METHODOLOGY

Industrial production, sales
(Tables 1.9., 2.9.–2.23., 2.32.–2.33.)

Definition of main concepts, indicators

Industrial activity: own production of industrial enterprises classified to the industry, and industrial production performed from indirect services.

Sales of industrial activities: value of own industrial production and performed industrial services increased with price support, decreased with consumption tax, excise duties and registration tax as well as value added tax.

Industrial production: production value of industrial activities of enterprises belonging to the industry. This indicator is calculated by correcting the sales value of industrial activities with the changes of own produced industrial stocks. From 2005 – in order to follow economic events of liberated energy-market – the value of energy received for distribution and sold further is subtracted from the industrial production volume of electricity, gas, steam and air-conditioning supply (netting out the multiplication).

Total sales: the sales value of industrial activities of the enterprises belonging to industry.

Export sales: value of the sales of own-produced industrial products and industrial products produced by subcontractors effectuated in the turnover of external trade to foreign buyers, respectively, as well as the current HUF value of the industrial services provided to foreign buyers, paid with foreign exchange, import purchase or HUF. The export sales are defined as sales over the border of Hungary. Export sales include the dispatches to the Member States of EU, too. Sales for enterprises with Hungarian tax number, but having headquarters of abroad have to be accounted as export sales.

Domestic sales: value of the sales of own-produced industrial products and industrial products produced by subcontractors effectuated in the turnover of domestic trade as well as the value of the industrial services provided at home. The domestic sales are defined as sales within the border of Hungary. Value of the sales to enterprises operating on custom free zones and from enterprises operating on custom free zones to enterprises operating at home are accounted as domestic sales.

End-use groups: the end-use groups are defined by grouping the classes – according to the regulations of the European Union – and are divided into three groups and four sub-groups.

Volume indices of industrial production and sales: this indicator is calculated by Paasche weighting from value of the production and sales of the enterprises of the industry at comparable prices (reference period prices). Volume indices of production and sales value reflect the changes of production and sales value netting out price movements.

Local data: data of counties according to the local units, where the production is really carried out (namely the data do not refer to the counties according to the headquarters) In order to improve authenticity local data – owing to the system of observation and to the methods of estimation – can be calculated for the total industry only.

Total production of industrial products: the data of products produced by the enterprises classified into the industry (Table 2.20.), respectively those of produced by the enterprises classified out of industry (Table 2.21.) are published according to the structure of Classification of Industrial Products (ITO).

In the yearbook only data of products with a significant production are published, but not all products of the product classification (ITO). Therefore and occasionally because of lack of data qualified as individual within a product group the sum of part figures may differ from the total.

Productivity index: the quotient of the production volume index and the staff number index.

Source of data

The data of production and sales of the industry are calculated from the reports 'Annual survey of industrial products statistics', 'Monthly survey on performance statistics, Industry'. The survey covers enterprises classified in mining, manufacturing, as well as in electricity, gas, steam and air conditioning supply.

Scope of data suppliers

Scope of observation of industrial production and sales: production and sales data broken down by classes, production data broken down by regions and data broken down by end use groups (Tables 2.14–2.19.) contain data of enterprises with at least 5 employees. Data referring to the total industry (Tables 2.9–2.12., 2.14–2.17.) are published in a separate row ("Industry excluding water and waste management, total including enterprises with less than 5 employees") and data in Table 2.13. contain data of all industrial enterprises, as a sum of data observed by full scope survey (enterprises with more than 49 employees), by sample survey (enterprises between 5–49 employees) and estimated from other data sources (enterprises with less than 5 employees).

Volume index numbers published by subsections are calculated from the comparable data of enterprises having 5 or more employees (Tables 2.9.–2.12.). The time series of share of industrial production by subsections refers to enterprises at least 5 employees too (Table 2.32.).

Annual observation of products covers in each sub-branch enterprises carrying out 90% of the national production (base of calculation is the sales of industrial activities), therefore scope of data suppliers differs from sub-branch to sub-branch: enterprises having employees 5 or more, 10 or more, 20 or more persons. Data of industrial products, contain data of this differentiated scope of data suppliers (Table 2.20.). The industrial product data of enterprises classified out of industry are published, too (Table 2.21.). The scope of these data covers the enterprises classified out of industry, but possessing establishment of industrial activity or realizing more than 500 million HUF from industrial activity.

Time series data of important industrial products (Table 1.9.) are published by the current observation. The data of products produced by the enterprises classified into the industry (Table 1.9.)

Method of estimation

The sample survey is performed on a stratified sampling. The target population covers all active small enterprises, the sampling frame is the business register of the HCSO. The strata are the branches, the size groups of employees, as well as Budapest and the countryside. The method of grossing up is the multiplication of the mean by the sample size for the various strata. The standard error is calculated by the traditional way. At estimating the data of classes and those of regions, the data grossed up for branches are distributed into classes broken down by size groups of employees and by Budapest and the countryside -, after that the data concerning the countryside are broken down by counties. The distribution is based on the sample, on the number of enterprises and on the latest available sales data deriving from surveys of the HCSO or from tax records.

In order to estimate the regional data of the industrial production, data of enterprises with more than 49 employees and having more than one local unit are broken down by counties. Until 2012 the distribution was based on the data of wages and salaries of total employees on the local units deriving from the former survey. Since 2013 the distribution is based on the data of the the annual average number of persons employed of surveyed active enterprises of the industry. This data are from two years earlier HCSO's statistical surveys (No. 1846 ('Survey of local units')). For enterprises between 5 and 49 employees headquarters' data are used because in this segment the number of local units is not more than one and this single local unit is in the county where the production takes place.

The data of enterprises having employees below 5 persons are estimated from the data on value added tax of the last two years, from the share of total sales and the number of active enterprises.

Non-response data are calculated with the average value.

The missing data of enterprises involved in the survey, but not responded have been imputed. Product data of missing enterprise were replaced by the figures reported by enterprise in the production survey of previous year (taking into consideration value of sales from industrial activity reported in structural business statistics). If these figures are not available, the value of sales from industrial activity reported in structural business statistics was used and split into product data according to the national product structure of activity class into the enterprise was classified.

Nomenclatures

Standard Industrial Classification of All Economic Activities (TEÁOR): this is a classification of economic activities by character of the activities. Classification of enterprises by the character of their main activity is based on TEÁOR.

The currently valid nomenclature (TEÁOR'08) was introduced on 1st January 2008. TEÁOR'08 corresponds to the NACE Rev 2., which is obligatory to use in the Member States of the European Union.

Code of branches: hierarchical code- and letter-system of 4-digit character (section, subsection, division, group, class; in Hungarian: gazdasági ág, gazdasági alág, ágazat, alágazat, szakágazat) applied in the Standard Industrial Classification of All Economic Activities for marking branches.

Classification of Industrial Products (ITO): a hierarchical classification containing products and services. ITO corresponds to NACE Rev.2 classes on 4-digit level, CPA 2008 subcategories on 6-digit level and PRODCOM (European industrial product list) on 8-digit level. ITO came into force on 1st January 2008 and is annually revised according to the changes in the PRODCOM List

Other general notes

Individual data are not published.

Industrial producer price indices
(Tables 2.34.–2.36.)

Definition of main concepts, indicators

Industrial producer price indices: they reflect price movements of sold products and services produced/performed by enterprises classified to the industry. The indices are calculated according to the standard industrial classification of all economic activities (TEÁOR). The PPI is the weighted average of the domestic and export price indices. The indices are aggregated by a two-step Laspeyres-weighting.

Price indices of domestic sales: index, calculated from the net prices of products and services sold within the country, by base-year weighting.

Price indices of export sales: index, calculated from the prices of products sold in foreign trade directly, by mean of consignee or by privity, by base-year weighting.

End-use grouping: groupings by end-use are based on listing the industrial classes according to the prescriptions of the European Union, *(*MIG: *Main Industrial Grouping)* i.e. divided into 3 main and 4 sub-groups.

Index calculation method: As a first step the computation of chain relative numbers by representatives is set up for the reference month. Then the indices of commodity groups are determined as the arithmetical mean of price relative numbers of representatives, and the price indices of 4-digit classes are computed as a weighted arithmetical mean of indices of commodity groups. The weight is the annual sales value two years prior to the reference year in the respective sales direction.

Source of data

Industrial producer price indices are based on data of the HCSO-questionnaire No. 1007 (‘Monthly price survey of industrial products and services’) in the NPSDC (National Programme for Statistical Data Collection, based on a government decree). The data supply is compulsory.

Scope of data suppliers

The scope of data suppliers reporting price statistics data is representative and independent of size groups regarding the number of employed persons. The data collection covers enterprises selected from branches of mining and quarrying, manufacturing, electricity, gas, steam and air conditioning supply, water collection, treatment and supply, and waste collection, treatment and disposal activities; materials recovery. The monthly representative price survey refers to more than 1300 enterprises and nearly 5800 products or services. In case of domestic sales the observed price is a basic price, excluding value added tax and excise duties and including price support (making part of sales), while in case of export sales it is a price at frontier parity converted to HUF at the actual rate of exchange at the time of fulfilment.

Construction
(Tables 3.9.–3.14., 3.17.–3.21., 3.32.–3.34.)

Definition of main concepts, indicators

Total value of construction output: this amount comprises sum of value of the construction activities performed by enterprises with legal and non-legal entity, as well as individual entrepreneurs classified to the construction, enterprises outside the construction and the population.

Construction output: these are activities with aim to erect new buildings and to expand, re-build or transform existing buildings (changing the purposes, increasing the life), furthermore to renovate buildings reconstructing original condition and increasing value, to maintain (repair) buildings, not increasing value or to demolish. Price support and overcharges are included, consumption tax, allowances and value added tax are excluded by value of the construction activity.

Value of own construction output: this is amount value of construction activities performed by employees belonging to own staff or by contractual employees, and with own or leased machines. It comprises the value of contract and sub-contract activities, excluding the work made by sub-contractors. The value of own construction activity includes value of completed (invoiced) works, as well as change in stock of uncompleted construction works registered on direct production costs.

Construction activity of investment type: activities with aim to erect new buildings and to expand or re-build existing buildings changing their purpose, or enlarging the dimension, furthermore to renovate buildings reconstructing original condition and increasing value.

Construction activity of maintenance type: maintaining and repairing activities with aim to assure continuous, undisturbed, stable run of the building, not enlarging its original dimension and not changing its purpose. Demolish is included as well. It comprises the value of invoiced performances carried out for customers, but excludes activities made for own purposes.

Volume index: this indicator is calculated from the value of the construction activity at comparative reference period prices, which reflects the changes of the value of construction activity netting out the effects of the price movements.

Scope of data suppliers

Enterprises classified to the construction, having 10 or more employees are observed by full scope survey, ones between 5 and 9 employees by representative survey. Observation of enterprises outside the construction is based on the data supply of the previous year. Scope of data suppliers are expanded with new enterprises reporting construction activities in the associated surveys year by year (Tables 3.32.–3.34.).

In the tables containing comprehensive data of production and staff-number for total value of construction activities, the data collected by statistical surveys of construction of the HCSO are completed with the following estimates:

- data of construction enterprises which did not submit the annual statistical survey,
- data of enterprises not belonging to the construction and reporting construction activity
- data of individual entrepreneurs having less than 5 persons,
- data of construction activity of the population.

Method of estimation

The sample survey of enterprises having employees between 5–9 persons is performed on a stratified sampling. The target population covers all active small enterprises, the sampling frame is the business register of the HCSO. The strata are the groups, the size groups of employees, as well as Budapest and the countryside. The method of grossing up is the multiplication of the mean by the sample size for the various strata. The standard error is calculated by the traditional way. At estimating the construction output data of groups and those of regions, the data grossed up are distributed into groups – broken down by size groups of employees and by Budapest and the countryside –, after that the data concerning the countryside are broken down by counties. The distribution is based on the sample, on the number of enterprises and on the latest available sales data deriving from surveys of the HCSO or from tax records.

Data of enterprises with less than 5 employees are calculated from the group averages of production value per persons of the enterprises between 5–19 employees. Non-response data are estimated by the group average.

Production value of construction by households is estimated on the cost per m^2 data of an average dwelling. Number of employees is calculated from the production per persons data of enterprises with less than 10 employees.

Data completion of enterprises outside the construction, not obliged to annual data supply is based on associated surveys relating to the reference year.

Source of data

Value of construction activities and the number of manual employees on construction activities derive from 'Annual Survey of Construction', data of construction by households derive from survey 'Detailed data on put into use of dwellings'.

Comparability

Until 1991 the volume index of construction activities and data of labour force employed on these activities included the enterprises with legal entity and the entrepreneurs. Since 1992 the calculations have covered non-legal entities as well.

In the tables containing data of construction activity broken down by sections of the national economy (Tables 3.7., 3.8.) the section Construction also contains construction by households.

Nomenclatures

Classification of economic activities (TEÁOR'08)

From 1st January 2008 the classification (TEÁOR'08) and publication of activities follow the nomenclature NACE Rev. 2 of the Eurostat.

While the nomenclature TEÁOR'08 basically differs from the TEÁOR'03, retrospective data are not broken down by groups.

Groups in the TEÁOR '08:

41: Construction of buildings

42: Construction of civil engineering works

43: Specialised construction works

Classification of Constructions (ÉJ): this is a list containing classification of constructions of same purposes, broken down by main and sub groups, type of groups, with contents definition of the groups of constructions.

Buildings: roofed constructions, which can be used separately, have been built for permanent purposes. Buildings do not necessarily need walls, but there must be a demarcation, which constitutes the individual character of the building to be used separately.

Civil engineering works: are constructions not classified under buildings (roads, railways, waterworks, pipelines, cables).

Classification of construction activities by sub-groups of constructions – according to the regularisation of the EUROSTAT – is based on the Classification of Constructions, valid from 1st January 2000. (Published in Statisztikai közlöny No. 5/1999).

Construction producer price indices
(Tables 3.15., 3.16.)

Definition of main concepts, indicators

Construction producers' price index: reflects the average price development of construction activity performed in construction branch. The indices are based on the survey of market prices of selected construction operations. Until 2007 the price index was calculated on cost-base, taking into consideration the change in the producers' prices of the materials used in the construction and in the earnings of employees on construction. Until 1992 the price index was calculated on sample survey. Data, calculated by different methods are connected by chain indices.

Price indices by type of building: reflects the average price development of construction operations need to build the given type of construction.

Calculation method: The basic element of the calculation is the elementary price relative by representatives, which is the quotient of the construction operation's reference and base period prices. From these quotients first we calculate - using arithmetical averages - enterprise indices; subsequently sub-branch and branch indices aggregated from enterprise indices weighted by staff size categories and main groups of construction. The construction price index is computed from the branch indices. Production values from two years before the reference year are used as weights. To compute indices of types of constructions first price indices for each selected operation are calculated as the simple arithmetical mean of elementary price relatives, subsequently the indices of the construction operations are weighted by types of constructions. The weights used for the types of constructions were made to be compiled by specialists, who collected weight proportions from the costs of selected construction projects.

Source of data

Data supply of "Prices of Construction Activities".

Group of data providers

Designated enterprises classified to the construction industry (a total of around 900).

Unit of observation

The changes in prices of homogeneous elements, sub-activities so called construction operations are observed for calculation of the construction price index. 217 representative construction operations are selected to the data collection.

Gross Value Added
(Tables 1.1., 1.2., 2.37.)

Definition of main concepts, indicators

Gross value added on basic price is the difference between output (at basic prices) and intermediate consumption (at purchasers' prices).

Output is an aggregated indicator of production, which is the gross value of goods and services produced by all economic units in the course of a year. Gross output is valued at market prices.

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

Source of data

Several data sources are used for compiling the system of national accounts. A part of these data derives from the HCSO's statistical surveys, as well as from the National Tax and Customs Administration (NAV) and from other institutions.

Scope of data suppliers

Data of Gross Domestic Product (GDP) include all activities of every units classified according to the TEÁOR'08.

Comparability

Gross value added data (table 1.1., 1.2., 2.37.) are comparable internationally with others from other countries (comparability with other countries).

Gross value added data are methodologically comparable for the whole time series (comparability in terms of time).

Methodological source

The methodology of the compilation of national accounts in the European Union has been changed from September 2014, based on Regulation (EU) No 549/2013 of the European Parliament and of the Council on the European system of national and regional accounts in the European Union. Annex A of this regulation defines the methodology of national accounts for the Member States of the European Union (ESA2010). This adaptation is not only European but world-wide. ESA 2010 in Europe is the sister of SNA 2008, which is in the process of being implemented all around the world.

Detailed methodology can be found on HCSO's website at Metainformation.

Investment
(Tables 1.3., 1.4., 2.38.–2.43., 3.30., 3.31.)

Definition of main concepts, indicators

Investment activity of the national economy: The procurement, establishment, production of tangible assets; the expansion, conversion, reconstruction of existing tangible assets (forest growing works excluded), as well as all activities from putting into operation to forwarding to warehouse of assets, strictly relating to the asset. (Definition of fixed assets: see chapter 'Assets'). Investment activities are recorded at performance value.

Performance value of investment: includes purchase price, costs of transportation, storing, foundations, installation, pilot projects, putting in operation, fees of agents in connection with the acquisitions, commissions, supports, taxes, duties, pre-charged undeductible VAT, and other costs, strictly relating to the asset. Deductible share of VAT does not belong to the performance value of investment.

Volume indices of investments: this indicator is calculated by Paasche weighting from value of the investment value at comparative prices (reference period prices). Volume indices of investments reflect the changes of investment value netting out price movements

Source of data

Data of investments derive partly from the annual survey of investment statistics of the HCSO and partly from estimations.

Scope of data suppliers

Tables 1.3 and 1.4. enterprises having more than 19 employees and organisations belonging to the central and local government and social security are observed by a full-scope survey. Enterprises between 5–19 employees were observed by stratified sample surveys. Data relating to corporations with less than 5 employees are based on experts' estimations.

In performance value of investment from 2004 to 2005 the significant difference was caused, that the respondents of 7011 (Development and selling of real estate) to the NACE Rev.1.1 had been reclassified to the construction according to the NACE Rev.2.

Tables 2.38.–2.43. and 3.30., 3.31. enterprises having more than 19 employees are observed by a full-scope survey. Enterprises between 5–19 employees were observed by stratified sample surveys.

Grossing up of the data of the enterprises was composed with multiplication of the mean by the sample size. The standard error is calculated in the traditional way.

Local data

Exceeding more than 5 employees the data of enterprises are accounted according to the place of investment, regardless the location of the investor.

Nomenclatures

The time series of investment value data are published between 2001 and 2004 according to TEÁOR'03 (NACE Rev.1.1), from 2005 according to TEÁOR'08 (NACE Rev.2).

The time series of investment volume index data are published between 2001 and 2005 according to TEÁOR'03 (NACE Rev.1.1), from 2006 according to TEÁOR'08 (NACE Rev.2).

Labour

(Tables 1.6., 2.24.–2.31., 3.10., 3.12., 3.14., 3.22.–3.29.)

Employment statistics due to the difference in data sources, accounting methods and the surveyed population, the same phenomenon may be described by numerically different figures, therefore information deriving from various data sources cannot be used as substitutes.

Definition of main concepts, indicators

Employed persons: those persons, who worked one hour or more for pay, profit or payment in kind in job or business (including farm), during the reference week, or worked one hour or more without pay in a family business or on a farm (i.e. unpaid family workers), or were employees who had a job from which they were temporarily absent all of survey week (Table 1.6.).

Manual employees on construction activities (Tables 3.10., 3.12., 3.14.)**:** it is the average staff-number of manual full-time and non-full time employees on main job, pensioners and employees on contract.

Employees: the employee who stands in the contractual relationship being aimed at working with the employer, and the basis of his labour agreement, his/her agreement being aimed at working, in a monthly average in at least 60 working hours in return for a wage onto working obliged, and works at least 6 workdays continuously.

Gross earnings: the total of all earnings including basic wage with the personal income tax, contributions to health and retirement schemes, the employee's contribution and other wage elements paid under different titles to employees (wage supplement, bonuses, premiums, 13th month salary).

Average net earnings: an indicator calculated from the average gross earnings subtracting the labour market contribution, the personal income tax, and the health and retirement contributions, taking into consideration the contribution threshold as well, according to the prevailing valid rates. The impact of the children related tax concession has not been included.

Source of data

Data of employed (Table 1.6.) derive from the labour force survey and data of employees derive from sub annual labour survey.

Labour data referring to manual employees on construction activities (Tables 3.10., 3.12., 3.14.) derive from the survey 'Annual Survey of Construction Statistics'.

Scope of data suppliers

The scope of suppliers of monthly employees data – in the labour data collection system from institutions – covers enterprises with 5 or more employees, that with 50 or more employees are observed by a full-scope survey, between 5–49 employees by a representative one. Data – with the exception of Table 1.6. – refer to the enterprises with 5 or more employees.

Data of number of employees deriving from the 'Annual Survey on Construction Statistics' relates to enterprises having 5 or more employees, as well.

Comparability

Data of Table 1.6. are comparable, however data differ from those issued in the previous publications as a result of changing the source of data. Previous data source was Labour account Hungary 1 January …. (year); the recent one is the Labour Force Survey.

Data of employees in the industry and in the construction (Table 1.6.) – because of the differences in data sources, in the methodology and the observed population – differ from the labour data with similar content in Chapter 2. and 3.

In this yearbook the data on the number and earnings of the employees differ from other labour data publications of HCSO, because besides the data of the publicly financed and non-profit institutions, it contains data of enterprises belonging to industry and construction too.

Nomenclatures

The time series are published according to the Hungarian standard industrial classification of all economic activities valid in the reporting year.

Methodological source

The Reference Book to Labour Statistical Definitions.

Assets
(Tables 1.5.)

Definition of main concepts, indicators

Fixed assets (consist of dwellings, other buildings and structures, machinery and equipment, cultivated assets and intellectual property products) are such a produced, non-financial assets which are intended to be used functionally for more than one year.

Nomenclatures

The data are published according to TEÁOR'08.

Source of data

STADAT Table 3.1.34: Net stock of fixed assets

Scope of data suppliers

Data of fixed assets are calculated based on the data of units belong to the industry, construction or to the national economy.

Method of estimation

There was carried out a sample survey on the fixed assets in the corporation sector in 2000. The Perpetual Inventory Method (PIM) was applied to determine the stock value – except dwellings and cultivated assets – of following years. Statistical data and statistical models are both applied in order to calculate the new replacement (gross) value of the stock and – by taking into account the actual deteriorations of the assets – the net values of each year following the year, of which the initial stock was set for. PIM provides data on capital stock by accumulating the value of asset acquisitions of the preceding years.

The estimation of data on stock of dwellings and cultivated assets based on direct data sources.

Methodological source

Capital Formation and Stock of Non-financial Assets, 2000-2004. KSH. Budapest, 2006.

http://www.ksh.hu/docs/hun/xftp/idoszaki/pdf/nempenzugyieszk.pdf

Regulation (EU) No 549/2013 of the European Parliament and of the Council of 21 May 2013 on the European system of national and regional accounts in the European Union (ESA 2010).

Number of enterprises
(Tables 1.7., 1.8., 2.1.–2.8., 3.1.–3.8.)

Definition of main concepts, indicators

Registered enterprises: units which according to administrative registrations legally exist at the date of observation and have a tax number, including units under bankruptcy, liquidation and dissolution proceedings.

Active enterprises: an enterprise is considered as active if in the reference year it has turnover or employment. The definition follows the methodology of the Eurostat business demography statistics.

Entrepreneurs: private persons falling under the competency of the Act on private businesses, and also those who carry out business activity and have tax number (e.g. free-lance professions). In case of active entrepreneurs the definition covers only private persons falling under the competency of the Act on private businesses.

Companies and partnerships: the total number of companies and partnerships contains both the number of companies with legal entity and the number of partnerships without legal entity. The definition „companies and partnerships" contains all enterprises except entrepreneurs.

Source of data

The sources of statistical data for registered and active enterprises is the Business Register (BR) of the Hungarian Central Statistical Office. In the case of Business Demography the data the BR are completed with the information of different statistical data collections and with administrative sources (e.g. Tax and Financial Control Administration).

Nomenclatures

The applied activity classification of the registered and the active enterprises follows the NACE Rev.2. The grouping of registered business entities by legal form (abbreviation: GFO) is based on the classification in force from 1 May 2012. The classification of business entities by legal form was published in Regulation 21/2012. (16 April) KIM on the elements and nomenclatures of the statistical code.