

## 52.5 Retail sale of second-hand goods in stores

## 52.6 Retail sale not in stores

52.61 Retail sale via mail order houses

52.62 Retail sale via stalls and markets

52.63 Other non-store retail sale

## 52.7 Repair of personal and household goods

52.71 Repair of boots, shoes and other articles of leather

- 52.72 Viðgerðir á rafmagnsheimilistækjum
- 52.73 Viðgerðir á úrum, klukkum og skartgripum
- 52.74 Aðrar ótaldar viðgerðir á hlutum til einkanota og heimilisnota

## 55 Hotels and restaurants

52.74 Repair n.e.c.

## 55 Hótel- og veitingahúsarekstur

## 55.1 Hótel

- 55.11 Hótel með veitingasölu
- 55.12 Hótel og gistiheimili án veitingasölu

#### 55.2 Orlofshús, bændagisting, tjaldstæði og önnur aðstaða til stuttrar dvalar

- 55.21 Farfuglaheimili og fjallaskálar
- 55.22 Tjaldstæði, þ. á m. hjólhýsastæði
- 55.23 Bændagisting, orlofshúsasvæði og önnur ótalin gisting

#### 55.3 Veitingahúsarekstur

- 55.30 Veitingahúsarekstur
  - 55.30.1 Matsölustaðir
  - 55.30.2 Skemmtistaðir með matsölu

#### 55.4 Krár, kaffihús, dansstaðir o.fl.

## 55.5 Mötuneyti og sala á tilbúnum mat

- 55.51 Mötuneyti
- 55.52 Sala á tilbúnum mat

## 60 Samgöngur á landi; flutningar eftir leiðslum

## 60.1 Járnbrautasamgöngur

#### 60.2 Aðrar samgöngur á landi

- 60.21 Akstur strætisvagna og áætlunarbíla
- 60.22 Akstur leigubíla
- 60.23 Aðrir farþegaflutningar á vegum
- 60.24 Vöruflutningar á vegum
  - 60.24.1 Akstur sendibíla
  - 60.24.2 Akstur vörubíla
  - 60.24.3 Akstur flutningabíla

## 60.3 Flutningur eftir leiðslum

## 61 Samgöngur á sjó og vatnaleiðum

- ${\bf 61.1~Millilanda-\,og~strandsiglingar}$
- 61.2 Samgöngur á vatnaleiðum

## 62 Flugsamgöngur

- 62.1 Áætlunarflug
- 62.2 Leiguflug og þjónustuflug
- 62.3 Geimferðir

# 63 Flutningaþjónusta, starfsemi ferðaskrifstofa og flutningamiðlun

## 63.1 Vöruafgreiðsla og vörugeymsla

- 63.11 Vöruafgreiðsla
- 63.12 Vörugeymslur

## 63.2 Önnur þjónusta tengd flutningum

- 63.21 Bílastöðvar; önnur þjónusta tengd flutningum á landi
- 63.22 Önnur þjónusta tengd flutningum á sjó
- 63.23 Önnur þjónusta tengd flutningum í lofti

## 63.3 Rekstur ferðaskrifstofa og önnur ótalin ferðaþjónusta

## 63.4 Önnur flutningamiðlun

## 64 Póstur og sími

## 64.1 Póst- og boðberaþjónusta

- 64.11 Almenn póstþjónusta
- 64.12 Boðberaþjónusta, þó ekki almenn póstþjónusta

## 64.2 Síma- og fjarskiptaþjónusta

# 65 Fjármálaþjónusta, þó ekki starfsemi vátryggingafélaga og lífeyrissjóða

## 65.1 Peningastofnanir

65.11 Rekstur seðlabanka

#### moters and restaut

#### 55.1 Hotels

55.11 Hotels and motels, with restaurants

52.72 Repair of electrical household goods

52.73 Repair of watches, clocks and jewellery

55.12 Hotels and motels, without restaurants

# 55.2 Camping sites and other provision of short-stay accommodation

- 55.21 Youth hostels and mountain refuges
- 55.22 Camping sites, including caravan sites
- 55.23 Other provision of lodgings n.e.c.

#### 55.3 Restaurants

- 55.30 Restaurants
  - 55.30.1 Restaurants serving only food and drink
  - 55.30.2 Entertainment establishments with restaurant services

#### 55.4 Bars

## 55.5 Canteens and catering

- 55.51 Canteens
- 55.52 Catering

## 60 Land transport; transport via pipelines

## 60.1 Transport via railways

#### 60.2 Other land transport

- 60.21 Other scheduled passenger land transport
- 60.22 Taxi operation
- 60.23 Other land passenger transport
- 60.24 Freight transport by road
  - 60.24.1 Delivery van services
  - 60.24.2 Open-lorry services
  - 60.24.3 Other lorry services (incl. container trucks)

## 60.3 Transport via pipelines

## 61 Water transport

- 61.1 Sea and coastal water transport
- 61.2 Inland water transport

## 62 Air transport

- 62.1 Scheduled air transport
- 62.2 Non-scheduled air transport
- 62.3 Space transport

# 63 Supporting and auxiliary transport activities; activities of travel agencies

## 63.1 Cargo handling and storage

- 63.11 Cargo handling
- 63.12 Storage and warehousing

## 63.2 Other supporting transport activities

- 63.21 Other supporting land transport activities
- 63.22 Other supporting water transport activities
- 63.23 Other supporting air transport activities

# 63.3 Activities of travel agencies and tour operators; tourist assistance activities n.e.c.

## 63.4 Activities of other transport agencies

## 64 Post and telecommunications

## **64.1** Post and courier activities

- 64.11 National post activities
- 64.12 Courier activities other than national post activities

## 64.2 Telecommunications

# 65 Financial intermediation, except insurance and pension funding

## **65.1 Monetary intermediation**

65.11 Central banking

65.12 Rekstur banka og sparisjóða

## 65.2 Önnur fjármálaþjónusta

65.21 Eignarleiga

65.22 Önnur lánastarfsemi

65.22.1 Fjárfestingarlánasjóðir

65.22.2 Starfsemi greiðslukortafyrirtækja

65.23 Önnur ótalin fjármálaþjónusta

65.23.1 Verðbréfasjóðir

65.23.9 Önnur ótalin fjármálastarfsemi

## 66 Starfsemi vátryggingafélaga og lífeyrissjóða, þó ekki almannatryggingar

## 66.0 Vátryggingafélög og lífeyrissjóðir, þó ekki almannatryggingar

66.01 Líftryggingar

66.02 Lífeyristryggingar

66.02.1 Sameignarsjóðir

66.02.2 Séreignarsjóðir

66.02.9 Aðrar lífeyristryggingar

66.03 Skaðatryggingar

## 67 Starfsemi tengd fjármálaþjónustu

## 67.1 Starfsemi tengd fjármálaþjónustu, þó ekki starfsemi vátryggingafélaga og lífeyrissjóða

67.11 Kauphallarstarfsemi

67.12 Verðbréfamiðlun

67.13 Önnur ótalin starfsemi tengd fjármálaþjónustu

## 67.2 Starfsemi tengd vátryggingafélögum og lífeyrissjóðum

## 70 Sala og rekstur fasteigna

## 70.1 Fasteignaviðskipti með eigin eignir

70.11 Lóða- og byggingarumsýsla, fjármögnun og sala fasteigna

70.12 Kaup og sala á eigin fasteignum

## 70.2 Fasteignaleiga

70.20 Fasteignaleiga

70.20.1 Leiga íbúðarhúsnæðis

70.20.2 Leiga atvinnuhúsnæðis

70.20.3 Leiga á landi og landréttindum

## 70.3 Fasteignastarfsemi gegn þóknun eða skv. samningi

70.31 Fasteignamiðlun

70.32 Fasteignarekstur gegn þóknun eða skv. samningi

70.32.1 Starfsemi húsfélaga íbúðareigenda

70.32.9 Annar fasteignarekstur

# til einka- og heimilisnota

## 71.1 Bílaleiga

## 71.2 Leiga annarra samgöngutækja

71.21 Leiga annarra tækja til landflutninga

71.22 Báta- og skipaleiga

71.23 Leiga á loftförum

## 71.3 Önnur véla- og tækjaleiga

71.31 Leiga landbúnaðarvéla og -tækja

71.32 Leiga vinnuvéla og tækja til byggingariðnaðar

71.33 Leiga á skrifstofuvélum og tölvum

71.34 Önnur ótalin véla- og tækjaleiga

## 71.4 Leiga á munum til einka- og heimilisnota

71.40 Leiga á munum til einka- og heimilisnota

71.40.1 Myndbandaleiga

71.40.9 Leiga á öðrum ótöldum munum til einka- og heimilisnota

## 72 Tölvur og tölvuþjónusta

65.12 Other monetary intermediation

#### 65.2 Other financial intermediation

65.21 Financial leasing

65.22 Other credit granting

65.22.1 Investment credit funds

65.22.2 Credit card companies

65.23 Other financial intermediation n.e.c.

65.23.1 Unit trust activities

65.23.9 Other financial intermediation n.e.c.

#### 66 Insurance and pension funding, except compulsory social security

## 66.0 Insurance and pension funding, except compulsory social security

66.01 Life insurance

66.02 Pension funding

66.02.1 Occupational pension funds

66.02.2 Personal pensions funds

66.02.9 Other pension funding

66.03 Non-life insurance

## 67 Activities auxiliary to financial intermediation

## 67.1 Activities auxiliary to financial intermediation

67.11 Activities auxiliary to financial markets

67.12 Security broking and fund management

67.13 Activities auxiliary to financial intermediation n.e.c.

## 67.2 Activities auxiliary to insurance and pension funding

## 70 Real estate activities

## 70.1 Real estate activities with own property

70.11 Development and selling of real estate

70.12 Buying and selling of own real estate

## 70.2 Letting of own property

70.20 Letting of own property

70.20.1 Letting of residential housing

70.20.2 Letting of non-residential housing

70.20.3 Letting of land and land rights

## 70.3 Real estate activities on a fee or contract basis

70.31 Real estate agencies

70.32 Management of real estate on a fee or contract basis

70.32.1 Apartment-building associations (of individual owners)

70.32.9 Other management of real estate on a fee or contract basis

## 71 Leiga á vélum- og tækjum án stjórnanda og leiga á hlutum 71 Renting of machinery and equipment without operator and of personal and household goods

## 71.1 Renting of automobiles

## 71.2 Renting of other transport equipment

71.21 Renting of other land transport equipment

71.22 Renting of water transport equipment

71.23 Renting of air transport equipment

## 71.3 Renting of other machinery and equipment

71.31 Renting of agricultural machinery and equipment

71.32 Renting of construction and civil engineering machinery and equipment

71.33 Renting of office machinery and equipment including

71.34 Renting of other machinery and equipment n.e.c.

## 71.4 Renting of personal and household goods n.e.c.

71.40 Renting of personal and household goods n.e.c.

71.40.1 Renting of videos

71.40.9 Renting of other personal and household goods n.e.c.

## 72 Computer and related activities

72.1 Ráðgjöf varðandi tölvuvélbúnað

72.2 Hugbúnaðargerð; ráðgjöf varðandi hugbúnað

72.3 Gagnavinnsla

72.4 Rekstur gagnabanka

72.5 Viðhald og viðgerðir á skrifstofu- og bókhaldsvélum og tölvum

72.6 Önnur starfsemi tengd tölvum og gagnavinnslu

73 Rannsóknir og þróunarstarf

73.1 Rannsóknir og þróunarstarf í raun- og tæknivísindum

73.2 Rannsóknir og þróunarstarf í félags- og hugvísindum

74 Önnur viðskipti og sérhæfð þjónusta

74.1 Lögfræði- og bókhaldsþjónusta; markaðsrannsóknir; rekstrarráðgjöf; eignarhaldsfélög

74.11 Lögfræðiþjónusta

74.12 Bókhaldsþjónusta, endurskoðun og skattaráðgjöf

74.13 Markaðsrannsóknir og skoðanakannanir

74.14 Rekstrarráðgjöf

74.14.1 Landbúnaðarráðunautar

74.14.9 Rekstrarráðgjöf, þó ekki í landbúnaði

74.15 Rekstur eignarhaldsfélaga

74.2 Starfsemi arkitekta og verkfræðinga og skyld tækniráðgjöf

74.20 Starfsemi arkitekta og verkfræðinga og skyld tækniráðgjöf

74.20.1 Verkfræðiráðgjöf og önnur tækniráðgjöf við byggingarframkvæmdir og mannvirkjagerð

74.20.2 Verkfræðiráðgjöf varðandi framleiðslu- og véltækni

74.20.3 Starfsemi arkitekta og tækniráðgjöf tengd byggingum

74.20.4 Jarðfræðilegar rannsóknir og könnun jarðefna

74.20.5 Könnun lands

74.20.6 Einkaleyfisskrifstofur

74.20.9 Önnur tækniráðgjöf verkfræðinga og tæknifræðinga

74.3 Tæknilegar prófanir og greining

74.4 Auglýsingastarfsemi

74.40 Auglýsingastarfsemi

74.40.1 Starfsemi auglýsingastofa

74.40.9 Önnur auglýsingastarfsemi

74.5 Vinnumiðlun og ráðningarþjónusta

74.6 Eftirgrennslan og öryggisþjónusta

 $74.7\ Ræstingar, sótthreinsun og meindýraeyðing$ 

74.8 Margs konar ótalin viðskipti og sérhæfð þjónusta

74.81 Ljósmyndaþjónusta

74.82 Pökkunarstarfsemi

74.83 Þýðingarstarfsemi og skrifstofuþjónusta

74.83.1 Þýðingar og túlkun

74.83.2 Skrifstofuþjónusta

74.84 Önnur ótalin viðskipti og sérhæfð þjónusta

75 Opinber stjórnsýsla og varnarmál; almannatryggingar

80 Fræðslustarfsemi

85 Heilbrigðis- og félagsþjónusta

90 Skólpveitur, sorphreinsun, hreinsunardeildir og skyld starfsemi

90.0 Skólpveitur, sorphreinsun, hreinsunardeildir og skyld starfsemi

91 Starfsemi annarra ótalinna félaga og samtaka

72.1 Hardware consultancy

72.2 Software consultancy and supply

72.3 Data processing

72.4 Data base activities

72.5 Maintenance and repair of office, accounting and computing machinery

72.6 Other computer related activities

73 Research and development

73.1 Research and experimental development on natural sciences and engineering

73.2 Research and experimental development on social sciences and humanities

74 Other business activities

74.1 Legal and accounting activities; market research; business consultancy; holding companies

74.11 Legal activities

74.12 Accounting, book-keeping and auditing activities; tax consultancy

74.13 Market research and public opinion polling

74.14 Business and management consultancy activities

74.14.1 Agricultural consultancy activities

74.14.9 Business and management consultancy activities, excl. agricultural consultancy

74.15 Management activities of holding companies

74.2 Architectural and engineering activities and related technical consultancy

74.20 Architectural and engineering activities and related technical consultancy

74.20.1 Civil engineering activities and related technical consultancy

74.20.2 Mechanical and industrial engineering activities and related technical consultancy

74.20.3 Architectural activities and related technical consultancy

74.20.4 Geological research and prospecting activities

74.20.5 Geodetic surveying activities

74.20.6 Patent office activities

74.20.9 Other architectural and engineering activities and related technical consultancy n.e.c.

74.3 Technical testing and analysis

74.4 Advertising

74.40 Advertising

74.40.1 Advertising agencies

74.40.9 Other advertising activities n.e.c.

74.5 Labour recruitment and provision of personnel

74.6 Investigation and security activities

74.7 Industrial cleaning

74.8 Miscellaneous business activities n.e.c.

74.81 Photographic activities

74.82 Packaging activities

74.83 Secretarial and translation activities

74.83.1 Translation and interpretation activities

74.83.2 Secretarial activities

74.84 Other business activities n.e.c.

75 Public administration and defence; compulsory social security

80 Education

85 Health and social work

90 Sewage and refuse disposal, sanitation and similar activities

90.0 Sewage and refuse disposal, sanitation and similar activities

91 Activities of membership organizations n.e.c.

92 Tómstunda-, menningar- og íþróttastarfsemi	92 Recreational, cultural and sporting activities
92.1 Gerð, dreifing og sýningar á kvikmyndum og myndböndum	92.1 Motion picture and video activities
92.11 Framleiðsla kvikmynda og myndbanda	92.11 Motion picture and video production
92.12 Dreifing kvikmynda og myndbanda	92.12 Motion picture and video distribution
92.13 Rekstur kvikmyndahúsa	92.13 Motion picture projection
92.2 Starfsemi útvarps- og sjónvarpsstöðva	92.2 Radio and television activities
92.3 Önnur menningar- og afþreyingarstarfsemi	92.3 Other entertainment activities
92.31 Starfsemi listamanna	92.31 Artistic and literary creation and interpretation
92.32 Rekstur húsnæðis og aðstöðu fyrir menningarstarfsem	i 92.32 Operation of arts facilities
92.33 Rekstur skemmtigarða	92.33 Fair and amusement park activities
92.34 Önnur ótalin menningar- og afþreyingarstarfsemi	92.34 Other entertainment activities n.e.c.
92.4 Starfsemi sjálfstæðra fréttastofa	92.4 News agency activities
92.5 Starfsemi safna og önnur menningarstarfsemi	92.5 Library, archives, museums and other cultural activities
92.6 Íþróttastarfsemi	92.6 Sporting activities
92.7 Önnur tómstundastarfsemi	92.7 Other recreational activities
92.71 Happdrætti og veðmálastarfsemi	92.71 Gambling and betting activities
92.72 Önnur ótalin tómstundastarfsemi	92.72 Other recreational activities n.e.c.
93 Önnur persónuleg þjónustustarfsemi	93 Other service activities
93.0 Önnur persónuleg þjónustustarfsemi	93.0 Other service activities
93.01 Þvottahús og efnalaugar	93.01 Washing and dry-cleaning of textile and fur products
93.02 Hárgreiðslu- og snyrtistofur	93.02 Hairdressing and other beauty treatment
93.03 Útfararþjónusta	93.03 Funeral and related activities
93.04 Heilsuræktarstarfsemi, sólbaðstofur o.þ.h.	93.04 Physical well-being activities
93.05 Önnur ótalin persónuleg þjónustustarfsemi	93.05 Other service activities n.e.c.
95 Heimilishald með launuðu starfsfólki	95 Private household with employed persons
95.0 Heimilishald með launuðu starfsfólki	95.0 Private household with employed persons

# 10.2 Classification used for the income approach

The income approach in Iceland is still under construction with the emphasis on sectoral accounting, but an independent estimate of GDP according to this approach will not be made. So far it is not possible to give a precise description of the classifications which are going to be used. However, it can be stated that the value added components of the income approach will be derived from the production approach and therefore the breakdown of these items at least will be the same as followed in the production approach.

# 10.3 Classification used for the expenditure approach 10.3.1 Household final consumption expenditure

The following table shows the most detailed breakdown of Household final consumption in Icelandic national accounts. The classification followed is the COICOP.

Table 10-2 Classification of household final consumption

Icelandic	English
01. Matur og drykkjarvörur	01. Food and non-alcoholic beverages
01.1 Matur	01.1 Food
01.1.1 Brauð og kornvörur	01.1.1 Bread and cereals
01.1.2 Kjöt	01.1.2 Meat
01.1.3 Fiskur	01.1.3 Fish
01.1.4 Mjólk, ostar og egg	01.1.4 Milk, cheese and eggs
01.1.5 Olíur og feitmeti	01.1.5 Oils and fats
01.1.6 Ávextir	01.1.6 Fruit
01.1.7 Grænmeti, kartöflur o.fl.	01.1.7 Vegetables
01.1.8 Sykur, súkkulaði, sælgæti o.fl.	01.1.8 Sugar, jam, honey, chocolate and confectionery
01.1.9 Aðara matvörur	01.1.9 Food products n.e.c.
01.2 Drykkjarvörur	01.2 Non alcoholic beverages

01.2.1 Kaffi, te og kakó

01.2.2 Gosdrykkir, safar og vatn

## 02. Áfengi og tóbak

02.1 Áfengi

02.2 Tóbak

## 03. Föt og skór

03.1 Föt

03.1.1 Fatnaður

03.1.2 Tilbúinn fatnaður

03.1.3 Önnur föt og fylgihlutir

03.1.4 Hreinsun, viðgerðir á fötum

03.2 Skófatnaður

03.2.1 Skór og annar skófatnaður

03.2.2 Viðgerðir og leiga á skófatnaði

## 04. Húsnæði, rafmagn og hiti

04.1-04.4 Húsaleiga og annar húsnæðiskostnaður

04.5 Rafmagn og hiti

04.5.1 Rafmagn

04.5.2 Gas

04.5.3 Eldsneyti í fljótandi formi

04.5.4 Eldsneyti í föstu formi

04.5.5 Hiti

#### 05. Húsgögn, húsbúnaður, heimilistæki og heimilishald

05.1 Húsgögn og heimilisbúnaður

05.1.1 Húsgögn og innréttingar

05.1.2 Teppi og önnur gólfefni

05.1.3 Viðgerðir á húsgögnum

05.2 Vefnaðarvörur til heimilis

05.3 Raftæki

05.3.1-05.3.2 Heimilistæki

05.3.3 Viðgerðir heimilistækja

05.4 Búsáhöld

05.6. Ýmsar vörur og heimilisþjónusta

05.6.1 Vörur til heimilishalds

05.6.2 Heimilisþjónusta o.fl.

## 06. Lyf og læknishjálp

06.1 Lyf og lækningavörur

06.1.1 Lyf

06.1.2-06.1.3 Lækninga- og hjúkrunarvörur

06.2 Heilsugæsla

06.2.1 Læknishjálp

06.2.2 Tannlækningar

06.2.3 Önnur heilsugæsla

## 07. Flutningatæki og samgöngur

07.1 Kaup ökutækja

07.2 Rekstur ökutækja

07.3 Flutningar

## 08. Póstur og sími

08.1-08.3 Póstur og sími

## 09. Tómstundir og menning

09.1-09.3 Tómstundir, stærri tæki o.fl.

09.4 Íþróttir, fjölmiðlun og happdrætti

09.5 Bækur, blöð og ritföng

## 10. Menntun

10.1 Barnagæsla, leikskólar

10.2-10.5 Menntun

## 11. Hótel og veitingastaðir

11.1-11.2 Útgjöld á veitinga- og gistih.

## 12. Ýmsar vörur og þjónusta

12.1 Persónuleg þjónusta

12.3 Persónulegar eigur

12.4 Félagsleg þjónusta

12.5 Tryggingar

01.2.1 Coffee, tea and cocoa

01.2.2 Fruit and vegetable juices

## 02. Alcoholic beverages and tobacco

02.1 Alcoholic beverages

02.2 Tobacco

## 03. Clothing and footwear

03.1 Clothing

03.1.1 Clothing materials

03.1.2 Garments

03.1.3 Other articles of clothing and clothing accessories

03.1.4 Cleaning, repair and hire of clothing

03.2 Footwear

03.2.1 Shoes and other footwear

03.2.2 Repair and hire of footwear

## 04. Housing, water, electricity, gas and other fuels

04.1-04.4 Actual and imputed rentals and maintenance of housing

04.5 Electricity, gas and other fuels

04.5.1 Electricity for heating

04.5.1 Electricity for lighting and cooking

04.5.3 Liquid fuels

04.5.4 fuels

04.5.5 Heat energy

# 05. Furnishings, household equipment and routine maintenance of the house

05.1 Furniture and furnishings, carpets and other coverings

05.1.1 Furniture and furnishings

05.1.2 Carpets and other floor coverings

05.1.3 Repair of furniture, furnishings and floor coverings

05.2 Household textiles

05.3 Household appliances

05.3.1-05.3.2 Household appliances

05.3.3 Repair of household appliances

05.4 Glassware, tableware and household utensils

05.6. Goods and services for routine household maintenance

05.6.1 Non-durable household goods

05.6.2 Domestic services and household services

## 06. Medical care and health expenses

06.1 Medical products, appliances and equipment

06.1.1 Pharmaceutical products

06.1.2-06.1.3 Other medical products, therapeutic appliances and equipment

06.2 Out- patient services

06.2.1 Medical services

06.2.2 Dental services

06.2.3 Services of midwives

## 07. Transport

07.1 Purchase of vehicles

07.2 Operation of personal transport equipment

07.3 Transport services

## 08. Communication

08.1-08.3 Postal and telephone services and equipment

## 09. Recreation and culture

09.1-09.3 Recreation equipment

09.4 Recreational and cultural services

09.5 Newspapers, books and stationery

## 10. Education

10.1 Pre-primary education

10.2-10.5 Educational services

## 11. Restaurants and hotels

11.1-11.2 Restaurants and hotels

## 12. Miscellaneous goods and services

12.1 Personal care

12.3 Personal effects n.e.c.

12.4 Social services12.5 Insurance

Einkaneysla alls	Household Final Consumption Expenditure of Resident Households
Útgjöld erlendra manna á Íslandi	Direct purchases in the domestic marked by non-resident household
Útgjöld íslendinga erlendis	Direct purchases abroad by resident households
Einkaneysla innanlands alls	Households Final Consumption Expenditure in the Domestic Market
12.7 Önnur þjónusta	12.7 Other services n.e.c.
12.6 Fjármálaþjónusta	12.6 Financial services n.e.c.

# 10.3.2 Final consumption expenditure of non-profit institutions serving households

The available classification of the expenditure of NPISHs is not as detailed as the ones for expenditure of households and government. In deciding final consumption expenditure of that sector the first step is to deliminate the sector NPISH. That was done by using the Business Register and the Pay-roll Register. As described in section 3.1.2 the Business register makes it possible to identify all units by legal form and thereby by sectors. Statistics Iceland checked the classification as recorded in the Business register and corrected that classification in view of national accounts purposes where necessary. Based on this sector classification for each unit and the Pay-roll register 1995 the production accounts of each industry were split up by sectors. The outcome of these calculations showed that the NPISH were mainly operating in the following activities:

- Sporting activity
- Religious organisations
- Social work activity
- Trade unions
- Various membership organisations

The output of some of these activities was already recorded as a sale to households or government and the residual was defined as final consumption of NPISH.

# 10.3.3 Government final consumption expenditure

General government consumption expenditure is classified according to purpose. The classification by purpose follows COFOG.

The following table shows the most detailed breakdown of general government total expenditure, of which government final consumption is one of the components.

Table 10-3 General government total expendit

Icelandic	English
01. Almenn opinber þjónusta	01. General public services
01.1 Æðsta stjórnsýsla, löggjafarvald, opinber fjármál og utanríkismál.	01.1 Executive and legisl. organs, fin., fiscal and ext. affairs
01.1.1 Æðsta stjórnsýsla og löggjafarvald	01.1.1 Executive and legislative organs
01.1.2 Opinber fjármál	01.1.2 Financial and fiscal affairs
01.1.3 Utanríkismál	01.1.3 External affairs
01.2 Erlend efnahagsaðstoð	01.2 Foreign economic aid
01.2.1 Efnahagsaðstoð við þróunarlönd og önnur lönd á þróunarstigi	01.2.1 Econ. aid to develop. countries and countr, in transit.
01.2.2 Efnahagsaðstoð í samvinnu við alþjóðastofnanir	01.2.2 Econ. aid routed through international organizations
01.3 Almenn þjónusta	01.3 General services
01.3.1 Almenn starfsmannamál	01.3.1 General personnel services
01.3.2 Almenn áætlana- og hagskýrslugerð	01.3.2 Overall planning and statistical services
01.3.3 Önnur almenn þjónusta	01.3.3 Other general services
01.4 Grunnrannsóknir	01.4 Basic research

01.5 Rannsóknir og þróun í almennri opinberri stjórnsýslu	01.5 R&D General public services
01.6 Almenn opinber þjónusta, ótalin annars staðar	01.6 General public services n.e.c.
01.7 Fjármagnskostnaður hins opinbera	01.7 Public debt transactions
01.8 Almennar tilfærslur milli stjórnsýslustiga	01.8 Transfers of a gen. charact. betw. diff. levels of governm.
02. Varnarmál	02. Defence
02.1 Hervarnir	02.1 Military defence
02.2 Heimavarnir	02.2 Civil defence
02.3 Erlend hernaðaraðstoð og friðargæsla	02.3 Foreign military aid
02.4 Rannsóknir og þróun í varnarmálum	02.4 R&D Defence
02.5 Varnarmál, ótalin annars staðar	02.5 Defence n.e.c.
03. Löggæsla, réttargæsla og öryggismál	03. Public order and safety
03.1 Löggæsla	03.1 Police services
03.2 Brunavarnir	03.2 Fire-protection services
03.3 Dómsstólar	03.3 Law courts
03.4 Fangelsismál	03.4 Prisons
03.5 Rannsóknir og þróun í löggæslu,réttargæslu og öryggismálum	03.5 R&D Public order and safety
03.6 Löggæsla, réttargæsla og öryggismál, ótalin annars staðar	03.6 Public order and safety n.e.c.
<b>04. Efnahags- og atvinnumál</b> 04.1 Almenn efnahags-, viðskipta- og vinnumarkaðsmál	<b>04. Economic affairs</b> 04.1 General economic, commercial and labour affairs
04.1.1 Almenn efnahags- og viðskiptamál	04.1.1 General economic and commercial affairs
04.1.2 Almenn vinnumarkaðsmál	04.1.2 General labour affairs
04.2 Landbúnaður, skógrækt, fiskveiðar og aðrar veiðar	04.2 Agriculture, forestry, fishing and hunting
04.2.1 Landbúnaður	04.2.1 Agriculture
04.2.2 Skógrækt	04.2.2 Forestry
04.2.3 Fiskveiðar og aðrar veiðar	04.2.3 Fishing and hunting
04.3 Eldsneytis- og orkumál	04.3 Fuel and energy
04.3.1 Kol og annað fast jarðefnaeldsneyti	04.3.1 Coal and other solid mineral fuels
04.3.2 Jarðolía og jarðgas	04.3.2 Petroleum and natural gas
04.3.3 Kjarnorkueldsneyti	04.3.3 Nuclear fuel
04.3.4 Annað eldsneyti	04.3.4 Other fuels
04.3.5 Raforkumál	04.3.5 Electricity
04.3.6 Orkumál önnur en raforkumál	04.3.6 Non-electric energy
04.4 Iðnaðar- og byggingarstarfsemi, námuvinnsla	04.4 Mining, manufacturing and construction
04.4.1 Námuvinnsla á jarðefni öðrum en jarðefnaeldsneyti	04.4.1 Mining of mineral resources other than mineral fuels
04.4.2 Iðnaðarstarfsemi	04.4.2 Manufacturing
04.4.3 Byggingarstarfsemi	04.4.3 Construction
04.5 Samgöngur	04.5 Transport
04.5.1 Vegasamgöngur	04.5.1 Road transport
04.5.2 Sjó- og vatnasamgöngur	04.5.2 Water transport
04.5.3 Járnbrautasamgöngur	04.5.3 Railway transport
04.5.4 Flugsamgöngur	04.5.4 Air transport
04.5.5 Flutningur eftir leiðslum og aðrir flutningar	04.5.5 Pipeline and other transport
04.6 Fjarskipti	04.6 Communication
04.7 Aðrar atvinnugreinar	04.7 Other industries
04.7.1 Dreifingar- og vörugeymslustarfsemi	04.7.1 Distributive trades, storage and warehousing
04.7.2 Hótel og veitingahúsastarfsemi	04.7.2 Hotels and restaurants
04.7.3 Ferðaþjónusta	04.7.3 Tourism
04.7.4 Fjölþætt þróunarverkefni	04.7.4 Multi-purpose development projects
04.8 Rannsóknir og þróun í efnahags- og atvinnumálum	04.8 R&D Economic affairs
04.8.1 Rannsóknir og þróun í efnahags-, viðskipta- og	04.8.1 R&D General economic, commercial and labour affairs
vinnumarkaðsmálum	o no. 1 Reed General economic, commercial and labour arrains
04.8.2 Rannsóknir og þróun í landbúnaði, skógrækt, fiskveiðum og öðrum veiðum	
04.8.2 Rannsóknir og þróun í eldsneytis og orkumálum	04.8.3 R&D Fuel and energy
04.8.4 Rannsóknir og þróun í iðnaðar- og byggingarstarfsemi og námuvinnslu	04.8.4 R&D Mining, manufacturing and construction 04.8.5 R&D Transport
04.8.5 Rannsóknir og þróun í samgöngum	04.8.6 R&D Communication
04.8.6 Rannsóknir og þróun í fjarskiptum 04.8.7 Rannsóknir og þróun í öðrum atvinnugreinum	04.8.6 R&D Communication 04.8.7 R&D Other industries
04.8.8 Önnur efnahagsmál, ótalin annars staðar	07.0.7 R&D Other industries
04.9 Önnur efnahags- og atvinnumál	04.9 Economic affairs n.e.c.
OT.) Omiai Cinanago- og atvinnullat	OT.) Leonomic arians n.c.c.

#### 05. Umhverfisvernd

- 05.1 Götu- og sorphreinsun
- 05.2 Fráveitur
- 05.3 Mengunarvarnir
- 05.4 Verndun lands og fjölbreytni lífríkis
- 05.5 Rannsóknir og þróun í umhverfisvernd
- 05.6 Umhverfisvernd, ótalin annars staðar

#### 06. Húsnæðis- skipulags- og veitumál

- 06.1 Húsnæðismál
- 06.2 Skipulagsmál
- 06.3 Vatnsveitur
- 06.4 Götulýsing
- $06.5\ Rannsóknir og þróun í húsnæðis-, skipulags- og veitumálum$
- 06.6 Húsnæðis-, skipulags- og veitumál, ótalin annars staðar

#### 07. Heilbrigðismál

- 07.1 Lækningavörur og hjálpartæki
  - 07.1.1 Lyf
  - 07.1.2 Aðrar lækningavörur
  - 07.1.3 Hjálpartæki
- 07.2 Þjónusta við ferlisjúklinga
  - 07.2.1 Almenn heilsugæsla
  - 07.2.2 Sérfræðilæknar
  - 07.2.3 Tannlæknar
  - 07.2.4 Sjúkraþjálfun, iðjuþjálfun, talþjálfun og fleira
- 07.3 Sjúkrahúsaþjónusta
  - 07.3.1 Almenn sjúkrahúsaþjónusta
  - 07.3.2 Sérhæfð sjúkrahúsaþjónusta
  - 07.3.3 Mæðravernd
  - 07.3.4 Hjúkrunar- og endurhæfingarstofnanir
- 07.4 Almenn heilbrigðisþjónusta
- 07.5 Rannsóknir og þróun í heilbrigðismálum
- 07.6 Heilbrigðismál, ótalin annars staðar

#### 08. Menningar-, íþrótta- og trúmál

- 08.1 Íþrótta- og tómstundamál
- 08.2 Menningarmál
- 08.3 Fjölmiðlun
- 08.4 Trúmál og önnur félagsmál
- 08.5 Rannsóknir og þróun í menningar-, íþrótta- og trúmálum
- 08.6 Menningar-, íþrótta- og trúmál, ótalin annars staðar

#### 09. Menntamál

- 09.1 Leikskóla- og barnaskólastig
  - 09.1.1 Leikskólastig
  - 09.1.2 Barnaskólastig (1.-7. bekkur grunnskóla)
- 09.2 Unglinga- og framhaldsskólastig
  - 09.2.1 Unglingastig (8.-10. bekkur grunnskóla)
- 09.2.2 Framhaldsskólastig
- 09.3 Viðbótarstig, önnur framhaldsmenntun ekki á háskólastigi
- 09.4 Háskólastig
  - 09.4.1 Menntun á háskólastigi
  - 09.4.2 Doktorsstig
- 09.5 Menntun óflokkuð á skólastig
- 09.6 Stoðþjónusta í skólastarfi
- 09.7 Rannsóknir og þróun í menntamálum
- 09.8 Menntamál, ótalin annars staðar

#### 10. Almannatryggingar og velferðarmál

- 10.1 Sjúkdómar, örorka og fötlun
  - 10.1.1 Sjúkdómar
  - 10.1.2 Örorka og fötlun
- 10.2 Öldrun
- 10.3 Eftirlifendur

#### 05. Environmental protection

- 05.1 Waste management
- 05.2 Waste water management
- 05.3 Pollution abatement
- 05.4 Protection of biodiversity and landscape
- 05.5 R&D Environmental protection
- 05.6 Environmental protection n.e.c.

#### 06. Housing and community amenities

- 06.1 Housing development
- 06.2 Community development
- 06.3 Water supply
- 06.4 Street lighting
- 06.5 R&D Housing and community amenities
- 06.6 Housing and community amenities n.e.c.

#### 07. Health

- 07.1 Medical products, appliances and equipment
  - 07.1.1 Pharmaceutical products
  - 07.1.2 Other medical products
  - 07.1.3 Therapeutic appliances and equipment
- 07.2 Outpatient services
  - 07.2.1 General medical services
  - 07.2.2 Specialized medical services
  - 07.2.3 Dental services
  - 07.2.4 Paramedical services
- 07.3 Hospital services
  - 07.3.1 General hospital services
  - 07.3.2 Specialized hospital services
  - 07.3.3 Medical and maternity centre services
  - 07.3.4 Nursing and convalescent home services
- 07.4 Public health services
- 07.5 R&D Health
- 07.6 Health n.e.c.

#### 08. Recreation, culture and religion

- 08.1 Recreational and sporting services
- 08.2 Cultural services
- 08.3 Broadcasting and publishing services
- 08.4 Religious and other community services
- 08.5 R&D Recreation, culture and religion
- 08.6 Recreation, culture and religion n.e.c.

#### 09. Education

- 09.1 Pre-primary and primary education
  - 09.1.1 Pre-primary education
  - 09.1.2 Primary education
- 09.2 Secondary education
  - 09.2.1 Lower-secondary education
  - 09.2.2 Upper-secondary education
- 09.3 Post-secondary non-tertiary education
- 09.4 Tertiary education
  - 09.4.1 First stage of tertiary education
  - 09.4.2 Second stage of tertiary education
- 09.5 Education not definable by level
- 09.6 Subsidiary services to education
- 09.7 R&D Education
- 09.8 Education n.e.c.

#### 10. Social protection

- 10.1 Sickness and disability
  - 10.1.1 Sickness
  - 10.1.2 Disability
- 10.2 Old age
- 10.3 Survivors

 10.4 Fjölskyldur og börn
 10.4 Family and children

 10.5 Atvinnuleysi
 10.5 Unemployment

 10.6 Húsnæðisaðstoð
 10.6 Housing

 10.7 Félagsleg aðstoð, ótalin annars staðar
 10.7 Social exclusion n.e.c.

 10.8 Rannsóknir og þróun í velferðarmálum
 10.8 R&D Social protection

 10.9 Almannatryggingar og velferðarmál, ótalin annars staðar.
 10.9 Social protection n.e.c.

#### 10.3.4 Gross fixed capital formation

In section 5.10 a description is given of the cross classification of gross fixed capital formation by activity and type of asset. The Enterprise Accounts Register allows the same breakdown by activity as exists in the production approach. A detailed breakdown by type of assets can also be derived from the Enterprise Accounts Register. The grouping of assets depends on the rate of depreciation allowed for in the tax laws. These groups are 10. Each of these groups is further disaggregated by type of assets which enables classification of assets by Pi6 classification at least.

#### Table 10-4 These groups and the main sub groups are the following

#### 1. Motor vehicles for industrial use

Jeeps for less than nine persons

Other motor vehicles for less than nine persons, excluding taxis

#### 2. Ships, aircraft and pertaining equipment

Aircrafts

Boats less than 12 GRT

Other ships and boats (6 sub groups)

#### 3. Manufacturing machinery and equipment

Fish processing machinery

Other food processing machinery

Other machinery (13 sub groups)

#### 4. Office machinery and computers

Furnishings, fitment

Telephone systems

Computers

Software

Other office machinery (6 sub groups)

#### 5. Machinery and equipment other, such as vans, coaches, taxis, bulldozers etc.

(19 sub groups)

#### 6. Constructions

Office buildings

Storefront

Dwelling house

Other construction (17 sub groups)

#### 7. Non renewable subsoil assets such as non-metallic mineral reserves, sand pits etc.

Graval and sand pits

Other non renewable subsoil assets

#### 8. Intangible nonproduced assets, such as purchased goodwill, patented entities etc.

Goodwill

Patents and trade marks

Copyright

Other purchased right

#### 9. Assets, not depreciated, according to tax laws, such as land, fishing quotas, valuables etc.

Land and building sites

Fishing quotas (13 sub groups by fish species)

Valuables

Other assets not depreciated

#### 10. Other assets, not depreciated such as production rights in agriculture, start-up costs etc.

3 sub groups

The total number of sub-groups is 85. Some of these items are not gross fixed capital formation following national accounts definitions although the items are investments from the enterprises point of view. Therefore, it is necessary to eliminate some of the items. Such a detailed breakdown as described above facilitates this work.

# Chapter 11. Main data sources used

## 11.1 Statistical surveys and other data sources used for the production approach

The compilation of national accounts in Iceland is characterized by an intensive use of administrative registers. Direct data collection using questionnaires plays a negligible role. In estimating production accounts the following registers are the most important ones:

- 1. The Enterprise Register, (for short Business Register)
- 2. Enterprise Accounts Register (EAR)
- 3. VAT Register
- 4. Payroll Register
- 5. Pay-as-you-earn Register
- 6. Customs database

Registers 1-5 are mainly used for the production approach but in fact there is not a clear cut distinction in use of sources for production and expenditure approaches. Most of them are directly or indirectly used for most approaches. Item 6, the Custom database, are mainly used for the expenditure approach but it is also used for production approach in many cases for checking and evaluating the results.

A description of registers 1-5 is given in section 3.1.2 above. The *Enterprise Accounts Register* is the newest of these registers. The actual use of this register for statistical production started for the year 1997 and this register now plays a central role for all business enterprises. The advantages and disadvantages of this register are described in the section mentioned. One of the main disadvantages is that this source is enterprise oriented, not establishment oriented. The activity breakdown is very detailed but each activity is rather heterogeneous and reflects the enterprise structure where enterprises are engaged in many activities.

Legally all enterprises in Iceland are obliged to be registered in the Business Register and otherwise it is impossible for them to open a bank account. Therefore it can be stated that practically all enterprises are registered in the Business Register. The identification number given to each enterprise in the Business Register is used in all other registers so here is a full consistency. However, there are problems to keep consistency in classification between different sources. On receiving the EAR the classifications there are compared with the classifications of the VAT Register, Business Register and the EAR from the previous year. Where the classification does not match an attempt is made to use other sources to find out which classification is the right one and the EAR is updated accordingly. After that Statistics Iceland uses the classification from the EAR for other data.

The main advantages of the Pay-as-you-earn and VAT registers are that they are updated continuously.

Data on external trade of goods are retrieved from the Customs database, based on the date of customs clearance of the declaration. The external trade database within Statistics Iceland is updated monthly with declarations cleared by customs in the previous month. All changes regarding HS numbers in external trade are published in the Law and Ministerial Gazette and are, as a result, included in the external trade database.

Population census is not undertaken on a regular basis. The last census was conducted in 1981 but the result has not yet been published. On the other hand, a national population register is maintained and updated continuously but the information therein does not allow grouping people living together into households. It is only possible to link children up to 18 years to their parents and pair couples who are married or registered to be living together.

The thresholds values for records entering the registers differ by registers:

- The Enterprise Accounts Register: There are no threshold values but enterprises having annual turnover less than 500 000 ISK are allowed to deliver more aggregated data.
- The VAT Register: The threshold value is annual turnover less than 500 000 ISK.
- Customs database: The threshold value for individual records is ISK 500.
- PAYE Register: No thresholds and all salaried employees and self-employed are registered.

Apart from these registers, other registers of more specified character were used in individual industries. Some of them will be described in the following.

#### Agriculture and agricultural products

The Agricultural Economic Institute collects a sample of annual accounts in "ordinary farming" that is farming of cattle, sheep and horses. Statistics Iceland makes use of these accounts in constructing the production accounts for these industries.

The Farmers Association of Iceland compiles statistics of the quantity and value of all agricultural products. Data are collected on a monthly basis and cover sales, production and inventories. Sales of products from agricultural holdings to processing plants is collected as well as direct sale to the retail trade or consumers. Data on the value of agricultural products, such as processed milk and meat, are collected from the Farmers' Association and the Icelandic Dairy Association. These figures are of complete coverage and they are used for grossing up the corresponding industries.

#### Fishing and fish processing

Directorate of Fisheries, former Fisheries Association of Iceland compiles the total quantity and value of the total fish catch of all Icelandic fishing vessels irrespective of whether the catch is landed domestically or abroad. Samples are not used. The figures are on a monthly basis and classified by species. The quality of the figures is considered to be very high. That can be explained by the fact that approximately 96 percent of the value of the marine production is exported and figures on exported goods are generally very reliable. Because of this it can easily be verified if the relationship between the value of catch bought by each processing plant and the export value of production looks reasonable.

#### Fish farming

The Institute of Freshwater Fisheries collects data on the production of fish farming as well as the number of salmons and trouts caught by angling rod in selected rivers. Figures on average weight and thereby the total quantity of fresh water fishing is also available.

#### **Manufacturing**

Statistics Iceland collects annual data on the total value of sold manufactured products, that is ISAT divisions 15-36. The data are broken down by six-eight digit Prodcom code. The data comprise a total of 150 products. These data are already used in estimating the volume of manufacturing products and to some extent they are used in estimating the total size of each activity.

#### **Electricity** and hot water supply

The National Energy Authority compiles production statistics from all suppliers of electricity and hot water. This includes both the volume and the value of production. A part of these statistics are on a monthly basis such as the production of electricity.

#### **Tourism**

Statistics Iceland collects on a monthly basis data on overnight stays in hotels and guesthouses by region within Iceland, the citizenship of guests and the length of stay. Statistics Iceland collects these data directly from the hotels and guesthouses.

#### **Financial intermediation**

The Financial Supervisory Authority compiles and processes the company accounts of most banking and insurance and pension funds. The accounts collected are of almost complete coverage and only minor grossing up is needed. During the last few years just a few minor funds are missing and only in the banking sector.

#### The dwelling services

The single biggest industry in the activity K is dwelling services. The output of these services is now estimated from the household expenditure survey and a special survey conducted by Statistics Iceland in 1999.

## 11.2 Statistical surveys and other data sources used for the income approach

The income approach in Iceland is still under construction with the emphasis on sectoral accounting but an independent estimate of GDP according to this approach will not be made. So far the data sources used for the income approach are more or less the same as those used for the output and expenditure approach.

## 11.3 Statistical surveys and other data sources used for the expenditure approach

### 11.3.1 Household final consumption expenditure

#### **Customs database**

Of individual data sources used for estimating household final consumption, the customs database i.e. external trade statistics is the most vital one. The data are compiled by the customs authorities but processed for statistical purposes by Statistics Iceland. Goods in external statistics are classified according to the HS-system (Harmonised Commodity Description and Coding System). In the Icelandic version of the system there are approximately 8000 tariff numbers. Of these goods it is assumed that some of them are entirely consumer goods. Other are considered as being goods of multi-purpose use and for these goods a certain percentage is assumed to be consumer goods. In section 5.15 a further description is given of this source.

#### Household expenditure survey

During the period 1985-1995 household expenditure surveys were carried out with the interval of five years and the weights in the CPI revised consequently. A survey was carried out in 1995 and the index from 1997-2001 was largely based on its results. From the year 2000 household expenditure surveys are carried out continuously and from March 2002 the results are used for annual rebasing of the CPI.

The survey cycle is three years and Statistics Iceland selects as a single-stage random sample for the HES for approximately 1,200 household units each year from the national population register. The actual number of responding households over the three-year period is in the interval 1,700-1,800 each year; the response rate being 45-49 percent due to non-response and other factors. Statistics Iceland corrects for the bias attributable to the non-respondents, using data obtained from the HES and from other sources on family size and type and other major household characteristics. Statistics Iceland also compares the data with geographical distribution data from the population register.

The samples of households for each year are spread evenly over the year in 26 two-week subsamples. Respondents submit information of day-to-day expenses and also report expenditures for a three-month period for less frequently occurring expenses. Extensive use is made of the receipt approach by collecting cash register receipts in place of purchases itemized in diaries provided to respondents. By 2002, 77 percent of all entries were taken from cash register receipts. In the case of food and beverages, 89 percent of entries were taken from cash register receipts. In the remaining cases, Statistics Iceland used itemized data reported by respondents in diaries.

Household expenditure data are compiled on a three-year moving average basis. For example, data have been compiled for the years 2004 to 2006. The data for 2004 and 2005 were recalculated at 2006 prices for the purposes of deriving CPI weights. Standard errors are calculated for the main aggregates arising from the HES data. Standard errors for total expenditures are less than 2 percent and for groceries less than 1 percent. Where standard errors are greater than 20 percent, those particular data cells show an asterisk accompanying the figure indicating that the figure should be used with caution.

#### Other main sources

Other main sources used for estimating the household final consumption are the five main registers of transverse character mentioned in section 11.1 above.

### 11.3.2 Government final consumption

The data on general government finances, and government consumption, are based on complete accounting information for central and local government units as well as for the social security system.

#### The Central Government

The sub sector central government in the national accounts is mainly based on accounting information from the Budgetary Central Government Annual Account (the State Account). The State Account gives relatively detailed data on the overall incomes and expenditures as well as key figures for every institution included in the central government account. In the A-part of the account, data is available on both public and quasi-public institutions such as schools and hospitals, etc. The B-part of the account contains data on the public non-financial and financial institutions which are defined as market activity and outside the government activity. The distinction between A and B-part of the central government accounts is similar to the borderline followed in making a distinction between non-market activity and market activity in the national accounts system.

#### **The Local Governments**

The information on the sub-sector *Local government* is primarily derived from a new unit, the Local Authorities' Reporting Unit, which is an information unit established in co-operation between the Association of Local Authorities, Statistics Iceland and the Ministry of Social Affairs. That unit is operated by the Association of Local Authorities and it collects and processes a very detailed financial data from all local authorities. The number of local authorities has been diminishing over the last few years. They were 124 in 1999 but in 2007 they are 79. From a statistical point of view this decrease in numbers is positive because the quality of the data

normally improves when the units become bigger. The accounting procedures among local authorities are standardized, so there is no need for adjustments because of discrepancies between them. From the same source a use is made of detailed information on both municipal income tax and real estate tax as well as on local government expenditures.

In addition to the information on local governments obtained from the Reporting Unit, Statistics Iceland gathers annual accounts from a few of the largest cities and towns. These accounts are used to acquire further disaggregation of the data, for example on the share of compensation of employees in government final consumption and on purchases, imputed pensions and sales of goods and services. This sample of accounts is also used as the main source of the March version of the annual accounts, i.e. the first estimate as well as quarterly estimates.

Finally it should be mentioned that *The Communal Equalization Fund* is recorded as a part of the local government sector. Its main purpose is to equalize the different economic conditions of local authorities. The Fund receives a contribution from the central government amounting to 1.4% of the total tax revenue as well as direct contributions from central and local governments. These incomes are so redistributed to local governments following definite criteria in order to equalize the economic performance.

#### The social security system

The data on the sub-sector social security system is based on accounting information from the *State Social Security Institute*. This information covers health insurance, pension and disability benefits, accident insurance benefits and unemployment insurance benefits. The information is rather detailed.

#### 11.3.3 Gross fixed capital formation

Following are the most important data sources for estimating the gross fixed capital formation:

- The Enterprise Accounts Register
- The Land Registry of Iceland
- The c.i.f. value of imported capital goods
- The financial accounts of central and local governments

The utilization of these sources for estimating Gross fixed capital formation is described in section 5.10 above.

#### 11.3.4 External trade

Statistics on exports and imports of goods are compiled on a monthly basis by Statistics Iceland on the basis of customs data. The customs authorities register data on exports and imports based on declarations from exporters and importers.

The compilation of the data on exports and imports of services is based on a variety of sources including the ITRS system or the settlement system operated by the Central Bank and various mandatory surveys and questionnaires. These methods are now under revision where the settlement system will be replaced more or less by direct data collection from the enterprises. Provided that the present time schedule will hold, statistics following the revised system will be published from the first quarter of 2009.

The sources used in external trade are further described in section 5.15-5.18 above.

## **Appendix 1**

## English and Icelandic names of main concepts and institutions mentioned in the Inventory

institutions mentioned		Cittory
T. P. I.	English	T 1 1
English Administration of Occupational Safety and	abbreviation	Icelandic
health in Iceland		Vinnueftirlitið
Agricultural Economic Institute	AEI	Hagþjónusta landbúnaðarins
Agricultural Production Board	APB	Framleiðsluráð landbúnaðarins
Association of Icelandic Concessionaires	AH D	Félag sérleyfishafa
Association of Icelandic Furniture Makers		Félag húsgagna- og innréttingaframleiðenda
Association of Local Authorities in Iceland		Samband ísl. sveitarfélaga
Budgetary central government annual account		Ríkisreikningur
Building Research Institute		Rannsóknastofnun byggingariðnaðarins
Capital Area Cemeteries		Kirkjugarðar Reykjavíkurprófastsdæma
CBI's Statistics and IT		Seðlabanki Íslands - Upplýsingasvið
Central Bank of Iceland	CBI	Seðlabanki Íslands
Communal Equalisation Fund	СЫ	Jöfnunarsjóður sveitarfélaga
Competition Investigation Agency		Samkeppnisstofnun
Consumer Price index	CPI	Vísitala neysluverðs
	CPI	Íslensk erfðagreining
DeCode genetics Director of Customs		
		Tollstjórinn í Reykjavík
Director of Internal Revenue		Ríkisskattstjóri
Director of Tax Investigation		Skattrannsóknastjóri
Directorate of Fisheries	EAD	Fiskistofa
Enterprise Accounts Register	EAR	Ársreikningar fyrirtækja á samræmdu formi
Enterprise Register		Fyrirtækjaskrá (Ríkisskattstjóra)
Farm Accounting Statistics Office	DAI	Búreikningastofa landbúnaðarins
Farmers Association of Iceland	FAI	Bændasamtök Íslands
Federation of Icelandic Industries		Samtök iðnaðarins
Financial Management Authority	T0 1	Fjársýsla ríkisins
Financial Supervisory Authority	FSA	Fjármálaeftirlitið
Fisheries Association of Iceland		Fiskifélag Íslands
Fisheries Price Fixing Board		Verðlagsráð sjávarútvegsins
Gardeners Marketing Company		Sölufélag garðyrkjumanna
Household Expenditure Survey	HES	Rannsókn á útgjöldum heimila (Neyslukönnun)
Housing Financing Fund		Íbúðalánasjóður
Icegrid		Landsnet
Icelandic Centre for Research		RANNÍS
Icelandic Civil Aviation Administration		Flugmálastjórn Íslands
Icelandic Comm. on Trade Proceudures and	IcePro	Samstarf um rafræn viðskipti
e-Commerce Icelandic Dairy Association	icerio	Samtök afurðastöðva í mjólkuriðnaði
Icelandic Securities Depository		Verðbréfaskráning
Icelandic Film Centre		
		Kvikmyndamiðstöð Íslands
Icelandic Maritime Administration		Siglingastofnun Íslands Ríkisendurskoðun
Icelandic National Audit Office	ICT	Staðlaráð Íslands
Icelandic Standards	IST	
Icelandic Student Loan Fund Icelandic Tourist Board	LIN	Lánasjóður ísl. námsmanna Ferðamálastofa
Icelandic Travel Industry Association		Samtök ferðaþjónustu
Institute of Freshwater Fisheries		Veiðimálastofnun
Institute of Labour Market Research	DCK	Kjararannsóknanefnd
Internal Revenue Directorate	RSK	Ríkisskattstjóri
International Monetary Fund	IMF	Alþjóðagjaldeyrissjóðurinn
International Transations Reporting System	ITRS	Gjaldeyrisviðskiptakerfið - GV kerfið
ISAT 95 activity classification		Icelandic version of NACE rev.1

ISAVIA		Flugstoðir
Land Registry of Iceland	LRI	Fasteignamat ríkisins
Local Authorities' Reporting Unit		Upplýsingaveita sveitarfélaga
Ministry of Finance		Fjármálaráðuneyti
National Economic Institute	NEI	Þjóðhagsstofnun
National Energy Authority		Orkustofnun
Pay-as-you-earn Register	PAYE	Staðgreiðsluskrá
Payroll Register		Launamiðaskrá
Pharmaceutical Pricing Committee		Lyfjaverðlagsnefnd
Post and telecom administration in Iceland		Póst- og fjarskiptastofnun
Price Equalization Fund		Verðjöfnunarsjóður sjávarútvegsins
Producer Price Index	PPI	Vísitala framleiðsluverðs
Register of Enterprises		Fyrirtækjaskrá (Ríkisskattstjóra)
Reykjavík Milk Distribution Centre		Mjólkursamsalan
Road Traffic Directorate		Umferðarstofa
Housing Financing Fund		Íbúðalánasjóður
State Social Security Institute		Tryggingastofnun ríkisins
State Wine, Spirit and Tobacco Authority	ÁTVR	Áfengis- og tóbaksverslun ríkisins
Statistical Series		Hagtíðindi
Statistics Iceland	SI	Hagstofa Íslands
Statistics Iceland's Business Database		Fyrirtækjaskrá til hagskýrslugerðar
The National Registry		Þjóðskrá
Trade Council of Iceland		Útflutningsráð Íslands
Wage Index		Launavísitala

### **Appendix 2**

#### **Process Tables**

#### 1. Introduction

The main feature of Icelandic national accounts is their reliance on administrative data. Most frequently these data are collected for purposes other than statistical ones, like taxation. Direct inquiries only exist in exceptional cases and the processing of tax assessment data both on a sample basis and using total population is the most common procedure as will be most apparent in the Process Table.

However the reliance on the individual sources differs somewhat for the two individual approaches of national accounts, i.e. the production approach and the expenditure approach.

### 2. Preparation for completing the Process Table

The Process Tables presented here are the first one for Iceland and they refer to the year 2005. The tables were constructed during the first months of 2010 in connection with a revised version of the Inventory originally written in 2008. They were revised in autumn 2010. Owing to this time difference the figures presented in the Process Tables refer to the latest revision of data as presented in autumn 2010. Therefore, they do not fully correspond to the figures in the Inventory. This discrepancy is insignificant in most cases and it can be explained by current revisions but no major revisions have occurred in the meantime. However, the table is internally consistent.

#### 3. Analysis of the Process Tables

#### 3.1 Production measure

The main sources for compilation of GDP by production approach are *administrative records*. The Enterprise Accounts Register (EAR) is the far most important source. In most cases the EAR is the starting point in estimating output, intermediate consumption and value added as well as the individual components of value added. *Surveys and censuses* are the main source in the cases of farming of animals or "traditional farming", a subgroup of section A, where data are collected directly from a survey of farms. Data on electricity and hot water supply, section E, are derived from the annual accounts of the firms and additional information from these enterprises in some cases.

Combined data are used in the case of fishing and fish processing where data are compiled from the enterprises in addition to the EAR.

Extrapolation and models are used in some industries. An example of benchmark extrapolation is activity 45.49 Own account construction covering households' residential construction and repair carried out by their own and the construction and repair activity on the farms carried out by the farmers and their families. Another and more important example of benchmark extrapolation is the services of owner occupied dwellings. Benchmark extrapolation also plays an important role in estimating that part of education and health carried out by non-government units.

Various *conceptual adjustments* are made from the items as they appear in the Enterprise Accounts Register and to the proper concepts on the production side. A distinction is made between following adjustments classified as conceptual:

- Stock appreciation, i.e. eliminating holding gains on stocks due to inflation
- Net recording of goods purchased for resale, refers to wholesale and retail trade only

- Various adjustments of operating expenses as recorded in the EAR in order to reach the definition of intermediate consumption in national accounts. Examples thereof:
  - Insurance premiums replaced by insurance services following the national accounts definitions
  - Purchase of software capitalized, not recorded as current expenditure as exist to some extent in the bookkeeping practices
  - o Threshold value for capital goods adjusted to the national accounts definitions
  - o Various adjustments to approach income in kind as defined in national account
- Allocation of FISIM by industries

Of these items above the single most important adjustment made is the net recording of goods purchased for resale and this item only occur in the wholesale and retail trade.

A residual item is recorded in the column of conceptual adjustments. This residual refers to unallocated taxes on production less subsidies on production and is calculated as the difference between the total value of these items according to the government's accounts and already recorded taxes and subsidies on production in individual activities.

The item *Exhaustiveness adjustment* occurs in a few activities where an attempt is made to directly estimate hidden activities. These are especially in:

- 45.49 Repair and residential construction of owners' occupied dwellings
- 45.49 The own activity of farmers in residential construction and outhouses construction and repair
- 55.2 Camping sites and other provision of short-stay accommodation
- 60.22 Taxi operation
- 93.24.1 Freight transport by delivery vans

The final item in the Process Table before the final estimate is reached is the *Balancing adjustments*. That item plays an important role in the Icelandic national accounts because that item reflects the overall difference between the expenditure approach and the production approach when all other adjustments have been taken into account. That difference, i.e. the statistical difference, is eliminated by distributing it proportionally on the intermediate consumption of industries. Therefore a balancing item occurs in every industry.

#### 3.2 Expenditure measure

#### 3.2.1 Total final consumption expenditure

In the case of Household final consumption the data sources are more diverse than in the production approach. The single most important source is imported consumer goods amounting to around a quarter of the value of household final consumption. This source is classified as *Administrative records* in the case where no shares are applied to import figures. VAT turnover is also classified as administrative records. Expenditure on alcoholic beverages is obtained from ATVR and the source is also classified as administrative records.

Surveys and censuses are of similar importance as administrative records and these sources are especially playing important role in medical care, package tours and lotteries. In these cases data are collected directly from the prime source and the questions can be very specific.

Of the sub-items of *Extrapolations and models, other extrapolation* plays an important role. Over 40% of the total household final consumption is derived from that source. The reason for such a

high percentage is that when shares or ratios are applied on imported data then the source is classified as other extrapolation.

Expenditures of NPISH are entirely based on benchmark extrapolation, also restaurants.

Whereas the Household final consumption is estimated directly from the individual sources where the national accounts principles are followed, there is not considered any need for further adjustments and therefore these columns are empty in the Process Table.

Government final consumption is mainly compiled from the State Account and the Local Authorities' Reporting Unit. These sources are both classified as administrative units. Two additional data sources are utilized here besides the government accounts. One is a model based calculation of consumption of fixed capital, based on the PIM method and classified as extrapolation and models. The other is a special calculation of the imputed social contribution to the Civil Servants' Pension Fund, classified as conceptual adjustments.

#### 3.2.2 Gross fixed capital formation

Gross fixed capital formation is mainly based on the Enterprise Accounts Register which is administrative records. Apart from this source information is also collected directly from the enterprises in some important cases like in power intensive industries and in electricity and hot water utilities. That source is classified as surveys and censuses. Benchmark extrapolation is playing a minor role and restricted to major repair of residential construction and software investments.

#### 3.2.3 Exports and imports of goods and services

Exports and imports of ships and airplanes and major repair of ships are mainly derived from the enterprises and that is classified as *surveys and censuses*. In some cases information are derived both from the customs data and some additional information is collected from the enterprises. That is classified as combined data.

In most other cases the custom data is the main source and it is classified as administrative records.

Some minor conceptual adjustments are made. As the value of imports in Icelandic kronur (ISK) was until 2008 reached by converting the foreign currency value of the commodity to ISK based on the selling exchange rate of the currency concerned and the value of exports was based on the buying exchange rates. Both these figures were then adjusted to mid exchange rate by the Central Bank as part of BOP. This adjustment is classified as *conceptual adjustments*.

In the case of exports and imports of services both surveys and censuses and administrative records are utilized. The settlement system is considered as *administrative records*. Direct reporting from individual enterprises is considered as *surveys and censuses* as well as detailed debit and credit card data collected from the card companies.

#### 3.2.4 Primary income receivable from the rest of the world

Primary income to and from abroad are mainly based on two sources. Dividends and reinvested earnings are based on direct information from enterprises and classified as *surveys and censuses*. Interests, on the other hand, are estimated from stock data of assets and liabilities and estimated interest rates. These are classified as combined data. Correction related to FISIM calculations are recorded as conceptual adjustments.

### 4. Tabular presentation

Tabular presentation of the Process Tables is presented on the following pages. The first part of the tables shows the importance of various sources and the adjustments that are added to input data to produce final balanced figures. The columns are split into two groups. The first distinguishes the type of source data and the second seperates different kinds of adjustments made. Production and expenditure approaches are shown seperately as well as the transition to GNI.

The second part of the tables provides cross-references cell by cell to the corresponding section in the main text.

Table A2-1 Data\_Layer

						E	Basis for NA Figu	res				
Compilation of CNI		Level of Details	0	A desired states the se	0		Extrap	olation and Mo	odels			
Compilation of GNI			Surveys & Censuses	Administrative Records	Combined Data	Benchmark extrapolations	CFM and ratios	CFC(PIM) & Imputed Dw.	Other E&M	Total Extrap+Models	Other	Total
PRODUCTION APPROACH	A17											
		TOTAL										
Output of goods and services (at basic prices)			22131	1940168	154506	135560	93545	0	720	229825	0	2346629
Intermediate consumption (at purchasers' prices )			11690	1239719	89545	57509	24495	0	0	82004	0	1422957
Gross value added (at basic prices)			10441	700449	64961	78050	69050	0	720	147820	0	923671
	A	Agriculture, hunting and forestry	20404	7440								20242
Output of goods and services (at basic prices)			22131	7118	0	0	0	0	0	0	0	29249
Intermediate consumption (at purchasers' prices )			11690	4004	0	0	0	0	0	0	0	15694
Gross value added (at basic prices)			10441	3115	0	0	0	0	0	0	0	13556
	_											
	В	Fishing										
Output of goods and services (at basic prices)	<b>.</b>		0	3349	72204	0	0	0	0	0	0	75553
Intermediate consumption (at purchasers' prices )			0	2632	30113	0	0	0	0	0	0	32745
Gross value added (at basic prices)			0	717	42091	0	0	0	0	0	0	42808
	С	Mining and quarrying										
Output of goods and services (at basic prices)			0	2254	0	0	0	0	0	0	0	2254
Intermediate consumption (at purchasers' prices )			0	1279	0	0	0	0	0	0	0	1279
Gross value added (at basic prices)			0	976	0	0	0	0	0	0	0	976
	D	Manufacture										
Output of goods and services (at basic prices)			0	230347	82302	0	0	0	0	0	0	312648
Intermediate consumption (at purchasers' prices )			0	147280	59431	0	0	0	0	0	0	206712
Gross value added (at basic prices)			0	83066	22870	0	0	0	0	0	0	105936
	E	Bectricity										
Output of goods and services (at basic prices)			0	55177	0	0	0	0	0	0	0	55177
Intermediate consumption (at purchasers' prices )			0	24191	0	0	0	0	0	0	0	24191
Gross value added (at basic prices)			0	30986	0	0	0	0	0	0	0	30986
	F	Construction										
Output of goods and services (at basic prices)			0	209917	0	11726	0	0	0	11726	0	221643
Intermediate consumption (at purchasers' prices )			0	129873	0	0	0	0	0	0	0	129873
Gross value added (at basic prices)			0	80044	0	11726	0	0	0	11726	0	91771
	G	Wholesale and retail trade, repair of vehicles and personal	l and HH goods									
Output of goods and services (at basic prices)			0	663239	0	0	0	0	0	0	0	663239
Intermediate consumption (at purchasers' prices )			0	559287	0	0	0	0	0	0	0	559287
Gross value added (at basic prices)			0	103951	0	0	0	0	0	0	0	103951
	н	Hotels and restaurants										
Output of goods and services (at basic prices)			0	38314	0	0	0	0	0	0	0	38314
Intermediate consumption (at purchasers' prices )			0	23013	0	0	0	0	0	0	0	23013
Gross value added (at basic prices)			0	15301	0	0	0	0	0	0	0	15301
	ı	Transport, storage and communication										
Output of goods and services (at basic prices)		_	0	202167	0	0	0	0	0	0	0	202167
Intermediate consumption (at purchasers' prices )			0	140559	0	0	0	0	0	0	0	140559
Gross value added (at basic prices)			0	61607	0	0	0	0	0	0	0	61607
											ĺ	
	J	Financial intermediation										
Output of goods and services (at basic prices)			0	102602	0	0	0	0	0	0	0	102602
Intermediate consumption (at purchasers' prices )			0	23528	0	0	0	0	0	0	0	23528
Gross value added (at basic prices)				79074							-	79074

	Level of Details				Adjustments			
Compilation of GNI			Data validation	Conceptual	(1) Explicit Cut-off	(1) Explicit exhaustiveness	Balancing	Final estimate
PRODUCTION APPROACH	<del></del>							
PRODUCTION APPROACH	A17	TOTAL	<b></b>					
Output of goods and corpless (at basis prices)		TOTAL	0	-482602	0	16497	6992	1887517
Output of goods and services (at basic prices) Intermediate consumption (at purchasers' prices )	$\vdash$		0		0		48774	1029093
Gross value added (at basic prices)			0	-30475	0		-41781	858426
Or 033 Value added (at basic prices)	_			00470		7011	41701	000420
	Α	Agriculture, hunting and forestry	1					
Output of goods and services (at basic prices)	,	3	0	-5	0	0	0	29245
Intermediate consumption (at purchasers' prices )	-		0	-50	0	0	903	16546
Gross value added (at basic prices)			0	46	0	0	-903	12698
	В	Fishing	1					
Output of goods and services (at basic prices)	)		0	-19	0	0	0	75535
Intermediate consumption (at purchasers' prices)			0	94	0	0	1883	34722
Gross value added (at basic prices)			0	-112	0	0	-1883	40813
	С	Mining and quarrying						
Output of goods and services (at basic prices)	4		0	-4	0	0	0	2251
Intermediate consumption (at purchasers' prices )	ــــــ		0		0	0	74	1371
Gross value added (at basic prices)	₩		0	-22	0	0	-74	880
	D	Manufacture						
Output of goods and services (at basic prices)	4—		0	-267	0	0	0	312381
Intermediate consumption (at purchasers' prices )	<u> </u>		0		0	0	11890	220867
Gross value added (at basic prices)	—		0	-2531	0	0	-11890	91515
	<del></del>		•					
	E	Electricity			•			55477
Output of goods and services (at basic prices)	┼		0	4007	0	0	1391	55177 27489
Intermediate consumption (at purchasers' prices)	_	<u> </u>	0	1907 -1907	0	0	-1391	
Gross value added (at basic prices)	$\leftarrow$	<del> </del>	0	-1907		U	-1391	27688
	_	Construction	1					
Output of goods and services (at basic prices)	.=	Construction	1	-386	0	15502	0	236759
Intermediate consumption (at purchasers' prices)	_	<del></del>	0		0	8908	7048	148776
Gross value added (at basic prices)	_	+	0		0	6594	-7048	87983
Or obs Tallas dadod (al basis prisses)	-		Ů	5551		0001	7010	0.000
	G	Wholesale and retail trade, repair of vehicles and pers	sonal and HH goods	1				
Output of goods and services (at basic prices)	_	The second and retain a day, repair or remoise and per-	0		0	0	0	175906
Intermediate consumption (at purchasers' prices )	_		0		0	0	4186	82070
Gross value added (at basic prices)	T		0	-5930	0	0	-4186	93836
,								
	н	Hotels and restaurants	1					
Output of goods and services (at basic prices)	,		0	-7	0	539	0	38846
Intermediate consumption (at purchasers' prices )			0	451	0		1344	25158
Gross value added (at basic prices)			0	-457	0	189	-1344	13689
	1	Transport, storage and communication	1					
Output of goods and services (at basic prices)	4		0	-22	0	456	0	202600
Intermediate consumption (at purchasers' prices )			0		0		8098	148013
Gross value added (at basic prices)			0	850	0	228	-8098	54587
			1					
	J	Financial intermediation	1					
Output of goods and services (at basic prices)	4		0	0	0	0	0	102602
Intermediate consumption (at purchasers' prices )	₩	ļ	0		0	0	1353	29597
Gross value added (at basic prices)	1		0	-4715	0	0	-1353	73005

							Basis for NA Figu	res				
Committee of Chil		Lavel of Dataila					Extrap	olation and M	odels			
Compilation of GNI		Level of Details	Surveys & Censuses	Administrative Records	Combined Data	Benchmark extrapolations	CFM and ratios	CFC(PIM) & Imputed Dw.	Other E&M	Total Extrap+Models	Other	Total
	K	Real estate, renting and business activity										
Output of goods and services (at basic prices)				134420	0	28766	93545	0	0	122311	0	256731
Intermediate consumption (at purchasers' prices )				64102	0	10170	24495	0	0	34664	0	98766
Gross value added (at basic prices)			C	70318	0	18596	69050	C	C	87646	0	157965
	_K	Services of owner-occupied dwellings (104)										
Output of goods and services (at basic prices)	_ ^	Services of owner-occupied dwellings (104)			0		93545			93545	0	93545
Intermediate consumption (at purchasers' prices)				0	0	0	24495			24495	0	24495
Gross value added (at basic prices)				0	0	0	69050			69050	0	69050
Oross value added (at basic prices)						,	03000			03000		03030
	L	Public administration and defence; compulsory social	security									
Output of goods and services (at basic prices)		, and a second second	(	78332	0	0	0	C	C	0	0	78332
Intermediate consumption (at purchasers' prices )			0	30407	0	0	0	C	0	0	0	30407
Gross value added (at basic prices)			0	47925	0	0	0	C	C	0	0	47925
,												
	М	Education										
Output of goods and services (at basic prices)			C	63918	0	17154	0	c	c	17154	0	81072
Intermediate consumption (at purchasers' prices )			C	24810	0	12061	0	C	C	12061	0	36872
Gross value added (at basic prices)			C	39107	0	5093	0	C	C	5093	0	44200
	N	Health and social work										
Output of goods and services (at basic prices)			C	96010	0	57977	0	C	C	57977	0	153987
Intermediate consumption (at purchasers' prices )			C	37269	0	25376	0	C	C	25376	0	62645
Gross value added (at basic prices)			C	58742	0	32601	0	C	C	32601	0	91343
	О	Other community, social and personal service activities	es									
Output of goods and services (at basic prices)			C	53005	0	19937	0	C	C	19937	0	72941
Intermediate consumption (at purchasers' prices )			C	27486	0	9902	0	C	C	9902	0	37388
Gross value added (at basic prices)			C	25519	0	10034	0	C	C	10034	0	35553
	P	Private households with employed persons										
Output of goods and services (at basic prices)			C	0	0	0	0	C	720	720	0	720
Intermediate consumption (at purchasers' prices )				0	0	0	0	C	C	0	0	0
Gross value added (at basic prices)				0	0	0	0	C	720	720	0	720
						_					_	_
(global) FISIM			0	0	0	0	0			9	0	0
T				407500	_							407500
Taxes on products	-			167532	0	0	0	0	0	0	0	167532
Value added type taxes	<u> </u>			113897	0	0	0	0	0	0	0	113897
Taxes and duties on imports, except VAT	$\vdash$			49556	0	0	0	0	0	0	0	49556 4079
Other taxes on products Subsidies on products	$\vdash$			94979 9492	0	0	0	0			0	4079 <b>9492</b>
Subsidies oil products	-			9492	U	U	U			4		9492
Residual item												
			40444	050400	0.4004	70050	00050		700	4.47000		4004744
Gross domestic product			10441	858489	64961	78050	69050	0	720	147820	0	1081711

					Adjustments			
Compilation of GNI		Level of Details	Data validation	Conceptual	(1) Explicit Cut-off	(1) Explicit exhaustiveness	Balancing	Final estimate
	K	Real estate, renting and business activity	0	50	0	0	0	050070
Output of goods and services (at basic prices)	₩		0	-52 2367	0	0	5681	256679 106814
Intermediate consumption (at purchasers' prices)	$\vdash$		0	-2419	0	0	-5681	106814
Gross value added (at basic prices)	$\vdash$		U	-2419	U	U	-3081	149865
	к	Services of owner-occupied dwellings (104)						
Output of goods and services (at basic prices)	_	Services of owner-occupied dwellings (104)	0	0	0	0	0	93545
Intermediate consumption (at purchasers' prices )	-		0	1391	0	0	1409	27294
Gross value added (at basic prices)	-		0	-1391	0	0	-1409	66250
			•			-		
	L	Public administration and defence; compulsory social	security					
Output of goods and services (at basic prices)		, , , , , , , , , , , , , , , , , , , ,	0	1812	0	0	3645	83788
Intermediate consumption (at purchasers' prices )			0	3645	0	0	0	34052
Gross value added (at basic prices)			0	-1833	0	0	3645	49737
	М	Education						
Output of goods and services (at basic prices)	,		0	1476	0	0	3347	85895
Intermediate consumption (at purchasers' prices )	t		0	3277	0	0	0	40148
Gross value added (at basic prices)	T		0	-1801	0	0	3347	45746
	N	Health and social work						
Output of goods and services (at basic prices)			0	2219	0	0	0	156207
Intermediate consumption (at purchasers' prices )			0	6836	0	0	3603	73084
Gross value added (at basic prices)			0	-4617	0	0	-3603	83123
	0	Other community, social and personal service activities	es					
Output of goods and services (at basic prices)			0	-15	0	0	0	72926
Intermediate consumption (at purchasers' prices )			0	1628	0	0	1320	40336
Gross value added (at basic prices)			0	-1643	0	0	-1320	32590
	Р	Private households with employed persons						
Output of goods and services (at basic prices)	<u> </u>		0	0	0	0	0	720
Intermediate consumption (at purchasers' prices )	—		0	50	0		0	50
Gross value added (at basic prices)	<b>├</b>		0	-50	0	0	0	670
(alabat) FICINA			اً	_	_	اـ	_	
(global) FISIM	₩		0	0	0	0	0	0
Tayoo on producto	-		0	0	0	0		167532
Taxes on products	$\vdash$		0	0	0		0	113897
Value added type taxes Taxes and duties on imports, except VAT	<del></del>		0	0	0		0	49556
	$\vdash$		0	0	0		0	49556
Other taxes on products Subsidies on products	<del></del>		0	0	0		0	9492
oubaidies on products	<u> </u>		0	0	0	0	0	9492
Residual item			0	10254	0	0	-2	10252
			0		0	7014	44702	
Gross domestic product			U	-20221	U	7011	-41783	1026718

						ı	Basis for NA Figu	res				
Compilation of GNI		Level of Details	Cumunua 8	A due in interestive	Cambinad		Extrap	olation and Mo	odels			
Compliation of GNI		Level of Details	Surveys & Censuses	Administrative Records	Combined Data	Benchmark extrapolations	CFM and ratios	CFC(PIM) & Imputed Dw.	Other E&M	Total Extrap+Models	Other	Total
EXPENDITURE APPROACH												
Total final consumption expenditure			62160	301752	0	83363		132419	265494	481275	0	845187
Household final consumption expenditure	Tot		62160	73323	0	62636	0	113738	265494	441868	0	577351
		Food and non-alcoholic beverages	4921	3447		C		0	58119	58119		66488
		Alcoholic beverages, tobacco and narcotics	0	22629		C		0	0	0		22629
		Clothing and footwear	0	19190		C		0	6452	6452		25641
		Housing, water, electricity, gas and other fuels	0	0		C		113738	0	113738		113738
	€ 05 -	Furnishings, household equipment and routine househ	1476	8626		316		0	26300	26616		36718
	0	Health	9136	0		847		0	6720	7567		16703
	$\sim$	Transport	6518	244		2565		0	91265	93830		100592
	8 08 -	Communication	0	0		643		0	13586	14230		14230
		Recreation and culture	17074	0		8744		0	40784	49528		66603
		Education	0	0		C		0	7538	7538		7538
		Restaurants and hotels	7020	0		33538		0	3548	37086		44106
	12 -	Miscellaneous goods and services	0	0		15983		0	11181	27164		27164
	Tra	nsition to national concept	16016	19187						0		35202
NPISH final consumption expenditure			0	0		20726		0		20726		20726
General government final consumption expenditure	е			228429				18681	0	18681		247110
										0		0
Gross fixed capital formation	Tot		96405	188799	0	6190	0	0	0	6190	0	291395
	1	Products of agriculture, forestry, fishery and aquacult		1746						0		1746
	2	Metal products and machinery equipment	14938	40275		3737				3737		58950
	9 3	Transport equipment	207	17800						0		18007
	4	Construction of housing		56012		2453				2453		58466
	5	Other constructions	81260	70606						0		151866
	6	Other products		2360						0		2360
Changes in inventories			-862							0		-862
Acquisitions less disposals of valuables										0		0
Exports of goods and services			64822	256789	2064	0	0	0	0	0	0	323675
goods			7584	184708	2064	C	0	0	0	0	0	194355
services			57238	72082	0	C	0	0	0	0	0	129320
Imports of goods and services			91151	354476	1825	0	0	0	0	0	1666	449118
goods			10075	276995	1825	C	0	0	0	0	0	288895
services			81076	77481	0	C	0	0	0	0	1666	160223
										0		0
Residual item										0		0
Gross domestic product			131375	392864	239	89553	0	132419	265494	487465	-1666	1010277

					Adjustments			
Compilation of GNI		Level of Details	Data validation	Conceptual	(1) Explicit Cut-off	(1) Explicit exhaustiveness	Balancing	Final estimate
EXPENDITURE APPROACH								
T. (-) (")			0	40700	0	0		004070
Total final consumption expenditure	T-4-		0	10.00	0		0	861976 588633
Household final consumption expenditure	Tota	ood and non-alcoholic beverages	U	11202	U	U	U	66488
		Alcoholic beverages, tobacco and narcotics						22629
		Clothing and footwear						25641
<u> </u>		Housing, water, electricity, gas and other fuels						113738
(1-dig)		furnishings, household equipment and routine househ	old maintenance					36718
5.		-urnisnings, nousenoid equipment and routine nousen Health	old maintenance					16703
COICOP		Fransport						100592
Ĭ.		Transport Communication						14230
0		Recreation and culture						66603
		Education						7538
		Restaurants and hotels						44106
		Miscellaneous goods and services		11282				38446
		sition to national concept		11202				35202
	II all	Sition to national concept						33202
NPISH final consumption expenditure								20726
General government final consumption expenditure				5507				252617
Contral government man contral phone experience								
Gross fixed capital formation	Tota		0	0	0	0	0	291395
oroso naou ouphur romauon	1	Products of agriculture, forestry, fishery and aquacult	ure					1746
	2	Metal products and machinery equipment						58950
o o	3	Transport equipment						18007
Pié	4	Construction of housing						58466
	5	Other constructions						151866
	6	Other products						2360
	Ĺ							2000
Changes in inventories								-862
Acquisitions less disposals of valuables		İ						0
Exports of goods and services			0	1834		0	0	325510
goods				579				194934
services				1256				130576
Imports of goods and services			0	2183		0	0	451300
goods				-861				288034
services				3043				163266
Residual item								0
Gross domestic product			0	16441	0	0	0	1026718

						i	Basis for NA Figu	res				
Compilation of GNI		Level of Details					Extrap	olation and M	odels			
Compliation of GNI		Level of Details	Surveys & Censuses	Administrative Records	Combined Data	Benchmark extrapolations	CFM and ratios	CFC(PIM) & Imputed Dw.	Other E&M	Total Extrap+Models	Other	Total
INCOME APPROACH												
Compensation of employees			0	0	0	0	0		0	0	o	
Non-Financial Corporations										0		C
Financial Corporations										0		C
General Government										0		C
Households										0		0
NPISH										0		0
(0) 0												
(2) Gross operating surplus			U	U	U	U	0	0	0	0	U	
Non-Financial Corporations										0		0
Financial Corporations										0		0
General Government										0		. 0
Households										0		. 0
NPISH										0		0
(2) Mixed income										0		0
Taxes on production and imports										0		0
Subsidies										0		0
Capacita												
Residual item												
Gross domestic product			0	0	0	0	0	0	0	0	0	0
Gross National Income												İ
Oross National Income												İ
Compensation of employees received from the rest	of the	world	3247	1392	0					0		4639
Compensation of employees received from the rest of the v			3247 0	1533	0					0		1533
Property income received from the rest of the world			65006	1333	21486					0		86492
Property income paid to the rest of the world			66776	0	61564					0		128340
Taxes on production and imports			30770	0	31304					0		120340
Subsidies										0		- 0
			44640	050040	0.4000	70050	00050	_	700	4.47000	_	4040000
Gross national income			11918	858348	24883	78050	69050	0	720	147820	0	1042969

					Adjustments			
Compilation of GNI	Level of Details		Data validation	Data validation Conceptual		(1) Explicit exhaustiveness	Balancing	Final estimate
INCOME APPROACH								
Compensation of employees			0	0	0	0	0	581696
Non-Financial Corporations								0
Financial Corporations								0
General Government								0
Households								0
NPISH								0
(2) Gross operating surplus			0	0	0	0		269708
Non-Financial Corporations								0
Financial Corporations								0
General Government								0
Households								0
NPISH								0
(2) Mixed income								0
Taxes on production and imports								196033
Subsidies								20719
Residual item								0
Gross domestic product			0	0	0	0	0	1026718
Gross National Income  Compensation of employees received from the rest	of the	world						4639
Compensation of employees paid to the rest of the v								1533
				-1256				85236
Property income received from the rest of the world								
Property income paid to the rest of the world				-3043				125297
Taxes on production and imports								0
Subsidies								0
Gross national income			0	-18434	0	7011	-41783	989763

Table A2–2 Layer 2

				Basis for NA Figu	ires							
								oolation and M	odels			
Compilation of GNI		Level of Details	Surveys & Censuses	Administrative Records	Combined Data	Benchmark extrapolations	CFM and ratios	CFC(PIM) & Imputed Dw.	Other E&M	Total Extrap+Models	Other	Total
	<b></b>		<b></b>	+	<del> </del>	extrapolations	<b></b>	impated bir.	<b></b>	- Extrap+moders		· <del> </del> -
PRODUCTION APPROACH	A17											
TRODUCTION ALTROACH	All	TOTAL										
Output of goods and services (at basic prices)		TOTAL										
Intermediate consumption (at purchasers' prices )												
Gross value added (at basic prices)												
	Α	Agriculture, hunting and forestry										
Output of goods and services (at basic prices)	)		3.7	3.7								3.7
Intermediate consumption (at purchasers' prices )			3.7	3.7								3.7
Gross value added (at basic prices)	)		3.7	3.7								3.7
	ь	Fishing										-
Output of goods and services (at basic prices)	, F	Tishing		3.8	3.8							3.8
Intermediate consumption (at purchasers' prices )		1		3.8	3.8							3.8
Gross value added (at basic prices				3.8	3.8							3.8
, , ,												
	С	Mining and quarrying										
Output of goods and services (at basic prices)	)			3.9	3.9							3.9
Intermediate consumption (at purchasers' prices )	1			3.9	3.9							3.9
Gross value added (at basic prices	)			3.9	3.9							3.9
	D	Manufacture										
Output of goods and services (at basic prices)	1			3.10.2	3.10.1							3.10
Intermediate consumption (at purchasers' prices )	-			3.10.2 3.10.2	3.10.1 3.10.1							3.10
Gross value added (at basic prices)	-			3.10.2	3.10.1							3.10
	F	Electricity										
Output of goods and services (at basic prices	, i –	Lectricity	3.11									3.11
Intermediate consumption (at purchasers' prices)			3.11									3.11
Gross value added (at basic prices)			3.11									3.11
, , ,												
	F	Construction										
Output of goods and services (at basic prices)	)			3.12		3.12				3.12		3.12
Intermediate consumption (at purchasers' prices )				3.12								3.12
Gross value added (at basic prices)	)			3.12		3.12				3.12		3.12
												-
	G	Wholesale and retail trade, repair of vehicles and per	sonal and HH goods									
Output of goods and services (at basic prices Intermediate consumption (at purchasers' prices	-			3.13								3.13
Gross value added (at basic prices)				3.13								3.13
Gross value added (at basic prices)	+			0.10								3.13
	н	Hotels and restaurants										
Output of goods and services (at basic prices)	1			3.14								3.14
Intermediate consumption (at purchasers' prices )		<u>                                     </u>		3.14								3.14
Gross value added (at basic prices)				3.14								3.14
	ļi .	Transport, storage and communication										
Output of goods and services (at basic prices)	1	1		3.15								3.15
Intermediate consumption (at purchasers' prices )	4	1		3.15								3.15
Gross value added (at basic prices)	1			3.15								3.15
	١.											-
Output of goods and sequing - (-thii	J	Financial intermediation		3.16								3.16
Output of goods and services (at basic prices Intermediate consumption (at purchasers' prices		+		3.16								3.16
Gross value added (at basic prices)	1	<u> </u>		3.16								3.16
Si OSS value audeu (al Dasic prices)		1		00								3.10

					Adjustments			
Compilation of GNI		Level of Details	Data validation	Conceptual	(1) Explicit Cut-off	(1) Explicit exhaustiveness	Balancing	Final estimate
PRODUCTION APPROACH	<u> </u>							
PRODUCTION APPROACH	A17	TOTAL						
Output of goods and services (at basic prices)		TOTAL						
Intermediate consumption (at purchasers' prices )								
Gross value added (at basic prices)								
, ,								
	Α	Agriculture, hunting and forestry						
Output of goods and services (at basic prices	)			5.13+9.7				3.7+5.13+9.7
Intermediate consumption (at purchasers' prices	)			3.3.2+'5.13+6.3+9	9.7		7.32	3.7+3.22+5.13+6.3+7.32+9.7
Gross value added (at basic prices	1			3.3.2+'5.13+6.3+9.7			7.32	3.7+3.22+5.13+6.3+7.32+9.8
	ь	Fishing	•					
Output of goods and services (at basic prices	1	risting	•	5.13+9.7				3.8+5.13+9.7
Intermediate consumption (at purchasers' prices				3.3.2+'5.13+6.3+9	9.7		7.32	3.8+3.22+5.13+6.3+7.32+9.7
Gross value added (at basic prices				3.3.2+'5.13+6.3+9.7			7.32	3.8+3.22+5.13+6.3+7.32+9.7
	С	Mining and quarrying						
Output of goods and services (at basic prices	)			5.13+9.7				3.9+5.13+9.7
Intermediate consumption (at purchasers' prices	)	ļ.		3.3.2+'5.13+6.3+9	9.7		7.32	3.9+3.22+5.13+6.3+7.32+9.7
Gross value added (at basic prices	)	-		3.3.2+'5.13+6.3+9.7			7.32	3.9+3.22+5.13+6.3+7.32+9.7
	_	Manufacture						
Output of goods and services (at basic prices	, P	Manufacture		5.13+9.7				3.10+5.13+9.7
Intermediate consumption (at purchasers' prices	1			3.3.2+5.13+6.3+9	1 9 7		7.32	3.10+3.22+5.13+6.3+7.32+9.7
Gross value added (at basic prices				3.3.2+'5.13+6.3+9.7	1		7.32	3.10+3.22+5.13+6.3+7.32+9.7
	Е	Bectricity						
Output of goods and services (at basic prices	)							3.11+5.13+9.7
Intermediate consumption (at purchasers' prices	)		3.11	3.3.2+'5.13+6.3+9	9.7		7.32	3.11+3.22+5.13+6.3+7.32+9.7
Gross value added (at basic prices	)		3.11	3.3.2+'5.13+6.3+9.7			7.32	3.11+3.22+5.13+6.3+7.32+9.7
	L-	:						
Output of goods and services (at basic prices	_	Construction		5.13+9.7		7.4		3.12+5.13+7.4+9.7
Intermediate consumption (at purchasers' prices	_			3.3.2+5.13+6.3+9	l	7.4	7.32	3.12+3.13+7.4+9.7
Gross value added (at basic prices				3.3.2+'5.13+6.3+9.7	1	7.4	7.32	3.12+3.22+5.13+6.3+7.32+9.7
	G	Wholesale and retail trade, repair of vehicles and per	sonal and HH goods	5				
Output of goods and services (at basic prices	)			5.13+9.7				3.13+5.13+9.7
Intermediate consumption (at purchasers' prices	)			3.3.2+'5.13+6.3+9	9.7		7.32	3.13+3.22+5.13+6.3+7.32+9.7
Gross value added (at basic prices	)			3.3.2+'5.13+6.3+9.7			7.32	3.13+3.22+5.13+6.3+7.32+9.7
	l							
Output of mode and coulds (1) in it	Н	Hotels and restaurants		5.13+9.7		7.4	1	3.14+5.13+7.4+9.7
Output of goods and services (at basic prices Intermediate consumption (at purchasers' prices	_	+		5.13+9.7 3.3.2+'5.13+6.3+9	0.7	7.4	7.32	3.14+5.13+7.4+9.7 3.14+3.22+5.13+6.3+7.32+9.7
Gross value added (at basic prices	-	<u> </u>		3.3.2+5.13+6.3+9.7	]	7.4	7.32	3.14+3.22+5.13+6.3+7.32+9.7
Gross value added (at basic prices	1		1	5.5.2. 5516.619.7		f		
	li .	Transport, storage and communication						
Output of goods and services (at basic prices				5.13+9.7				3.15+5.13+9.7
Intermediate consumption (at purchasers' prices	)			3.3.2+'5.13+6.3+9	9.7		7.32	3.15+3.22+5.13+6.3+7.32+9.7
Gross value added (at basic prices	)			3.3.2+'5.13+6.3+9.7			7.32	3.15+3.22+5.13+6.3+7.32+9.7
	1						1	
	J	Financial intermediation						2.40, 5.40, 0.7
Output of goods and services (at basic prices	1			3.3.2+'5.13+6.3+	0.7		7.32	3.16+5.13+9.7 3.16+3.22+5.13+6.3+7.32+9.7
Intermediate consumption (at purchasers' prices Gross value added (at basic prices	+	+	1	3.3.2+5.13+6.3+9.7	9.1	1	7.32	3.16+3.22+5.13+6.3+7.32+9.7 3.16+3.22+5.13+6.3+7.32+9.7
Gross value added (at basic prices	'	I		3.3.2+3.13+0.3+9.7			1.02	3.10+3.22+3.13+0.3+1.32+9.1

						E	Basis for NA Figu	ires				
0 il-ti ( 0 N I		Land A Baratta					Extrap	oolation and Mo	odels			
Compilation of GNI		Level of Details	Surveys & Censuses	Administrative Records	Combined Data	Benchmark extrapolations	CFM and ratios	CFC(PIM) & Imputed Dw.	Other E&M	Total Extrap+Models	Other	Total
							1	T				
	K	Real estate, renting and business activity										
Output of goods and services (at basic prices)				3.17		3.17				3.17		3.17
Intermediate consumption (at purchasers' prices )				3.17		3.17				3.17		3.17
Gross value added (at basic prices)				3.17		3.17				3.17		3.17
	_ K	Services of owner-occupied dwellings (104)										
Output of goods and services (at basic prices)						3.18				3.18		3.18
Intermediate consumption (at purchasers' prices )						3.18				3.18		3.18
Gross value added (at basic prices)						3.18				3.18		3.18
		Dublic administration and defence, com!	l a a a uritu									
Output of goods and services (at basic prices)	_	Public administration and defence; compulsory social	n security	3.19								3.19
Intermediate consumption (at purchasers' prices )			1	3.19								3.19
Gross value added (at basic prices)			1	3.19								3.19
Gross value added (at basic prices)				5.19								5.19
	м	Education										
Output of goods and services (at basic prices)	IVI	Lucation		3.20		3.20				3.20		3.20
Intermediate consumption (at purchasers' prices )				3.20		3.20				3.20		3.20
Gross value added (at basic prices)				3.20		3.20				3.20		3.20
Or OSS Value added (at basic prices)				0.20		5.20				5.20		5.20
	N	Health and social work										
Output of goods and services (at basic prices)		TREATH WITE SOCIAL WOLK		3.21		3.21				3.21		3.21
Intermediate consumption (at purchasers' prices )				3.21		3.21				3.21		3.21
Gross value added (at basic prices)				3.21		3.21				3.21		3.21
(41 3 4 4 5 4 5 4 5 5 5 5 5 5 5 5 5 5 5 5 5												
	0	Other community, social and personal service activiti	ies									
Output of goods and services (at basic prices)		,,		3.22		3.22				3.22		3.22
Intermediate consumption (at purchasers' prices )				3.22		3.22				3.22		3.22
Gross value added (at basic prices)				3.22		3.22				3.22		3.22
, i												
	Р	Private households with employed persons										
Output of goods and services (at basic prices)			3.23									3.23
Intermediate consumption (at purchasers' prices )												
Gross value added (at basic prices)			3.23									3.23
(global) FISIM												
Taxes on products				3.24+3.25								
Value added type taxes												
Taxes and duties on imports, except VAT												
Other taxes on products												
Subsidies on products				3.26								
Residual item											<u> </u>	
Gross domestic product												

					Adjustments			
Compilation of GNI		Level of Details	Data validation	Conceptual	(1) Explicit Cut-off	(1) Explicit exhaustiveness	Balancing	Final estimate
	ĸ.	Real estate, renting and business activity						
Output of goods and services (at basic prices)		near estate, renting and business activity		5.13+9.7				3.17+5.13+9.7
Intermediate consumption (at purchasers' prices				3.3.2+'5.13+6.3+9	9.7		7.32	3.17+3.22+5.13+6.3+7.32+9.7
Gross value added (at basic prices)	1			3.3.2+'5.13+6.3+9.7			7.32	3.17+3.22+5.13+6.3+7.32+9.7
Or over value and a fair scale prices				0.0.21 0.1010.010.1			7.02	0.1110.2210.1010.011.0210.1
	к	Services of owner-occupied dwellings (104)						
Output of goods and services (at basic prices)		convicts of current occupion and minings (104)						3.18+5.13+9.7
Intermediate consumption (at purchasers' prices				3.3.2+'5.13+6.3+9	9.7		7.32	3.18+3.22+5.13+6.3+7.32+9.7
Gross value added (at basic prices)	1			3.3.2+'5.13+6.3+9.7			7.32	3.18+3.22+5.13+6.3+7.32+9.7
,								
	L	Public administration and defence; compulsory social	security					
Output of goods and services (at basic prices)	Ī	,	,				7.32	3.19+5.13+7.32+9.7
Intermediate consumption (at purchasers' prices				3.3.2+'5.13+6.3+9	9.7		7.02	3.19+3.22+5.13+6.3+7.32+9.7
Gross value added (at basic prices)	1			3.3.2+'5.13+6.3+9.7			7.32	3.19+3.22+5.13+6.3+7.32+9.7
(a p								
	м	Education						
Output of goods and services (at basic prices)							7.32	3.20+5.13+7.32+9.7
Intermediate consumption (at purchasers' prices				3.3.2+'5.13+6.3+9	9.7			3.20+3.22+5.13+6.3+7.32+9.7
Gross value added (at basic prices)	1			3.3.2+'5.13+6.3+9.7			7.32	3.20+3.22+5.13+6.3+7.32+9.7
	N	Health and social work						
Output of goods and services (at basic prices)	, i	Trouble did octor work						3.21+5.13+9.7
Intermediate consumption (at purchasers' prices				3.3.2+'5.13+6.3+9	9.7		7.32	3.21+3.22+5.13+6.3+7.32+9.7
Gross value added (at basic prices)	1			3.3.2+'5.13+6.3+9.7			7.32	3.21+3.22+5.13+6.3+7.32+9.7
Cross value dadou (di papie prices				0.0.21 0.1010.010.1			7.02	0.2110.2210.1010.011.0210.1
	0	Other community, social and personal service activities	·s					
Output of goods and services (at basic prices)		cinor community, coolai and porconal corvice activities	ĺ	5.13+9.7				3.22+5.13+9.7
Intermediate consumption (at purchasers' prices				3.3.2+'5.13+6.3+9	9.7		7.32	3.22+3.22+5.13+6.3+7.32+9.7
Gross value added (at basic prices)	1			3.3.2+'5.13+6.3+9.7			7.32	3.22+3.22+5.13+6.3+7.32+9.7
Cross value adaba (at sacro prices)				0.0.21 0.1010.010.1			7.02	0.22 10.22 10.10 10.0 11.02 10.1
	Р	Private households with employed persons						
Output of goods and services (at basic prices)	ľ	Trinate incaconiciae with employed perconic						3.23+5.13+9.7
Intermediate consumption (at purchasers' prices				3.3.2+'5.13+6.3+9	7			3.23+3.22+5.13+6.3+7.32+9.7
Gross value added (at basic prices)				3.3.2+'5.13+6.3+9.7	,,,			3.23+3.22+5.13+6.3+7.32+9.7
Cross value added (at basic prices)	<b>†</b>			5.5.21 5.1516.515.7				5.2515.2215.1516.517.5215.7
(global) FISIM							I	
(3)	t							
Taxes on products							1	
Value added type taxes	<del>                                     </del>						1	
Taxes and duties on imports, except VAT	<del>                                     </del>						1	
Other taxes on products	<del>                                     </del>						1	
Subsidies on products	t							
ourous on producto	t							
Residual item				3.3.3			1	
				5.5.0				
Gross domestic product								

						ı	Basis for NA Figu	ıres				
Compilation of GNI		Level of Details					Extra	polation and M	odels			
Compliation of GNI		Level of Details	Surveys & Censuses	Administrative Records	Combined Data	Benchmark extrapolations	CFM and ratios	CFC(PIM) & Imputed Dw.	Other E&M	Total Extrap+Models	Other	Total
EVENDITURE ARRESANT												
EXPENDITURE APPROACH												
Total final consumption expenditure												
Household final consumption expenditure	Tota					,						
	01 - F	Food and non-alcoholic beverages	5.7.4.	5.7.4.								5.7.4.
		Alcoholic beverages, tobacco and narcotics	5.7.4.									5.7.4.
		Clothing and footwear		5.7.4.					5.7.4.			5.7.4.
		Housing, water, electricity, gas and other fuels				5.7.4.			5.7.4.			5.7.4.
:		Furnishings, household equipment and routine househ	5.7.4.	5.7.4.		5.7.4.						5.7.4.
			5.7.4.	5.7.4.		5.7.4.						5.7.4.
	_	Fransport	5.7.4.	5.7.4.					5.7.4.			5.7.4.
7		Communication	····	JT.		5.7.4.			G <del></del>			5.7.4.
•	_	Recreation and culture	5.7.4.	5.7.4.		5.7.4.						5.7.4.
	-	Education	5.7.4.	5.7.4.		5.7.4.						5.7.4.
		Restaurants and hotels	5.7.4.			5.7.4.						5.7.4.
		Miscellaneous goods and services	5.7.4.	5.7.4.		5.7.4.						5.7.4.
		sition to national concept	5.7.4.	5.7.4.		5.7.4.						5.7.4.
	iran	sition to national concept	5.7.4.	5.7.4.								5.7.4.
NPISH final consumption expenditure						5.8						
General government final consumption expenditure	_			5,9		3.0	,	3.18.3				
General government final consumption expenditure				5,9				3.18.3				
Gross fixed capital formation	-L.											
Gross fixed capital formation	Tota											
	1	Products of agriculture, forestry, fishery and aquacult		5.10.3								
	2	Metal products and machinery equipment	5.10.5	5.10.3		5.11						
,	<u>9</u>	Transport equipment	5.10.5	5.10.3								
	4	Construction of housing		5.10.3+5.12		3.12						
	5	Other constructions	5.10.5	5.10.3								
	6	Other products		5.10.3								
Changes in inventories			5.13									
Acquisitions less disposals of valuables												
Exports of goods and services												
goods			5.15.1	5.15.1	5.15.1							
services			5.16.2-5.16.5	5.16.2-5.16.5								
Imports of goods and services												
goods			5.15.1	5.15.1	5.15.1							
services			5.16.2-5.16.5	5.16.2-5.16.5							5.16.2-5.16.5	
Residual item												
Gross domestic product												

					Adjustments			
Compilation of GNI		Level of Details	Data validation	Conceptual	(1) Explicit Cut-off	(1) Explicit exhaustiveness	Balancing	Final estimate
EVENDITUDE ADDROACH	F				T			
EXPENDITURE APPROACH	1							
Total final consumption expenditure	-							
Household final consumption expenditure	Tota							
Tousehold intal consumption experience		Food and non-alcoholic beverages						
		Alcoholic beverages, tobacco and narcotics						
		Clothing and footwear						
<u>6</u>		lousing, water, electricity, gas and other fuels						
(6)P-1) d 001000		Furnishings, household equipment and routine househ	old maintenance					
) <u>a</u>		Health						
8		Fransport						
ŌS		Communication						
·		Recreation and culture						
	10 -	Education						
	11 -	Restaurants and hotels						
		Miscellaneous goods and services						
	_	sition to national concept						
		i i						
NPISH final consumption expenditure		·						
General government final consumption expenditure				3.18.3				
-								
Gross fixed capital formation	Tota							
	1	Products of agriculture, forestry, fishery and aquacult	ure					
	2	Metal products and machinery equipment						
Pi 6	3	Transport equipment						
<u> </u>	4	Construction of housing						
	5	Other constructions						
	6	Other products						
Changes in inventories								
Acquisitions less disposals of valuables								
Exports of goods and services								
goods	1			5.15.3				
services	ــــــ			9.6				
Imports of goods and services	₩							
goods	<u> </u>			5.15.3				
services	ــــــ			9.6				
	1			1	1			
Residual item								
Gross domestic product								

						E	Basis for NA Figu	res				
Compilation of GNI		Level of Details	C	A desirate at matter a	Cambinad		Extrap	oolation and Mo	odels			
Compliation of GN1		Level of Details	Surveys & Censuses	Administrative Records	Combined Data	Benchmark extrapolations	CFM and ratios	CFC(PIM) & Imputed Dw.	Other E&M	Total Extrap+Models	Other	Total
INCOME APPROACH												
Compensation of employees												
Non-Financial Corporations												
Financial Corporations												
General Government												
Households												
NPISH												
(2) Gross operating surplus												
Non-Financial Corporations												
Financial Corporations												
General Government												
Households												
NPISH												
(2) Mixed income												
Taxes on production and imports												
Subsidies												
Residual item												
Gross domestic product												
Gross National Income												
Gross National Income												
	إ											
Compensation of employees received from the rest of the		d	8.0+8.1	8.0+8.1								
Compensation of employees paid to the rest of the world				8.0+8.1								
Property income received from the rest of the world			8.0+8.4+8.5+8.6		8.0+8.4+8.5+8.6							
Property income paid to the rest of the world			8.0+8.4+8.5+8.6		8.0+8.4+8.5+8.6							
Taxes on production and imports												
Subsidies												
Gross national income												

				Adjustments			
Compilation of GNI	Level of Details	Data validation	Conceptual	(1) Explicit Cut-off	(1) Explicit exhaustiveness	Balancing	Final estimate
INCOME APPROACH							
Compensation of employees							
Non-Financial Corporations							
Financial Corporations							
General Government							
Households							
NPISH							
(2) Gross operating surplus							
Non-Financial Corporations							
Financial Corporations							
General Government							
Households							
NPISH							
(2) Mixed income							
Taxes on production and imports							
Subsidies							
Residual item							
Gross domestic product							
Gross National Income							
Compensation of employees received from the rest of the							
Compensation of employees paid to the rest of the world							
Property income received from the rest of the world			9.6				
Property income paid to the rest of the world			9.6				
Taxes on production and imports							
Subsidies							
Gross national income							

**Table A2–3 Contributions** 

Complication of GNI   Complication and Surveys & Continued   Con								Basis for NA Figu	ires				
Comparing production of New   Comment   Services   Comment   Com										odels			
PRODUCTION APPROACH ATT OUTS.  OUTS.	Compilation of GNI		Level of Details	•					CFC(PIM) &			Other	Total
Totals   Company of professional services (at loss process)   Company of professional services (at loss process)   Company of processional		<b></b>			ļ	<b></b>	extrapolations		imputed Dw.	<b></b>	Extrap+wodels		
TOTAL	PPODJICTION APPROACH												
Compart of groups and services (a basic prices)   Vs	FRODUCTION AFFROACH	A1/											
Note	Output of goods and services (at hasis prices)		TOTAL										
A gricultural profess   A gricultural profess   A gricultural part of profess   A gricultura													
Application of goods and services (at bosic prices)   State			%	1.2	81.6	7.6	9.1	8.0	0.0	0.1	17.2	0.0	107,6
Material and Secretary (as process)				,	. ,.	,.	.,		.,.	.,	,	-,-	,,,
Metermediate consumption (in purchaser proces)		Α	Agriculture, hunting and forestry										
Gress value added (in besic prices)    No.													
Paining													
Disput of goods and services (al basic prices)	Gross value added (at basic prices)		%	1,2	0,4	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,6
Disput of goods and services (al basic prices)		_											
Intermediate consumption (at purchaser) prices)	Output of mode and condens (at horizonia)	В	Fishing										
Construction   Cons													
Couple of goods and services (a basic prices)   Mining and quarrying		-	9/		^4	4.0	0.0		0.0	0.0			5,0
Output of goods and services (at basic prices)	Gross value added (at basic prices)		76	0,0	0,1	4,9	0,0	0,0	0,0	0,0	0,0	0,0	5,0
Disput of goods and services (at basic prices)		c	Mining and guarrying										
Intermediate consumption (appurchasers' prices)   %	Output of goods and services (at hasin prince)		Milling and quarrying										
Cross value added (at basic prices)   %													
Output of goods and services (at basic prices)			%	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0,1
Mintermediate consumption (alpurchasers' prices)	Cross value added (at sales prices)		,,	0,0	0,1	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,1
Metrin ediate consumption (at purchasers' prices)		D	Manufacture										
Intermediate consumption (at purchaser prices)	Output of goods and services (at basic prices)												
E   Bettricity													
Output of goods and services (at basic prices)	Gross value added (at basic prices)		%	0,0	9,7	2,7	0,0	0,0	0,0	0,0	0,0	0,0	12,3
Output of goods and services (at basic prices)   Construction													
Intermediate consumption (at purchasers' prices)		E	Electricity										
Gross value added (at basic prices)   %   0,0													
Construction													
Output of goods and services (at basic prices)  Intermediate consumption (at purchasers' prices)  Gross value added (at basic prices)  Wholesale and retail trade, repair of vehicles and pers  Output of goods and services (at basic prices)  Intermediate consumption (at purchasers' prices)  Gross value added (at basic prices)  H Hotels and restaurants  Output of goods and services (at basic prices)  Intermediate consumption (at purchasers' prices)  Gross value added (at basic prices)  H Hotels and restaurants  Output of goods and services (at basic prices)  Intermediate consumption (at purchasers' prices)  Output of goods and services (at basic prices)  Intermediate consumption (at purchasers' prices)  Intermediate consumption (at purchas	Gross value added (at basic prices)		%	0,0	3,6	0,0	0,0	0,0	0,0	0,0	0,0	0,0	3,6
Output of goods and services (at basic prices)  Intermediate consumption (at purchasers' prices)  Gross value added (at basic prices)  Wholesale and retail trade, repair of vehicles and pers  Output of goods and services (at basic prices)  Intermediate consumption (at purchasers' prices)  Gross value added (at basic prices)  H Hotels and restaurants  Output of goods and services (at basic prices)  Intermediate consumption (at purchasers' prices)  Gross value added (at basic prices)  H Hotels and restaurants  Output of goods and services (at basic prices)  Intermediate consumption (at purchasers' prices)  Output of goods and services (at basic prices)  Intermediate consumption (at purchasers' prices)  Intermediate consumption (at purchas													
Intermediate consumption (at purchasers' prices)		F	Construction										
Gross value added (at basic prices)   %   0,0													
Coutput of goods and services (at basic prices)   Coutput of goods and services (at basic pric			0/	0.0	0.0	0.0	4.		0.0	0.0	4.4	0.0	10,7
Output of goods and services (at basic prices)         6         7         8         9<	Gross value added (at basic prices)		76	0,0	9,3	0,0	1,4	0,0	0,0	0,0	1,4	0,0	10,7
Output of goods and services (at basic prices)         6         7         8         9<		G	Wholesale and retail trade, renair of vehicles and nere										
Intermediate consumption (at purchasers' prices)	Output of goods and services (at hacin prince)	Ĭ											
Gross value added (at basic prices)   %   0,0													
H Hotels and restaurants			%	0,0	12,1	0,0	0,0	0,0	0,0	0,0	0,0	0,0	12,1
Output of goods and services (at basic prices)         Intermediate consumption (at purchasers' prices)         Image: Consumption (at purchasers	, , , , , , , , , , , , , , , , , , , ,			*,*	,.	-,-					5,5	-,-	
Intermediate consumption (at purchasers' prices)		н	Hotels and restaurants										
Gross value added (at basic prices)   %   0,0													
I Transport, storage and communication													
	Gross value added (at basic prices)		%	0,0	1,8	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,8
		ı	Transport, storage and communication										
Output of goods and services (at basic prices)		<u> </u>											
Intermediate consumption (at purchasers' prices )													
Gross value added (at basic prices)         %         0,0         7,2         0,0 <t< td=""><td>Gross value added (at basic prices)</td><td>-</td><td> %  </td><td>0,0</td><td>7,2</td><td>0,0</td><td>0,0</td><td>0,0</td><td>0,0</td><td>0,0</td><td>0,0</td><td>0,0</td><td>7,2</td></t<>	Gross value added (at basic prices)	-	% 	0,0	7,2	0,0	0,0	0,0	0,0	0,0	0,0	0,0	7,2
L. Enward internal distance		l. –	Financial intermediation										
J Financial intermediation	Output of goods and savvises (at heritaring)	J	rmancial intermediation										
Output of goods and services (at basic prices)  Intermediate consumption (at purchasers' prices)		$\vdash$											
Intermediate Consumption (at proclasers prices)			%	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9,2

			Basis for NA Figure			Adjustments			
Compilation of GNI		Level of Details	Surveys & Censuses	Data validation	Conceptual	(1) Explicit Cut-off	(1) Explicit exhaustiveness	Balancing	Final estimate
DDGDUGTION ADDDG AGU									
PRODUCTION APPROACH	A17								
		TOTAL							
Output of goods and services (at basic prices) Intermediate consumption (at purchasers' prices )									
Gross value added (at basic prices)		  %	1,2	0,0	-3,6	0,0	0,8	-4,9	100,0
	A	Agriculture, hunting and forestry	- 3=	5,5	5,5	0,0	0,0	.,0	
Output of goods and services (at basic prices)	-								
Intermediate consumption (at purchasers' prices ) Gross value added (at basic prices)		  %	1,2	0,0	0,0	0,0	0,0	-0,1	1,5
Gross value added (at basic prices)	1	<sup>7</sup> / <sub>0</sub>	1,2	0,0	0,0	0,0	0,0	-0,1	1,5
	В	Fishing							
Output of goods and services (at basic prices)									
Intermediate consumption (at purchasers' prices )									
Gross value added (at basic prices)		%	0,0	0,0	0,0	0,0	0,0	-0,2	4,8
	С	Mining and quarrying							
Output of goods and services (at basic prices)									
Intermediate consumption (at purchasers' prices )  Gross value added (at basic prices)	_	  %	0,0	0,0	0,0	0,0	0,0	0,0	0,1
Gross value added (at basic prices)	<del></del>	76	0,0	0,0	0,0	0,0	0,0	0,0	0,1
	D	Manufacture							
Output of goods and services (at basic prices)	_	manaracture							
Intermediate consumption (at purchasers' prices )									
Gross value added (at basic prices)		%	0,0	0,0	-0,3	0,0	0,0	-1,4	10,7
	E	Bectricity							
Output of goods and services (at basic prices)	<u> </u>								
Intermediate consumption (at purchasers' prices )	-								
Gross value added (at basic prices)		% 	0,0	0,0	-0,2	0,0	0,0	-0,2	3,2
	-	Construction							
Output of goods and services (at basic prices)	_	Construction							
Intermediate consumption (at purchasers' prices)									
Gross value added (at basic prices)		%	0,0	0,0	-0,4	0,0	0,8	-0,8	10,2
	G	Wholesale and retail trade, repair of vehicles and per						·	
Output of goods and services (at basic prices)									
Intermediate consumption (at purchasers' prices )									
Gross value added (at basic prices)	<u> </u>	%	0,0	0,0	-0,7	0,0	0,0	-0,5	10,9
	L	Hetele and restaurants							
Output of goods and services (at basic prices)	П	Hotels and restaurants							
Intermediate consumption (at purchasers' prices)	<del></del>								
Gross value added (at basic prices)	T	%	0,0	0,0	-0,1	0,0	0,0	-0,2	1,6
(4.535)			5,0	5,0	2,1			-,-	.,.
	ı	Transport, storage and communication							
Output of goods and services (at basic prices)	₩								
Intermediate consumption (at purchasers' prices )	-	l .							
Gross value added (at basic prices)	-	% 	0,0	0,0	0,1	0,0	0,0	-0,9	6,4
	l	Financial intermediation							
Output of goods and services (at basic prices)	Ĭ	I manola mermediation							
Intermediate consumption (at purchasers' prices)									
Gross value added (at basic prices)		%	0,0	0,0	-0,5	0,0	0,0	-0,2	8,5
G. GGG Tallag adaga (at basic prices)		124	0,0	0,0	-0,0	0,0	0,0	-0,2	0,0

						ı	Basis for NA Figu	res				
Commitation of CNI		Laurel of Dataille					Extrap	olation and Mo	odels			
Compilation of GNI		Level of Details	Surveys & Censuses	Administrative Records	Combined Data	Benchmark extrapolations	CFM and ratios	CFC(PIM) & Imputed Dw.	Other E&M	Total Extrap+Models	Other	Total
	Π											
	K	Real estate, renting and business activity										
Output of goods and services (at basic prices)												
Intermediate consumption (at purchasers' prices )												
Gross value added (at basic prices)		%	0,0	8,2	0,0	2,2	8,0	0,0	0,0	10,2	0,0	18,4
	K											
Output of goods and services (at basis prices)	_ K	Services of owner-occupied dwellings (104)										
Output of goods and services (at basic prices) Intermediate consumption (at purchasers' prices )												
Gross value added (at basic prices)		%	0,0	0,0	0,0	0,0	8,0	0,0	0,0	8,0	0,0	8,0
Cross value added (at basic prices)		70	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
	L	Public administration and defence; compulsory social										
Output of goods and services (at basic prices)												
Intermediate consumption (at purchasers' prices )												
Gross value added (at basic prices)		%	0,0	5,6	0,0	0,0	0,0	0,0	0,0	0,0	0,0	5,6
	М	Education										
Output of goods and services (at basic prices)												
Intermediate consumption (at purchasers' prices )												
Gross value added (at basic prices)		%	0,0	4,6	0,0	0,6	0,0	0,0	0,0	0,6	0,0	5,1
	N	Health and social work										
Output of goods and services (at basic prices)												
Intermediate consumption (at purchasers' prices )												
Gross value added (at basic prices)		%	0,0	6,8	0,0	3,8	0,0	0,0	0,0	3,8	0,0	10,6
	0	Other community, social and personal service activities										
Output of goods and services (at basic prices)												
Intermediate consumption (at purchasers' prices )												
Gross value added (at basic prices)		%	0,0	3,0	0,0	1,2	0,0	0,0	0,0	1,2	0,0	4,1
	Р	Private households with employed persons										
Output of goods and services (at basic prices)												
Intermediate consumption (at purchasers' prices )  Gross value added (at basic prices)		%	0,0	0,0	0,0	0,0	0,0	0,0	0,1	0,1	0,0	0,1
Gross value added (at basic prices)		76	0,0	0,0	0,0	0,0	0,0	0,0	0,1	0,1	0,0	0,1
						-						
(global) FISIM		%	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
(global) i loim		76	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Taxes on products		%	0,0	16,3	0,0	0,0	0,0	0,0	0.0	0.0	0,0	16,3
Value added type taxes		%	0,0		0,0				0,0	0,0	0,0	11,1
Taxes and duties on imports, except VAT		%	0.0		0,0			0,0	0,0	0,0	0,0	4,8
Other taxes on products		%	0,0		0,0			0,0	0,0	0,0	0,0	0,4
Subsidies on products		%	0,0						0,0		0,0	0,9
			-,-	-,-	5,2	-,-		-,-	-,-	,,,,	-,-	
Residual item			0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Gross domestic product	%		1,0	83,6	6,3	7.6	6.7	0.0	0.1	14.4	0.0	105,4
C. CCC COMOCIO PI GARGE	70		1,0	50,0	0,0	1,0		3,0	3,1	,-	,0	.00,7

			Basis for NA Figure			Adjustments			
Compilation of GNI		Level of Details	Surveys & Censuses	Data validation	Conceptual	(1) Explicit Cut-off	(1) Explicit exhaustiveness	Balancing	Final estimate
	v	Real estate, renting and business activity							
Output of goods and services (at basic prices)		Real estate, renting and business activity							
Intermediate consumption (at purchasers' prices)	+								
Gross value added (at basic prices)		%	0.0	0,0	-0,3	0.0	0.0	-0,7	17,5
or ood value added (at basis prices)	$\vdash$	70	0,0	0,0	0,0	0,0	0,0	0,7	17,0
	_ K	Services of owner-occupied dwellings (104)							
Output of goods and services (at basic prices)		continue of third occupion and minge (104)							
Intermediate consumption (at purchasers' prices									
Gross value added (at basic prices		%	0.0	0.0	-0,2	0.0	0.0	-0,2	7,7
			.,,,				.,.		
	L	Public administration and defence; compulsory socia							
Output of goods and services (at basic prices)									
Intermediate consumption (at purchasers' prices									
Gross value added (at basic prices		%	0,0	0,0	-0,2	0,0	0,0	0,4	5,8
	М	Education							
Output of goods and services (at basic prices)									
Intermediate consumption (at purchasers' prices )									
Gross value added (at basic prices)		%	0,0	0,0	-0,2	0,0	0,0	0,4	5,3
	N	Health and social work							
Output of goods and services (at basic prices)	1								
Intermediate consumption (at purchasers' prices )									
Gross value added (at basic prices)		%	0,0	0,0	-0,5	0,0	0,0	-0,4	9,7
	0	Other community, social and personal service activiti							
Output of goods and services (at basic prices)	1								
Intermediate consumption (at purchasers' prices )									
Gross value added (at basic prices		%	0,0	0,0	-0,2	0,0	0,0	-0,2	3,8
	Р	Private households with employed persons							
Output of goods and services (at basic prices)	1								
Intermediate consumption (at purchasers' prices )									
Gross value added (at basic prices)		%	0,0	0,0	0,0	0,0	0,0	0,0	0,1
(global) FISIM	_	%	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Taxes on products	₩	%	0,0	0,0	0,0	0,0		0,0	16,3
Value added type taxes	-	%	0,0	0,0	0,0	0,0	0,0	0,0	11,1 4,8
Taxes and duties on imports, except VAT	1	%	0,0	0,0	0,0	0,0		0,0	0,4
Other taxes on products	1	%	0,0 <b>0,0</b>	0,0 <b>0,0</b>	0,0 <b>0,0</b>	0,0	0,0	0,0 <b>0,0</b>	0,4
Subsidies on products	1	%	0,0	0,0	0,0	0,0	0,0	0,0	0,9
Residual item			0,0	0,0	1,0	0,0	0,0	0,0	1,0
	0/								
Gross domestic product	%		1,0	0,0	-2,0	0,0	0,7	-4,1	100,0

							Basis for NA Figu	res				
Compilation of GNI		Level of Details	Surveys &	Administrative	Combined		Extrap	olation and Mo	dels			
Complication of Citi			Censuses	Records	Data	Benchmark extrapolations	CFM and ratios	CFC(PIM) & Imputed Dw.	Other E&M	Total Extrap+Models	Other	Total
EXPENDITURE APPROACH												
Total final consumption expenditure			6,1	29,4	0,0	8,1	0,0	12,9	25,9	46,9	0,0	82,3
Household final consumption expenditure		al (%)	6,1	7,1	0,0		-7-		25,9	43,0	0,0	56,2
		Food and non-alcoholic beverages	0,5	0,3	0,0			0,0	5,7	5,7	0,0	6,
		Alcoholic beverages, tobacco and narcotics	0,0	2,2	0,0	0,0	-7.	0,0	0,0	0,0	0,0	2,
		Clothing and footwear	0,0	1,9	0,0	0,0	0,0	0,0	0,6	0,6	0,0	2,
		Housing, water, electricity, gas and other fuels	0,0	0,0	0,0	0,0	-7.	11,1	0,0	11,1	0,0	11,
	$\sim$	Furnishings, household equipment and routine househ	0,1	0,8	0,0	0,0	-71	0,0	2,6	2,6	0,0	3,6
	0	Health	0,9	0,0	0,0	0,1	0,0	0,0	0,7	0,7	0,0	1,6
	$\overline{}$	Transport Communication	0,6	0,0	0,0	0,2	-7.	0,0	8,9 1.3	9,1	0,0	9,8
	_	Recreation and culture	1,7	0,0	0,0	0,1	-7.	0,0	1,3	4.8	0,0	6,
		Education and culture	0,0	0,0	0,0	0,9		0,0	0,7	0,7	0,0	0,7
		Restaurants and hotels	0,0	0,0	0,0	3,3		0,0	0,7	3,6	0,0	4,3
		Miscellaneous goods and services	0,0	0,0	0,0	1.6		0,0	1.1	2.6	0,0	2,6
		nsition to national concept	1.6	1.9	0,0	0.0	0.0	0.0	0.0	0.0	0,0	3,4
	114	instituti to national concept	1,0	1,5	0,0	0,0	0,0	0,0	0,0	0,0	0,0	
NPISH final consumption expenditure		%	0,0	0,0	0,0	2,0	0,0	0,0	0,0	2,0	0,0	2,0
General government final consumption expenditure		%	0.0	22.2	0.0	0.0			0.0		0.0	24,1
				,		.,,.		,	.,.	,-		
Gross fixed capital formation	Tota	al (%)	9,4	18,4	0,0	0,6	0,0	0,0	0,0	0,6	0,0	28,4
<u> </u>	1	Products of agriculture, forestry, fishery and aquacult	0,0	0,2	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,2
	2	Metal products and machinery equipment	1,5	3,9	0,0	0,4	0,0	0,0	0,0	0,4	0,0	5,7
	<u>9</u> 3	Transport equipment	0,0	1,7	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,8
	4	Construction of housing	0,0	5,5	0,0	0,2	0,0	0,0	0,0	0,2	0,0	5,7
	5	Other constructions	7,9	6,9	0,0	0,0	0,0	0,0	0,0	0,0	0,0	14,
	6	Other products	0,0	0,2	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,:
Changes in inventories	_	%	-0,1	0,0	0,0			0,0	0,0	0,0	0,0	-0,1
Acquisitions less disposals of valuables	_	%	0,0	0,0	0,0		-,-	0,0	0,0		0,0	0,0
Exports of goods and services	_	%	6,3	25,0	0,2			0,0	0,0	0,0	0,0	31,
goods :	_	%	0,7	18,0	0,2	0,0	-7.	0,0	0,0	0,0	0,0	18,
services	_	70	5,6 <b>8,9</b>	7,0 <b>34,5</b>	0,0 <b>0,2</b>	-,-	-,-	0,0 <b>0,0</b>	0,0 <b>0,0</b>	0,0	0,0 <b>0,2</b>	12, <b>43,</b>
Imports of goods and services	+	% %	8,9 1.0	34,5 27.0	0,2	0,0	-,-	0,0	0,0	0.0	0,2	
goods services	_	% %	1,0 7,9	7.5	0,2	0,0	-7.	0,0	0,0	0,0	0,0	28,
SCI VIUCS	-	1/0	7,9	7,5	0,0	0,0	0,0	0,0	0,0	0,0	0,2	15,
Residual item			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0,
Gross domestic product	%		12.8	38.3	0.0	8.7	- , -	- /-	25.9	47.5	-0.2	98.4

	Basis for NA Figure Adjustments								
Compilation of GNI		Level of Details	Surveys & Censuses	Data validation	Conceptual	(1) Explicit Cut-off	(1) Explicit exhaustiveness	Balancing	Final estimate
EXPENDITURE APPROACH									
EXI ENDITORE ALTROAGH	1								
Total final consumption expenditure			6,1	0,0	1,6	0,0	0,0	0.0	84,0
Household final consumption expenditure	Tota	ıl (%)	6,1	0,0	1,1	0,0	0,0	0,0	57,3
	01 -	Food and non-alcoholic beverages	0,5	0,0	0,0	0,0	0,0	0,0	6,5
	02 -	Alcoholic beverages, tobacco and narcotics	0,0	0,0	0,0	0,0	0,0	0,0	2,2
	03 -	Clothing and footwear	0,0	0,0	0,0	0,0	0,0	0,0	2,5
( <u>gi</u>	04 -	Housing, water, electricity, gas and other fuels	0,0	0,0	0,0	0,0	0,0	0,0	11,1
(B)P-1) a 001000	05 -	Furnishings, household equipment and routine househ	0,1	0,0	0,0	0,0	0,0	0,0	3,6
O d C		Health	0,9	0,0	0,0	0,0	0,0	0,0	1,6
ŏ		Transport	0,6	0,0	0,0	0,0	0,0	0,0	9,8
8		Communication	0,0	0,0	0,0	0,0	0,0	0,0	1,4
		Recreation and culture	1,7	0,0	0,0	0,0	0,0	0,0	6,5
		Education	0,0	0,0	0,0	0,0	0,0	0,0	0,7
		Restaurants and hotels	0,7	0,0	0,0	0,0	0,0	0,0	4,3
	_	Miscellaneous goods and services	0,0	0,0	1,1	0,0	0,0	0,0	3,7
	Tran	nsition to national concept	1,6	0,0	0,0	0,0	0,0	0,0	3,4
NPISH final consumption expenditure	-	%	0,0	0,0	0,0	0,0	0,0	0,0	2,0
General government final consumption expenditure		%	0,0	0,0	0,5	0,0	0,0	0,0	24,6
One of five described forms at the	L .	1.00	0.4			0.0		0.0	20.4
Gross fixed capital formation	1 Ota	Products of agriculture, forestry, fishery and aquacul	<b>9,4</b> 0,0	<b>0,0</b>	<b>0,0</b>	0,0	0,0	0,0	28,4 0,2
	1		1,5	0,0	0,0	0,0	0,0	0,0	5,7
10	2	Metal products and machinery equipment  Transport equipment	0,0	0,0	0,0	0,0	0,0	0,0	1,8
Pi 8	4	Construction of housing	0,0	0,0	0,0	0,0	0,0	0,0	5,7
	-	Other constructions	7,9	0,0	0,0	0,0	0,0	0,0	14,8
	6	Other products	0,0	0,0	0,0	0,0	0.0	0,0	0,2
	Ť	Other products	0,0	0,0	0,0	0,0	0,0	0,0	0,2
Changes in inventories		%	-0,1	0,0	0,0	0,0	0,0	0,0	-0,1
Acquisitions less disposals of valuables	1	%	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Exports of goods and services		%	6,3	0,0	0,2	0,0	0,0	0,0	31,7
goods		%	0,7	0,0	0,1	0,0	0,0	0,0	19,0
services		%	5,6	0,0	0,1	0,0	0,0	0,0	12,7
Imports of goods and services		%	8,9	0,0	0,2	0,0	0,0	0,0	44,0
goods		%	1,0	0,0	-0,1	0,0	0,0	0,0	28,1
services		%	7,9	0,0	0,3	0,0	0,0	0,0	15,9
Residual item			0,0	0,0	0,0	0,0	0,0	0,0	0,0
Gross domestic product	%		12,8	0,0	1,6	0,0	0,0	0,0	100,0

						E	Basis for NA Figu	res				
Committee of CNI		Level of Details					Extrap	olation and Mo	dels			
Compilation of GNI	Level of Details		Surveys & Censuses	Administrative Records	Combined Data	Benchmark extrapolations	CFM and ratios	CFC(PIM) & Imputed Dw.	Other E&M	Total Extrap+Models	Other	Total
INCOME APPROACH												
Compensation of employees		%	0,0	0.0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Non-Financial Corporations		%	0,0	0.0	0,0	0.0	0.0		0.0	0.0	0,0	0,0
Financial Corporations		%	0,0	0.0	0,0	0,0	0,0	0.0	0.0	0.0	0,0	0,0
General Government		%	0,0	0.0	0,0	0,0	0.0	0.0	0.0	0.0	0,0	0,0
Households		%	0,0	0.0	0,0	0.0	0,0	0.0	0.0	0.0	0,0	0,0
NPISH		%	0.0	0.0	0,0	0.0	0.0	0.0	0.0	0.0	0,0	0,0
14 1011		,,	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
(2) Gross operating surplus		%	0,0	0.0	0,0	0,0	0,0	0.0	0.0	0,0	0,0	0,0
Non-Financial Corporations	$\overline{}$	%	0,0	0,0	0,0	0,0	0,0		0.0	0.0	0,0	0,0
Financial Corporations	$\overline{}$	%	0,0	0.0	0,0	0.0	0.0	0,0	0,0	0.0	0.0	0,0
General Government	$\rightarrow$	%	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0,0
Households		%	0,0	0,0	0,0		0,0	0,0	0,0	0.0	0,0	0,0
NPSH		76	0,0	0.0	0,0	0.0	0.0	0,0	0,0	0.0	0.0	0.0
IVENUE		76	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
(2) Mixed income		%	0,0	0,0	0,0	0,0	0,0	0.0	0.0	0,0	0,0	0,0
Taxes on production and imports	$\rightarrow$	%	0,0	0.0	0,0	0.0	0.0		0.0	0.0	0,0	0,0
Subsidies	$\overline{}$	%	0.0	0.0	0.0		0.0		0.0	0.0	0.0	0,0
Cubardica		70	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Residual item			0,0	0.0	0,0	0,0	0.0	0.0	0.0	0.0	0.0	0.0
	%		0.0	0.0	0.0	0.0	0,0	0.0	0.0	0.0	0.0	0.0
Gross domestic product	70		0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Gross National Income												
Compensation of employees received from the rest of the			0,3	0,1	0,0	0,0	0,0		0,0	0,0	0,0	0,5
Compensation of employees paid to the rest of the world		%	0,0	0,2	0,0	0,0	0,0		0,0	0,0	0,0	0,2
Property income received from the rest of the world		%	6,6	0,0	2,2	0,0	0,0	0,0	0,0	0,0	0,0	8,7
Property income paid to the rest of the world	$\overline{}$	%	6,7	0,0	6,2	0,0	0,0	- / -	0,0	0,0	0,0	13,0
Taxes on production and imports		%	0,0	0,0	0,0				0,0	0,0	0,0	0,0
Subsidies		%	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Gross national income	%		1,2	86,7	2,5	7,9	7,0	0,0	0,1	14,9	0,0	105,4

		Basis for NA Figure			Adjustments				
Compilation of GNI	Level of Details	Surveys & Censuses	Data validation	Conceptual	Conceptual (1) Explicit Cut-off		Balancing	Final estimate	
INCOME APPROACH									
Compensation of employees	%	0,0	0,0	0,0	0,0	0,0	0,0	56,7	
Non-Financial Corporations	%	0,0	0,0	0,0	0,0		0,0	0,0	
Financial Corporations	%	0.0	0.0	0,0	0,0		0.0	0,0	
General Government	%	0.0	0.0	0.0	0.0		0.0	0,0	
Households	%	0,0	0,0	0,0	0,0		0,0	0,0	
NPISH	%	0.0	0.0	0,0	0,0		0.0	0,0	
14 011	\(\alpha\)	0,0	0,0	0,0	0,0	0,0	0,0	0,0	
(2) Gross operating surplus	%	0,0	0,0	0,0	0,0	0,0	0,0	26,3	
Non-Financial Corporations	%	0,0	0,0	0,0	0,0		0,0	0,0	
Financial Corporations	%	0.0	0.0	0.0	0.0		0.0	0,0	
General Government	%	0,0	0,0	0,0	0.0	0,0	0,0	0,0	
Households	%	0,0	0,0	0,0	0,0		0,0	0,0	
NPISH	%	0,0	0,0	0,0	0,0		0,0	0,0	
		-,-	.,.	-,,		- 7,-	.,.		
(2) Mixed income	%	0,0	0,0	0,0	0,0	0,0	0,0	0,0	
Taxes on production and imports	%	0,0	0,0	0,0	0,0	0,0	0,0	19,1	
Subsidies	%	0,0	0,0	0,0	0,0	0,0	0,0	2,0	
Residual item		0,0	0,0	0,0	0,0	0,0	0,0	0,0	
Gross domestic product	%	0.0	0,0	0,0	0,0	0,0	0,0	100,0	
Gross National Income  Compensation of employees received from the rest of the		0,3	0,0	0,0	0,0	0,0	0,0	0,5	
Compensation of employees paid to the rest of the world		0,0	0,0	0,0	0,0		0,0	0,2	
Property income received from the rest of the world	%	6,6	0,0	-0,1	0,0		0,0	8,6	
Property income paid to the rest of the world	%	6,7	0,0	-0,3	0,0	0,0	0,0	12,7	
Taxes on production and imports	%	0,0	0,0	0,0	0,0	0,0	0,0	0,0	
Subsidies	%	0,0	0,0	0,0	0,0		0,0	0,0	
Gross national income	%	1,2	0,0	-1,9	0,0	0,7	-4,2	100,0	

**Table A2–4 Alternative meth. of Production** 

			Basis for NA Figures									
0 11 11 1 1011	Level of Betaile						Extrar	oolation and Me	odels			
Compilation of GNI		Level of Details	Surveys & Censuses	Administrative Records	Combined Data	Benchmark extrapolations	CFM and ratios	CFC(PIM) & Imputed Dw.	Other E&M	Total Extrap+Models	Other	Total
PRODUCTION APPROACH	A17											
		TOTAL										
Output of goods and services (at basic prices)		W NACE (Output+Int.Cons)	0,0	1,1	0,1	0,1	0,0	0,0	0,0	0,1	0,0	1,3
Intermediate consumption (at purchasers' prices )										44.4		444.0
Gross value added (at basic prices)		Weighted Contribution of GVA (%)	0,9	96,2	6,1	6,6	4,7	0,0	0,1	11,4	0,0	114,6
	^	Agriculture, hunting and forestry										
Output of goods and services (at basic prices)	r –	W NACE (Output+Int.Cons)	0.7	0.2	0,0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Intermediate consumption (at purchasers' prices )	_	mac (output muosilo)	0,1	0,2	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0
Gross value added (at basic prices)		Weighted Contribution of GVA (%)	0,9	0,3	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,2
		(.,					.,.		.,,.	.,.	-,-	,
	В	Fishing										
Output of goods and services (at basic prices)		W NACE (Output+Int.Cons)	0,0	0,1	0,9	0,0	0,0	0,0	0,0	0,0	0,0	1,0
Intermediate consumption (at purchasers' prices )												
Gross value added (at basic prices)		Weighted Contribution of GVA (%)	0,0	0,2	3,7	0,0	0,0	0,0	0,0	0,0	0,0	3,9
	L											
	С	Mining and quarrying										
Output of goods and services (at basic prices)		W NACE (Output+Int.Cons)	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0
Intermediate consumption (at purchasers' prices )												
Gross value added (at basic prices)		Weighted Contribution of GVA (%)	0,0	0,1	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,1
	_											
	D	Manufacture										
Output of goods and services (at basic prices)		W NACE (Output+Int.Cons)	0,0	0,7	0,3	0,0	0,0	0,0	0,0	0,0	0,0	1,0
Intermediate consumption (at purchasers' prices ) Gross value added (at basic prices)		Weighted Contribution of GVA (%)	0,0	6,3	2,4	0,0	0,0	0,0	0,0	0,0	0,0	8,7
Gross value added (at basic prices)		Weighted Contribution of GVA (%)	0,0	6,3	2,4	0,0	0,0	0,0	0,0	0,0	0,0	8,7
	F	Electricity										
Output of goods and services (at basic prices)	-	W NACE (Output+Int.Cons)	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0,0	0,0	1.0
Intermediate consumption (at purchasers' prices)	_	W NOCE (Output HILLOOMS)	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0
Gross value added (at basic prices)		Weighted Contribution of GVA (%)	0,0	2.6	0,0	0.0	0.0	0,0	0,0	0,0	0,0	2,6
		(.,		,-			.,.		.,,.	.,.	-,-	, .
	F	Construction										
Output of goods and services (at basic prices)		W NACE (Output+Int.Cons)	0,0	0,9	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,9
Intermediate consumption (at purchasers' prices )												
Gross value added (at basic prices)		Weighted Contribution of GVA (%)	0,0	7,6	0,0	0,3	0,0	0,0	0,0	0,3	0,0	7,8
	_											
	G	Wholesale and retail trade, repair of vehicles and pers										
Output of goods and services (at basic prices)	⊢	W NACE (Output+Int.Cons)	0,0	4,7	0,0	0,0	0,0	0,0	0,0	0,0	0,0	4,7
Intermediate consumption (at purchasers' prices )	₩											
Gross value added (at basic prices)	₩	Weighted Contribution of GVA (%)	0,0	43,3	0,0	0,0	0,0	0,0	0,0	0,0	0,0	43,3
	l	Underland and an admirant										
Output of goods and services (at basic prices)	п	Hotels and restaurants  W NACE (Output-Int.Cons)	0,0	1.0	0,0	0.0	0.0	0.0	0.0	0,0	0,0	4.0
Intermediate consumption (at purchasers' prices)		W NACE (Output+int.Cons)	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0
Gross value added (at basic prices)		Weighted Contribution of GVA (%)	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3
Gross value added (at basic prices)	<del>                                     </del>	Thought de de la dela de	0,0	1,3	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,3
	i –	Transport, storage and communication										
Output of goods and services (at basic prices)	ĺ	W NACE (Output+Int.Cons)	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0
Intermediate consumption (at purchasers' prices )			-,-	.,,=	2,5					5,5	2,5	.,-
Gross value added (at basic prices)		Weighted Contribution of GVA (%)	0,0	5,2	0,0	0,0	0,0	0,0	0,0	0,0	0,0	5,2
,,										.,,	.,	
	J	Financial intermediation										
Output of goods and services (at basic prices)		W NACE (Output+Int.Cons)	0,0	1,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1,0
Intermediate consumption (at purchasers' prices )												
Gross value added (at basic prices)		Weighted Contribution of GVA (%)	0,0	6,8	0,0	0,0	0,0	0,0	0,0	0,0	0,0	6,8

Compilation of GNI		Level of Details	Data validation	Conceptual	(1) Explicit Cut-off	(1) Explicit exhaustiveness	Balancing	Final estimate
PRODUCTION APPROACH								
PRODUCTION APPROACH	A17	TOTAL						
Output of goods and services (at basic prices)		W NACE (Output+Int.Cons)	0,0	-0,3	0,0	0,0	0,0	1,0
Intermediate consumption (at purchasers' prices )		W NACE (Output+int.Cons)	0,0	-0,3	0,0	0,0	0,0	1,0
Gross value added (at basic prices)		Weighted Contribution of GVA (%)	0,0	-33,1	0,0	0,6	1,5	83,6
, ,		, ,	,	·	·	,	,	
	Α	Agriculture, hunting and forestry						
Output of goods and services (at basic prices)		W NACE (Output+Int.Cons)	0,0	0,0	0,0	0,0	0,0	1,0
Intermediate consumption (at purchasers' prices )								
Gross value added (at basic prices)		Weighted Contribution of GVA (%)	0,0	0,0	0,0	0,0	0,0	1,2
	D	Eighing						
Output of goods and services (at basic prices)	В	Fishing W NACE (Output+Int.Cons)	0,0	0,0	0,0	0,0	0,0	1,0
Intermediate consumption (at purchasers' prices )		W Mice (Output+IIIt.Ootio)	0,0	0,0	0,0	0,0	0,0	1,0
Gross value added (at basic prices)		Weighted Contribution of GVA (%)	0,0	0,0	0,0	0,0	0,1	4,0
		(.,				-7-		, ,
	С	Mining and quarrying						
Output of goods and services (at basic prices)		W NACE (Output+Int.Cons)	0,0	0,0	0,0	0,0	0,0	1,0
Intermediate consumption (at purchasers' prices )								
Gross value added (at basic prices)		Weighted Contribution of GVA (%)	0,0	0,0	0,0	0,0	0,0	0,1
	_							
Output of accidence described (at heads assistant)	D	Manufacture	0,0	0,0	0,0	0,0	0,0	1,0
Output of goods and services (at basic prices) Intermediate consumption (at purchasers' prices )		W NACE (Output+Int.Cons)	0,0	0,0	0,0	0,0	0,0	1,0
Gross value added (at basic prices)		Weighted Contribution of GVA (%)	0,0	0,0	0,0	0,0	0,2	8,9
Ci OSS value added (at basic prices)		The ignited contribution of CVA (76)	0,0	0,0	0,0	0,0	0,2	0,3
	E	Bectricity						
Output of goods and services (at basic prices)		W NACE (Output+Int.Cons)	0,0	0,0	0,0	0,0	0,0	1,0
Intermediate consumption (at purchasers' prices )								
Gross value added (at basic prices)		Weighted Contribution of GVA (%)	0,0	0,1	0,0	0,0	0,0	2,7
	F	Construction						4.0
Output of goods and services (at basic prices) Intermediate consumption (at purchasers' prices )		W NACE (Output+Int.Cons)	0,0	0,0	0,0	0,1	0,0	1,0
Gross value added (at basic prices)		Weighted Contribution of GVA (%)	0,0	0,1	0,0	0,5	0,2	8,6
Ci OSS value added (at basic prices)		The ignited contribution of CVA (76)	0,0	0,1	0,0	0,0	0,2	0,0
	G	Wholesale and retail trade, repair of vehicles and per	sonal and HH goods					
Output of goods and services (at basic prices)		W NACE (Output+Int.Cons)	0,0	-3,8	0,0	0,0	0,0	1,0
Intermediate consumption (at purchasers' prices )								
Gross value added (at basic prices)		Weighted Contribution of GVA (%)	0,0	-34,3	0,0	0,0	0,1	9,1
	l							
	Н	Hotels and restaurants						4.0
Output of goods and services (at basic prices)		W NACE (Output+Int.Cons)	0,0	0,0	0,0	0,0	0,0	1,0
Intermediate consumption (at purchasers' prices )  Gross value added (at basic prices)		Weighted Contribution of GVA (%)	0,0	0,0	0,0	0,0	0,0	1,3
Ci OSS value added (at basic prices)		The ignited contribution of CVA (76)	0,0	0,0	0,0	0,0	0,0	1,5
		Transport, storage and communication						
Output of goods and services (at basic prices)		W NACE (Output+Int.Cons)	0,0	0,0	0,0	0,0	0,0	1,0
Intermediate consumption (at purchasers' prices )								
Gross value added (at basic prices)		Weighted Contribution of GVA (%)	0,0	0,0	0,0	0,0	0,1	5,3
	J	Financial intermediation						
Output of goods and services (at basic prices)		W NACE (Output+Int.Cons)	0,0	0,0	0,0	0,0	0,0	1,0
Intermediate consumption (at purchasers' prices )  Gross value added (at basic prices)	<b>—</b>	Weighted Contribution of GVA (%)	0,0	0,3	0,0	0,0	0,1	7,1
Gross value added (at basic prices)	Ь	I Meighted Contribution of GVA (%)	0,0	0,3	0,0	0,0	0,1	7,1

		Basis for NA Figures										
Compilation of GNI	Level of Details					Extrapolation and Models						
		Level of Details	Surveys & Censuses	Administrative Records	Combined Data	Benchmark extrapolations	CFM and ratios	CFC(PIM) & Imputed Dw.	Other E&M	Total Extrap+Models	Other	Total
								T				
	K	Real estate, renting and business activity										
Output of goods and services (at basic prices)		W NACE (Output+Int.Cons)	0,0	0,5	0,0	0,1	0,3	0,0	0,0	0,4	0,0	1,0
Intermediate consumption (at purchasers' prices )												
Gross value added (at basic prices)		Weighted Contribution of GVA (%)	0,0	8,0	0,0	1,6	4,7	0,0	0,0	6,3	0,0	14,3
	_ K	Services of owner-occupied dwellings (104)								4.0		
Output of goods and services (at basic prices)		W NACE (Output+Int.Cons)	0,0	0,0	0,0	0,0	1,0	0,0	0,0	1,0	0,0	1,0
Intermediate consumption (at purchasers' prices ) Gross value added (at basic prices)		Weighted Contribution of GVA (%)	0,0	0,0	0,0	0,0	6,3	0,0	0,0	6,3	0,0	6,3
Gross value added (at basic prices)		weighted Contribution of GVA (%)	0,0	0,0	0,0	0,0	0,3	0,0	0,0	6,3	0,0	6,3
		Public administration and defence; compulsory social										
Output of goods and services (at basic prices)		W NACE (Output+Int.Cons)	0,0	0,9	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,9
Intermediate consumption (at purchasers' prices)		The Computations	0,0	0,9	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,3
Gross value added (at basic prices)		Weighted Contribution of GVA (%)	0,0	4.5	0,0	0.0	0,0	0,0	0,0	0.0	0,0	4,5
		(47)	-,-	.,	-,-	-,-	-,-	-,-	-,-	,,,,	-,-	-,,-
	М	Education										
Output of goods and services (at basic prices)		W NACE (Output+Int.Cons)	0,0	0,7	0,0	0,2	0,0	0,0	0,0	0,2	0,0	0,9
Intermediate consumption (at purchasers' prices )		, , ,										
Gross value added (at basic prices)		Weighted Contribution of GVA (%)	0,0	3,1	0,0	1,0	0,0	0,0	0,0	1,0	0,0	4,2
	N	Health and social work										
Output of goods and services (at basic prices)		W NACE (Output+Int.Cons)	0,0	0,6	0,0	0,4	0,0	0,0	0,0	0,4	0,0	0,9
Intermediate consumption (at purchasers' prices )												
Gross value added (at basic prices)		Weighted Contribution of GVA (%)	0,0	4,7	0,0	2,9	0,0	0,0	0,0	2,9	0,0	7,€
	0	Other community, social and personal service activities										
Output of goods and services (at basic prices)		W NACE (Output+Int.Cons)	0,0	0,7	0,0	0,3	0,0	0,0	0,0	0,3	0,0	1,0
Intermediate consumption (at purchasers' prices )												
Gross value added (at basic prices)		Weighted Contribution of GVA (%)	0,0	2,3	0,0	0,8	0,0	0,0	0,0	0,8	0,0	3,1
	Р	Private households with employed persons										
Output of goods and services (at basic prices)		W NACE (Output+Int.Cons)	0,0	0,0	0,0	0,0	0,0	0,0	0,9	0,9	0,0	0,9
Intermediate consumption (at purchasers' prices )												
Gross value added (at basic prices)		Weighted Contribution of GVA (%)	0,0	0,0	0,0	0,0	0,0	0,0	0,1	0,1	0,0	0,1
(global) FISIM		Comtailentian (0/)	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
(global) Fishw		Contribution (%)	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Taxes on products		Contribution (%)	0,0	16,3	0,0	0.0	0,0	0.0	0.0	0.0	0,0	16,3
Value added type taxes	<del>                                     </del>	Contribution (%)	0,0	11,1	0,0		-,-		0,0	0,0	0,0	11,1
Taxes and duties on imports, except VAT		Contribution (%)	0,0	4.8	0,0			0,0	0,0	0,0	0,0	4,8
Other taxes on products		Contribution (%)	0,0	0,4	0,0			0,0	0,0	0,0	0,0	0,4
Subsidies on products	<del>                                     </del>	Contribution (%)	0.0	0.9	0.0				0.0	0.0	0.0	0,9
P		(79)	0,0	5,5	5,5	0,0	3,0	,,,	0,0	3,5	2,0	
Residual item		Contribution (%)								0,0		0,0
Gross domestic product	Wa	eighted Contribution of GDP (%)	0.9	111.6	6.1	6.6	4.7	0.0	0.1	11.4	0.0	130,0
Orogo domicado product	110	righted John Dation of JDI (78)	0,9	111,0	0,1	0,0	7,7	0,0	0,1	· · · · · ·	0,0	100,0

	Adjustments							
Compilation of GNI		Level of Details	Data validation	Conceptual	(1) Explicit Cut-off	(1) Explicit exhaustiveness	Balancing	Final estimate
		Bard and a settle and burden a set it.						
Contains of months and a southern (at books asis as	n.	Real estate, renting and business activity	0.0	0.0	0.0	0.0	0.0	1.0
Output of goods and services (at basic prices)	1	W NACE (Output+Int.Cons)	0,0	0,0	0,0	0,0	0,0	1,0
Intermediate consumption (at purchasers' prices)	-	Mainhard Contribution of OVA (9)	0.0	0.4	0.0	0.0	0.0	14,6
Gross value added (at basic prices)	+	Weighted Contribution of GVA (%)	0,0	0,1	0,0	0,0	0,2	14,6
	К	C						
Output of goods and services (at basic prices)	_ ^	Services of owner-occupied dwellings (104) W NACE (Output+Int.Cons)	0,0	0,0	0,0	0,0	0,0	1,0
	1	W NACE (Output+int.cons)	0,0	0,0	0,0	0,0	0,0	1,0
Intermediate consumption (at purchasers' prices)	<del>                                     </del>	Weighted Couteibusies of OVA (9)	0.0	0.4	0.0	0.0	0.1	0.5
Gross value added (at basic prices)	_	Weighted Contribution of GVA (%)	0,0	0,1	0,0	0,0	0,1	6,5
		Dublic administration and defended accomplished						
Out-ut -fddd (-t biii	-	Public administration and defence; compulsory social		0.0	0.0	0.0	0.0	1.0
Output of goods and services (at basic prices)	1	W NACE (Output+Int.Cons)	0,0	0,0	0,0	0,0	0,0	1,0
Intermediate consumption (at purchasers' prices)	<del>                                     </del>	Weighted Couteibusies of OVA (9)	0,0	0.0	0.0	0,0	0,1	4,8
Gross value added (at basic prices)	+	Weighted Contribution of GVA (%)	0,0	0,2	0,0	0,0	0,1	4,8
		Education						
	M	Education						4.0
Output of goods and services (at basic prices)	1	W NACE (Output+Int.Cons)	0,0	0,0	0,0	0,0	0,0	1,0
Intermediate consumption (at purchasers' prices )	-	W. 11. 10. 17. 17. 18. 19. 19.						
Gross value added (at basic prices)	-	Weighted Contribution of GVA (%)	0,0	0,2	0,0	0,0	0,1	4,5
	L							
	N	Health and social work						4.0
Output of goods and services (at basic prices)	1	W NACE (Output+Int.Cons)	0,0	0,0	0,0	0,0	0,0	1,0
Intermediate consumption (at purchasers' prices )	-							
Gross value added (at basic prices)	-	Weighted Contribution of GVA (%)	0,0	0,3	0,0	0,0	0,1	8,1
		04						
Out-ut -fddd (-t biii		Other community, social and personal service activitie	0,0	0.0	0.0	0,0	0.0	1.0
Output of goods and services (at basic prices)	1	W NACE (Output+Int.Cons)	0,0	0,0	0,0	0,0	0,0	1,0
Intermediate consumption (at purchasers' prices)	-	Mainhard Contribution of OVA (9)	0,0	0.0	0.0	0.0	0.0	3,2
Gross value added (at basic prices)	+	Weighted Contribution of GVA (%)	0,0	0,0	0,0	0,0	0,0	3,2
	_	Deivote have a halde with a wale and a conse						
Output of mondo and annihora (at basis asis as	Ρ	Private households with employed persons	0.0	0.4	0.0	0.0	0.0	1.0
Output of goods and services (at basic prices)	1	W NACE (Output+Int.Cons)	0,0	0,1	0,0	0,0	0,0	1,0
Intermediate consumption (at purchasers' prices )	<b>'</b>	W						
Gross value added (at basic prices)	-	Weighted Contribution of GVA (%)	0,0	0,0	0,0	0,0	0,0	0,1
(global) FISIM		Contail ation (00)	0,0	0,0	0,0	0,0	0,0	0,0
(global) FISIM	-	Contribution (%)	0,0	0,0	0,0	0,0	0,0	0,0
Taxos on products		Contribution (9/)	0,0	0,0	0,0	0,0	0.0	16,3
Taxes on products	-	Contribution (%)	0,0	0,0	0,0	0,0	-,-	10,3
Value added type taxes	1	Contribution (%)	0,0	0,0	0,0	0,0	0,0	4,8
Taxes and duties on imports, except VAT	-	Contribution (%)						0,4
Other taxes on products	1	Contribution (%)	0,0 <b>0,0</b>	0,0 <b>0,0</b>	0,0	0,0 <b>0,0</b>	0,0 <b>0,0</b>	0,4
Subsidies on products	1	Contribution (%)	0,0	0,0	0,0	0,0	0,0	0,9
Residual item		Contribution (%)						
	100			00.1			, .	00.0
Gross domestic product	We	eighted Contribution of GDP (%)	0,0	-33,1	0,0	0,6	1,5	99,0