



## Housing prices, housing price index, Quarter 2 2017

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### Introduction

In the first half of 2017, housing market turnover continued to grow. In the first two quarters, nearly 5% more homes changed hands than a year earlier.

The prices of second-hand homes increased by 3.1% in the first quarter of 2017 and by 2.1% in the second quarter.<sup>1</sup>

The price of new homes also rose: the rise in the price level was 4.9% in the first quarter and 3.2% in the second.

In the first two quarters of 2017, 55.4 thousand homes were sold, exceeding the housing market turnover of the same period of the previous year.

In 2017, the structural rearrangement of the housing market continued. Especially as a result of housing policy measures, real estate market turnover recovered in smaller settlements particularly hit by the crisis.

From the publication of the first quarter data of 2017, we use the 2015 base in accordance with Eurostat's data dissemination practices.

### Changes in property transactions

In the first two quarters of 2017, 55.4 thousand homes were sold, exceeding the housing market turnover of the first half of the previous year. Compared to data of similar processing level aggregated in the same period of 2016, the number of homes sold increased by 4.8% in the first quarter and by 4.9% in the second quarter.

During this year, the proportion of newly-built homes rose from 2.5% to 3.2% in sales. For the time being, the impact of expanding housing construction is mainly observed in the housing markets of county seats and small towns where the market share of new homes exceeded 4%. This indicator was 3.7% in Budapest and remained below 1% in villages.

<sup>1</sup> All housing market data for the year 2017 are preliminary.

<sup>2</sup> If we multiply the composition effect and the pure change in prices, we will get the index of total change in prices.

Table 1

### Number of home sales and homes built for sale

(Thousand units)

Period	Home sales as a whole	Of which:		New homes built for sale
		second hand homes	new homes	
2007	191.2	..	..	17.9
2008	154.1	140.0	14.1	17.4
2009	91.1	82.9	8.3	16.9
2010	90.3	85.5	4.8	10.7
2011	87.7	83.9	3.9	4.8
2012	86.0	83.3	2.6	3.5
2013	88.7	86.4	2.3	3.2
2014	113.8	110.5	3.3	3.4
2015	134.1	130.7	3.4	3.1
2016	146.3	141.4	4.9	5.2
Quarters 1–2 2017	55.4	53.7	1.8	2.6

In quarters 1–2 2017, a total of 2,558 new flats were built for sale, while 1,764 newly built flats were sold.

### Annual price index

In the first two quarters of 2017, the prices of **second-hand homes** sold increased further and exceeded the 2016 price level by 9.3%. It means that housing prices would have been that much higher if this year the same homes had been sold as a year earlier.<sup>2</sup> However, the composition of dwellings sold also shifted towards lower-value homes, as a result of which the average price of second-hand dwellings actually sold only slightly increased by 0.6% compared to 2016. The decline of quality index which has been lasting for two years now indicates that the real estate market of small settlements began to grow in settlements of low housing price level, where there had been far fewer transactions before.

The price of **new homes** sold in the first half of the year was 8.2% higher than in 2016. This represents a 19.5% increase compared to the base for 2015. In this submarket there is no deterioration in the quality index, so the change in the average price of all new homes sold was similar to the index of pure price change (8.8%).

In the first two quarters of the year, the real value of homes approached the pre-crisis level of the housing market in 2008. The value of new homes was only 1.5% lower and that of second-hand homes barely 2.2% lower than the 2008 level adjusted for the consumer price index.

**Trends and factors of annual price changes**

Table 2

Year	New homes			Second hand homes		
	composition effect	pure change in prices	total change in prices	composition effect	pure change in prices	total change in prices
<b>Previous year=100.0</b>						
2008	100.7	102.2	102.9	88.6	101.8	90.1
2009	101.6	98.2	99.7	94.3	94.5	89.1
2010	102.9	93.6	96.3	109.8	97.9	107.5
2011	99.7	96.7	96.4	98.7	96.4	95.2
2012	100.7	100.0	100.7	100.4	96.2	96.6
2013	98.9	101.0	99.8	101.2	97.1	98.3
2014	100.3	104.4	104.7	102.6	104.2	106.9
2015	99.7	108.0	107.7	100.9	111.4	112.4
2016	97.4	110.5	107.6	92.9	113.3	105.3
Quarters 1–2 2017	100.6	108.2	108.8	92.0	109.3	100.6
<b>2015=100.0</b>						
2007	94.4	97.4	92.0	102.1	101.6	103.7
2008	95.1	99.5	94.6	90.4	103.4	93.5
2009	96.5	97.7	94.3	85.2	97.8	83.3
2010	99.4	91.5	90.9	93.6	95.7	89.6
2011	99.1	88.4	87.6	92.4	92.3	85.3
2012	99.7	88.4	88.2	92.8	88.8	82.4
2013	98.6	89.3	88.0	93.9	86.2	81.0
2014	98.9	93.2	92.2	96.3	89.8	86.6
2015	100.0	100.0	100.0	100.0	100.0	100.0
2016	97.4	110.5	107.6	92.9	113.3	105.3
Quarters 1–2 2017	98.0	119.5	117.1	85.5	123.9	105.9

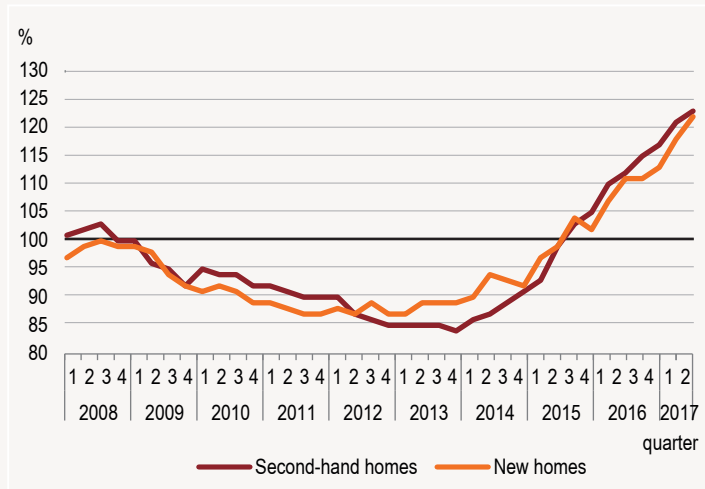
**Quarterly pure price index**

As a result of data received later, the first estimate of first-quarter growth in **second-hand home prices** was revised downwards, but this period was still characterized by a significant increase of 3.1%. In the second quarter, the prices of second hand-homes increased further by 2.1%.

The initial dynamic growth of 4.9% in the new home market was followed by a milder but still significant 3.2% rise in the second quarter.

Figure 1

**Price trend in the housing market – pure price change (2015=100)**



**Factors of overall price change in the market of second-hand homes**

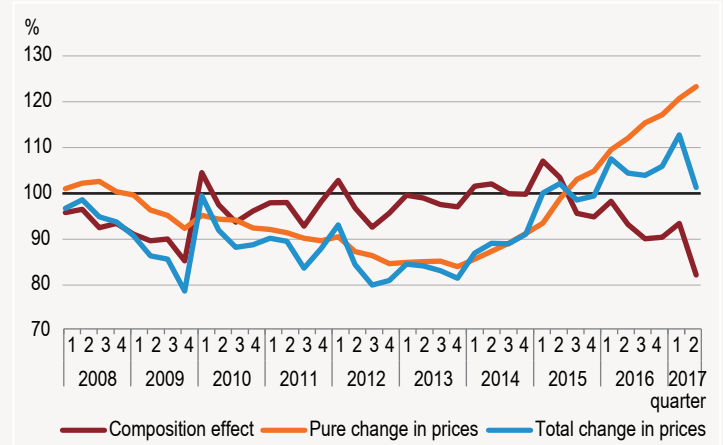
Since 2015, the composition index of housing market turnover has been characterized by a downward trend, meaning that since then the proportion of cheaper real estates has increased in housing market transactions. This means, that the cheaper locations have come to the fore in housing market transactions. This process is related to the market stimulus measures<sup>3</sup> announced in 2015, which has triggered an upswing in areas with lesser turnover. The Family Home Allowance (CSOK) introduced at that time, on the one hand, has had a direct impact on the market as it can also be used to buy second-hand dwellings and, on the other hand, it also has had indirect effect as it stimulates housing construction and thus the second-hand dwellings sold by those moving into new dwellings appear on the market. Since the first half of 2016, this subsidy has been disbursed for the construction and purchase of new homes in over 11,000 cases and an additional 21,000 households used it to purchase second hand homes. The number of grants paid in 2016 was also significant compared to the total annual housing market turnover, reaching 14% of that.

In the second quarter of 2017, the **composition index** was extremely low compared to this trend, reaching only 82% of the base. The composition index is still significantly pulled down by the faster incoming data of smaller settlements, therefore a substantial correction is expected in this field. Based on the observations of previous periods, it is expected that the composition index and, with it, the index of total price changes will be adjusted upward as the database will be completed.<sup>4</sup>

Apart from spikes in the first quarter the composition index continues to decline thus reducing the total price change of dwellings sold, accordingly this latter indicator is lagging behind the index of pure price change.

Figure 2

**Factors affecting changes in the price of second hand dwellings (2015=100)**



**Regional characteristics of the second-hand housing market**

Growth in **housing market turnover in small settlements** continued to increase in 2017 and this changed the territorial distribution of the housing market.

To observe structural changes in the housing market, settlements were categorized by average price level of sales observed in 2015 then we examined how the share of each category changed in successive years. (Classification was always based on the data of the base year so settlements fell in the same category every year.) In the first two quarters of 2017, 19% of dwellings sold were in such settlements where the average price of dwellings sold in the base year did not reach HUF 5 million, and another 30% where the price level was below HUF 10 million. Typically, less populous settlements have been included in this group. The share of settlements of low-price level in the transaction turnover declined during the crisis and then started to rise rapidly in 2016, and so far it has already

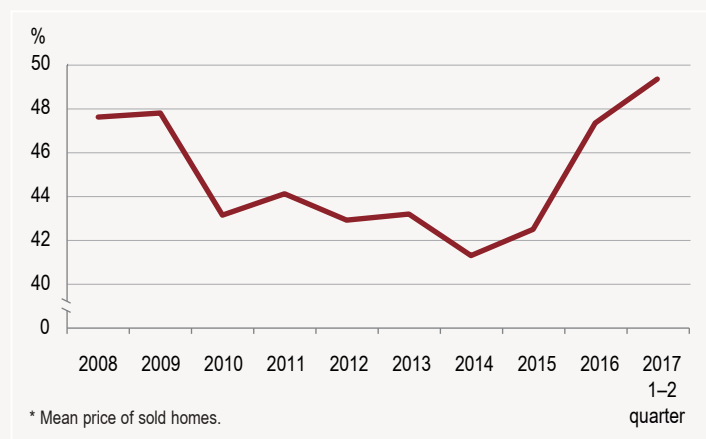
<sup>3</sup> The Family Home Allowance (CSOK) was introduced in the second half of 2015. This was followed by several measures aimed mainly at stimulating housing construction (reducing VAT rates, simplifying building administration, etc.). From January 2016, the range of incentives and subsidies was further expanded.

<sup>4</sup> In general, there is a greater delay in receiving the data of larger settlements.

approached 50% in 2017. In terms of proportions, pre-crisis conditions re-emerged, although the number of homes sold was still slightly behind the value measured at that time. This group of settlements was particularly severely affected by the crisis. In 2008, more than 70,000 dwellings were sold here, and this figure did not reach 40,000 per year between 2010 and 2013. Then, in 2015, 57 thousand, and a year later, 69 thousand housing transactions were registered in settlements being in unfavourable housing market situation.

Figure 3

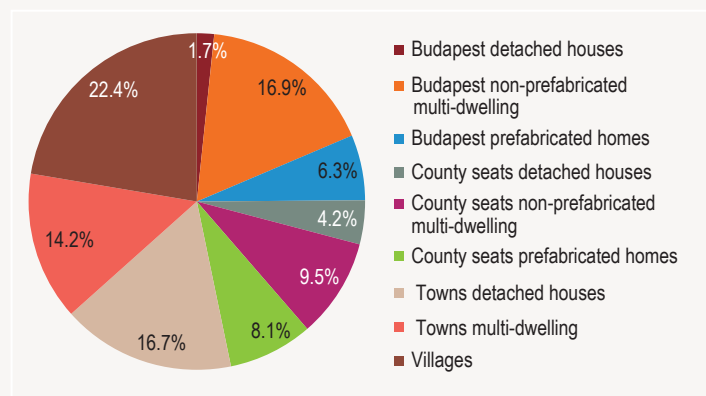
**Proportion of dwellings sold in settlements having a price level below HUF 10 million\***



Along with the rearrangement among settlements, the proportion of detached houses typical of small settlements increased to 46% in transactions by 2016. In the first quarter of 2017, this ratio was temporarily down and then it increased again to 46% in the second quarter. Prefabricated housing estate dwellings<sup>5</sup> accounted for 19% of second-hand housing sales in 2016. Their proportion reached 20% in the first quarter of 2017 then dropped to 17% in the second.

Figure 4

**Distribution of housing transactions by settlement and building type in quarters 1-2 2017**



In the first two quarters of 2017, the average price of second-hand homes sold in Budapest was HUF 22.6 million, HUF 1.4 million more than in 2016. In 2016, the average square meter price of second-hand dwellings sold in Budapest was HUF 361 thousand, which reached 402 thousand in the first two quarters of 2017. With this, the price level in **Budapest** continued to increase compared to the national average. In the

first two quarters of 2017, the price per square meter in Budapest was almost three times higher than the price per square meter in the countryside. This difference was only twofold before 2014.

In the first two quarters of 2017, housing prices increased by HUF 800 thousand in **county seats** compared to the same period of the previous year. Meanwhile, the price of dwellings sold in smaller settlements decreased by an average of 300 thousand forints. The reason for this decline was a shift in the composition of transactions towards smaller dwellings, as the price per square meter grew slightly (from 137 to HUF 140 thousand) in **towns**, while there was essentially no change in **villages**.

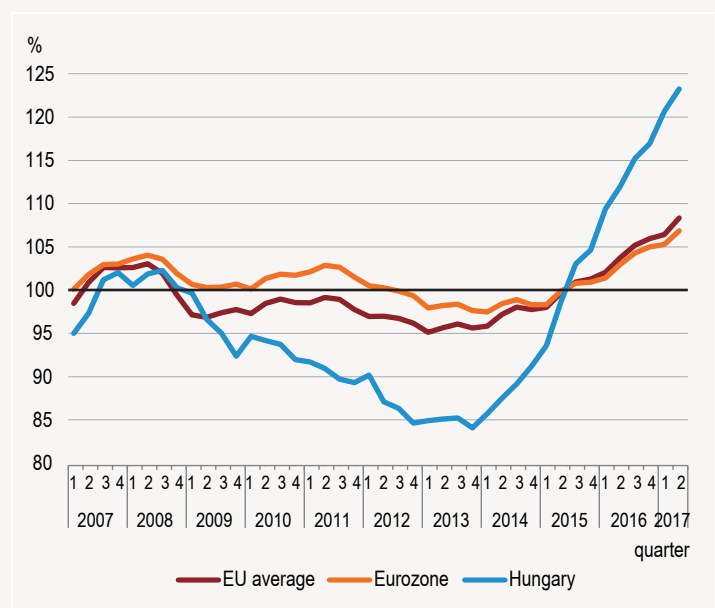
**International data**

The housing market index of Eurostat shows the aggregated price trends of second hand and new flats. In the first quarter of 2017, the overall housing market index of the EU Member States accounted for 108.3% of the 2015 base value. Within the Eurozone, the housing price index was below the EU average with a value of 106.9%. The lower price rise of the euro area is also reflected in deflated housing price indices. According to Eurostat's aggregate, in 2016 the real housing price index calculated for the EU as a whole was about twice as high as the Eurozone value.<sup>6</sup>

Since the first quarter of 2014, the Hungarian house price index has sharply increased, and in 2015 it was higher than in 2010 exceeding the EU average for the same period of the previous year as well. In the first quarter of 2017, the Hungarian value of the house price index aggregated according to the Eurostat methodology was 123.2%.

Figure 5

**Combined housing price index in the European Union and Hungary (2015=100)**



In the second quarter of 2017, prices fell only in Belgium (0.7%) among the reporting countries. The rise in prices compared to the previous quarter was exceptionally high in Iceland and Latvia (6.6% and 6.1% respectively), while housing prices grew by 5.6% in Slovakia and by 4.8% in Romania. There were also significant increases in other neighbouring countries: the quarterly home price index grew by 3.7% in Croatia and by 2.4% in Austria.

<sup>5</sup> Prefabricated dwellings in housing estates were identified on the basis of HCSO records (see methodological remarks).

<sup>6</sup> [http://ec.europa.eu/eurostat/statistics-explained/index.php/Housing\\_price\\_statistics\\_-\\_house\\_price\\_index](http://ec.europa.eu/eurostat/statistics-explained/index.php/Housing_price_statistics_-_house_price_index).

Table 3

**Quarterly aggregate housing market price index in some European countries (2015=100.0)**

(%)

Denomination	2016				2017	
	1	2	3	4	1	2
	quarter					
Austria	106.5	108.9	109.4	109.4	111.5	114.2
Belgium	100.6	101.8	104.3	103.9	106.0	105.3
Bulgaria	103.4	106.2	107.9	110.5	112.7	115.4
Cyprus	97.3	99.2	101.9	102.7	99.6	102.7
Czech Republic	102.9	105.0	107.7	112.8	116.2	118.9
Denmark	102.9	105.1	106.2	104.6	106.6	111.2
United Kingdom	104.2	106.5	108.6	108.6	108.9	111.8
Estonia	100.3	103.5	107.0	108.2	108.1	108.4
Finland	99.9	101.2	100.7	100.6	101.6	102.7
France	99.7	100.2	102.4	101.8	102.4	103.7
Netherlands	103.3	104.0	105.1	108.7	109.7	111.6
Croatia	101.2	100.3	101.3	100.8	100.9	104.6
Ireland	103.7	104.8	109.3	112.1	113.4	115.9
Iceland	104.9	106.7	110.8	116.7	122.1	130.1
Poland	100.0	100.8	102.7	103.9	103.3	105.4
Latvia	103.5	109.5	110.0	110.9	113.1	120.0
Lithuania	100.8	103.9	107.5	109.4	111.1	114.5
Luxembourg	102.6	105.4	107.0	108.9	109.8	112.0
<b>Hungary</b>	<b>109.4</b>	<b>112.0</b>	<b>115.2</b>	<b>117.0</b>	<b>122.4</b>	<b>120.6</b>
Malta	100.3	102.8	107.5	111.8	105.3	108.5
Germany	102.4	105.5	106.9	108.7	107.4	109.3
Norway	102.9	107.2	109.9	111.6	114.9	115.5
Italy	99.1	99.4	99.4	99.0	99.0	99.2
Portugal	103.7	106.9	108.3	109.6	111.9	115.5
Romania	103.7	106.6	105.9	107.7	109.0	114.3
Spain	102.7	104.6	105.4	105.8	108.2	110.4
Sweden	106.9	107.0	109.5	111.2	114.0	116.2
Slovakia	103.2	106.1	107.8	109.8	107.1	113.1
Slovenia	100.9	102.8	103.7	105.5	106.9	111.4
<b>EU average</b>	<b>102.1</b>	<b>103.7</b>	<b>105.2</b>	<b>106.0</b>	<b>106.4</b>	<b>108.3</b>
<b>Eurozone</b>	<b>101.4</b>	<b>103.0</b>	<b>104.3</b>	<b>105.0</b>	<b>105.3</b>	<b>106.9</b>

**Methodological notes**

Starting from the publication of data from the first quarter of 2017, we use the 2015 base in accordance with Eurostat's data dissemination practices. We also implemented several methodological changes simultaneously with the base change. The most important of these was the program that

was developed for linking administrative data for statistical purposes (ESS VIP ADMIN). Through the development, information on housing market transactions was supplemented with information available in the statistical registers of HCSO and relevant for the housing market processes. This gives us more accurate information on the size of dwellings sold on the market, the type of their buildings and their immediate environment. The calculation models of the housing market price index starting from the 2015 base are based on these new and more accurate information. The revised 2015 and 2016 price index does not override previously published price trends, but its concrete values have changed.

The cumulative values of the published housing market indices are also included in the housing price indices of Eurostat. Due to the harmonised methodology, these data are fully comparable across the European countries as well as with the aggregated indices of the EU member states.

The source of price observations is the stamp duty database of the National Tax and Customs Administration of Hungary (NAV), from where the anonymized stamp duty data are taken over on a monthly basis directly after their receipt. 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 analyse changes in home prices in a more detailed and exact way. From 2016 onwards, data received include the nationality and birth year of the given home buyer. The gradually completed data base still allows only preliminary information on the processes of 2017. Our compilation's data for the period prior to 2017 are final.

As a result of missing data, 1 per cent 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. Following this, a log linear regression model was used to analyse the data. 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) and the characteristics of the immediate neighborhood zone and the residential building. New dwellings were separated by NAV based on benefits used to buy a new dwelling.

Based on the findings of the first model estimation a further 5 per cent 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 the 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. However, the average prices of this publication are always arithmetical averages, which were calculated after the completion of the outlier filtering.

The Eurostat's aggregated housing price index is the weighted average of the price indices of second hand homes and new homes presented in our publication. The weights are the aggregate values of home sales realized in the previous year. The most recent Hungarian data published by Eurostat are always preliminary results based on the data recorded by the end of the second month following the reference period, while to this present publication we have used data received for the complete quarter following the reference period.

**Further data, information (links):**

[Tables](#)

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