

## **METHODOLOGY**

### **Construction permits**

(Table: 1.1.–1.6., 2.1.–2.2., 3.1.1.–3.1.10.)

**Source of data:** the monthly data registration and supply of the local governments concerning the number, useful floor area and the number of flats of the residential and non-residential buildings that have received construction permits.

**Building:** a structure with walls and roof confining, in part or in whole, an area or a room or a combination of such for a specific purpose, with the exception of engineering structures (engineering works) erected for the storage and transportation of gas, liquids or other bulk materials.

**Residential building:** a building should be regarded as residential when the major or entire part of it (more than 50 % of its built-in net area) is used for dwelling purposes.

**Non-residential building:** buildings used for official, administrative, commercial purpose, for tourism, entertainment, education, health care, sport, transport and telecommunication, industrial and agricultural activities and buildings serving other purposes.

**Useful floor area:** that part of the whole area surrounded by daubed walls, where the inner height exceeds 1.90 m.

### **Dwelling construction and cessation**

(Table: 1.7.–1.21., 2.3.–2.5., 3.2.1.–3.2.21., 3.5.1.–3.5.5., 3.6.1.)

**Source of data:** data registration and supply on construction of the local governments concerning building and cessation of dwellings and holiday houses.

**Built dwelling, holiday house:** new dwellings and holiday houses, which received put to use permit during the reference year.

**Completed residential building:** represents all dwellings in the residential building with put to use permit, registered in the year of completion of the building.

**Unfinished residential building:** not all dwellings in the building received the put to use permit.

**New construction:** the erection of a new dwelling or building.

**Other construction:** building extension, storey extension, attic-, loft conversion to dwelling, extensions, dwellings merge, subdivision, conversion to dwelling.

**Ceased dwelling:** on the basis of the registration of the settlement's local government dwellings ceased due to elementary damage, demolition, conversion or destruction.

**Dwelling construction permit:** permits issued in the course of the year to carry out construction activity. The review covers the number of dwellings figuring in the permits.

**Construction in progress:** building in progress on the basis of construction permits in force at the end of the year, except for constructions not started and failed.

**Dwelling:** by dwelling a technically architecturally, interconnected group of premises (rooms, offices and others) suitable for rest and home activities, cooking, eating, lavation, washing, use of toilet and for storage of goods necessary for the management of the household. The dwelling has to have at least one living room with a floor space exceeding 17 sq.m. and has to be heatable.

**Floor space:** the useful floor space of all premises, measured within a dwelling (at 1 m height above floor level between final wall surfaces.)

**Room:** a living premise of a dwelling with useful floor space exceeding 6 sq.m., heatable, with warm flooring, provided with window, so it has direct lighting and ventilation.

**Housing estate building:** multi-dwelling, multi-storey buildings (min. 2) erected under continuous construction, forming an independent part of the settlement and surrounded by public roads.

**Multi-storey, multi-dwelling building:** a residential building of min. 2 storeys and min. 3 dwellings surrounded by its own site.

**Group of buildings:** a group of structurally independent houses built in a row (min. 4 buildings), on individual sites, including one dwelling per site (built in a row, terrace-house, atrium house)

**Family house:** a residential building built to an independent site, including 1-2 dwellings.

**Holiday house:** a building for temporary stay and recreation and also suitable for managing a household and consisting of one or more units. (The criteria relating to holiday houses in respect of room and other conveniences are similar to that of dwellings.)

**Builders:** economic units with and without legal entity or natural persons at the order and expenses (cash and loan) of whom the construction is realised.

**Natural persons:** inhabitants, carrying out construction from own resources (cash+loan) mainly for private use.

**Local governments:** local governments of villages, towns, the capital and its districts, as well as those of the county and institutions established by them for public service.

**Central government:** ministries, national authorities and institutions with legal entity established to carry out a definite task financed by the central budget or other extrabudgetary fund.

**Business organisations:** domestic, foreign enterprises and joint ventures working under different kinds of ownership, corporations with legal entity, co-operative. Housing co-operatives are also accounted as business organisation.

**Other builders:** enterprises without legal entity, private ventures, social organisation, foundation, the Church.

**Contractors:** enterprises with or without legal entity and natural persons.

**Privately built dwellings:** construction is carried out under the guidance of a responsible technical manager by the builder himself, family members, relatives and friends.

Some definitions used in housing statistics appear in investment and construction statistics too. The definitions residential building, dwelling, investor, contractor are the same in all above statistics, but owing to the fact that housing statistics indicates only volume data, and others relate to value, there is no further overlap among mentioned statistics – except for the value of housing investment. This value – which figures only in this edition – has been stated by experts on the basis of volume data.

Time series of dwelling construction and cessation – except for financial resource of built dwellings – are comparable and uniform in respect of concepts.

### **Construction cost**

(Table: 1.29., 3.3.1.–3.3.2.)

**Construction cost:** An estimated cost incurred by the owner. Covers direct and indirect costs of home-building (construction) – exclusive of VAT – and the “fair” profit of the entrepreneur calculated on the given quarter’s price level.

#### **Considered cost are:**

Cost of building materials – purchase price of materials necessary for building the structures up

Price of material transportation to the site, loading and unloading;

Labour cost of the construction of structures – wages and contributions;

Cost of machinery and equipment incurred during the construction of structures;

Special costs – costs of auxiliary structures, interim apprentices and other organizational costs (covers expenses in connection with single and organizational costs emerging on the building site);

*Indirect or so called general cost, costs of the central management; and Profit, where the expected (fair) margin and the risk assumed by the entrepreneur is realized.*

**Costs passed over:**

*The cost of lot purchase;*

*Preparatory costs of development – engineering charges emerging in the process of planning, authorization and counseling;*

*Costs of construction financing;*

*Building of public utilities outside the borders of the lot or the contribution to this development;*

*Cost of fence building;*

*Construction costs of spaces with other functions than accommodation (e.g. office, workshop, etc.);*

*Profit of entrepreneurs who are not engaged in the process of construction but sell turnkey flats.*

**Method of cost estimation:** *We update the building costs of all the 28 types of homes quarterly on the basis of the relative average wages and building material costs. The effective average cost of a 1m<sup>2</sup> built area means the mean value weighted by the developed area (having a permission of usage) of the 28 types of specific home-building cost.*

**The bases of model calculation:** *all 28 types of home models are developed on the basis of home construction, the place of construction and the quality of homes.*

**The nature of home-building** *can be: single-family houses, multi-storey buildings with several flats, and new flats constructed through the exploitation of attics.*

**Differences considering location:** *We differentiate between 4 area categories, (2 county groups; within this, county seats and other settlements of the county) differentiated by the monthly gross salary of building industry workers.*

**Quality of the home** *can be: modest, average (flats constructed in the attic may belong to this category only), and luxury home.*

*Development of the modelled home-building cost of the 28 types of homes occurred in consideration to the following factors:*

*Resource requirement of the different types of homes (building material and labour);*

*Price data base supported by a continuous monitoring system of building material prices; and*

*Labour cost calculated on the basis of the average salary of building industry workers.*

**Weighing system of the cost calculation** *is made of the area of the actually constructed homes. Relevant data were gathered from the general data base number 1078. OSAP, entitled „Detailed data on the final take-over of homes“. Classification in 28 categories of homes in accordance with their nature and location – in line with the model – was given, while their classification in accordance with their quality (in case of single-family houses and multi-storey houses with several flats) is developed through a scoring system.*

*Homes are scored in accordance with 18 criteria based on footing area, equippedness and external shape, taking first of all characteristics improving the quality of the home into account. Score limits of the three quality categories were determined on the basis of scores of the flats built in 2010, where average quality represents homes with average scores,  $\pm 20\%$ .*

*Due to the last years' structural and quality changes the quality categories are defined by the actual year's mean points of built dwellings.*

**Construction cost index:** *shows quarterly changes of the home-building cost of 1 m<sup>2</sup> home as compared to the same period of the base period (average cost in 2010).*

## **Housing credits**

(Table: 1.25.–1.28., 3.4.1.–3.4.4.)

Enumeration of housing credits and subsidies is accomplished under the framework of 1686. OSAP data collection titled 'Report on housing credits' which relies on the structure of the Government Act nr.12/2001. (31.1.) regarding central housing subsidies.

**Loans subsidised by central budget** are mortgages and preferential loans altogether. (12/2001. (31. 1.) Government Act, 12.§ and 13.§.)

## **Dwelling stock**

(Table: 2.6., 2.7., 3.7.1.–3.7.3.)

Figures on the dwelling stock of early 2016 are calculated based on final figures of the population census of 2011, according to the administrative division valid on 1 January 2015. Data relate to all (inhabited and uninhabited) dwellings, and definitions are the same as those of the population census.

## **Housing market**

(Table: 1.23., 1.24., 2.18-20.,3.8.1.)

The monitoring of changes in home prices is based on data on stamp duty assessment, which are provided by the Hungarian Tax and Financial Control Administration (NAV) on a monthly basis. All home sales concluded by private individuals are subject to this data transfer including home sale prices and the most important characteristics. At present, there are data series of uniform structure comparable in every respect from 2007, which make it possible to analyze changes in home prices in a more detailed and exact way.

As a result of missing data 2% of all cases were excluded from calculations. In those cases, where there were no data on the floor area of the given dwelling, but all other data were available, the floor area was estimated using the home price and its other characteristics, then we used this estimated value to further calculate.

New dwellings were separated based on benefits used to buy a new dwelling.

Data on home transactions include all transfers of whole properties concluded by private persons. Mean home prices were calculated after the exclusion of outliers. For the calculation of square meter prices the estimated floor area was considered in case the actual information was missing. Average prices of this publication are arithmetical averages.

Home price index was calculated by a log linear regression model. Major data used in this model: floor area of the given dwelling, character of the building, specific geographical, administrative and income indicators of the given settlement (or district in Budapest). Based on the findings of the first model estimation 5% of dwellings were filtered out as outliers from further index calculations. After the exclusion of outliers, based on repeated model estimations, changes in prices were broken down by composition effect and pure changes in prices. As a result of the log linear method the released price indices resulted from the geometrical average of the given prices in all cases.

The home price index published by the Eurostat and introduced in this volume in chapter of International data is the weighted average of used and new home price indices. Weights are derived from the previous years' annual total value of home transactions.

## **Dwelling stock in local governments' property**

(Table: 2.8., 3.9.1.–3.9.11.)

Tables contain figures on the condition and quality of dwellings owned by local government. Classification of buildings by condition was done through the help of experts from the local government.

Till 2002 data are always sampled on the 1st of January of the given year, since 2003 in the interest of accounting consistency the next issues will contain the data of 31th of December of the given year.

## **Dwelling management of local government**

(Table: 1.30.–1.32., 2.9.–2.17., 3.10.1.–3.10.4.)

Data relate to buildings and rentals managed by those local governments that possess at least 10 flats.

**Restoration:** general repairs for the reinstating of one or more structures of a building by which the original technical state is restored or made safer.

**Modernization increasing the degree of comfort:** conversions within a dwelling which increase the degree of comfort.

**Modernization increasing the convenience of a dwelling:** improvement in the proper use of a dwelling – as compared to the original state – by the installation of individual heating and hotwater supplying equipment (gas or electric)

**Dwellings merge:** the establishment of larger dwellings through the merging of 2 or more dwellings in a way that either the degree of comfort or the level of convenience is increased.

**Maintenance:** preventive and reparative works carried out to assure proper use and substance of a building, as well as exchanging the cheap spareparts.

**Rented premise:** the subject of a rental contract. It can be: a dwelling, a garden, a shop, a warehouse etc. for rent. Janitor's or other service dwellings also belong to this category as well as unrented (empty) dwellings and premises to be rented for other purposes(e.g. shops).

**Rented dwelling:** the subject of a rental contract. It covers: dwellings rented for living in, service dwellings like janitor's, as well as unrented (empty) dwellings.

**Dwellings with full comfort** comprise dwellings:

- a.) with a living room of min. 12 m<sup>2</sup> floor space, a cooking premise, bathroom and flush toilet (in the bathroom or separately).
- b.) with public utilities ( electricity, water, sewerage disposal)
- c.) with hot water supply (district-, block-, or central hot water supply or from electric or gas boiler or bath-stove) and
- d.) with central heating system (district-, block-, individual central, level heating)

**Dwellings with comfort** are as follows:

- a.) with a living room of min. 12 m<sup>2</sup> floor space, a cooking premise, bathroom and flush toilet
- b.) with public utilities
- c.) with hot water supply and
- d.) with individual heating (gas heating, solid or fuel based stove, electric heat storing stove)

**Dwellings with semi-comfort** are:

- a.) with a living room of min. 12 m<sup>2</sup> floor space, a cooking premise, bathroom or flush toilet
- b.) with public utilities (at least electricity and water) and
- d.) with individual heating

**Dwellings without comfort** are dwellings which cannot be classified to semi-comfort ones, but

- a.) with a living room of min. 12 m<sup>2</sup> floor space, a cooking premise, and with possibility of toilet (latrine) usage outside the dwelling and

- b.) with individual heating
- c.) potable water is available.

**Dwellings jeopardizing life:** besides buildings declared as jeopardizing life by the construction authority, also those dwellings proclaimed by the house maintaining enterprise as such, at its own responsibility, irrespective of whether the indirect life danger has been eliminated e.g. by underpinning.

**Dwellings to be demolished:** dwellings located at areas designated for reconstruction within 5 years upon an authority resolution, and those whose restoration is not economical as stated by the house maintaining enterprise.

**Number of families in dwellings to be demolished:** the number of families entitled to use an independent dwelling. It relates to the number of new dwellings necessary for replacement.

**Rental fee receipts:** the actually paid in an received sums as rental fee, considering overpayments, too (rental fee of dwellings, gardens and shops).

**Rental fee receipts for dwellings:** the actually received sum by this title, including overpayments, too.

### **National Asset Management Company**

(Table: 3.11.1.–3.11.3.)

#### **Source of data:**

National Asset Management Company.

The NAMC's mission is to intervene on behalf of the Hungarian State to buy the real estates of families for Hungarian State, who are unable to pay their mortgage and have seriously got indebted, thus protecting the families and their homes. The NAMC buys all flats, in case the legal conditions are fully met. In the program property owner will become a tenant, to whom the Hungarian State guarantees the tenancy for indeterminate time. (<http://www.netzrt.hu>)

#### **International data**

(Table 4.1.–4.8.)

#### **Source of data:**

Buidecon, Hungarian member of Euroconstruct, June 2016. (Table 4.1., 4.2.)

Eurostat's database, SILC (Table 4.3. – 4.6.), Eurostat Tables (Table 4.7., 4.8.):

[http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search\\_database](http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database).

Tables 4.1. and 4.2 are based on population number in 01.01.2015.  
[http://www.ksh.hu/docs/hun/eurostat\\_tablak/tabl/tps00001.html](http://www.ksh.hu/docs/hun/eurostat_tablak/tabl/tps00001.html)

Table 4.7. and 4.8. measures price changes of all residential properties, both new and existing, purchased by households.