



## Housing prices, housing price index, Quarter 3 2015

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### Introduction

Sales contracts signed in quarters 1–3 of 2015 show an ongoing upswing in housing market turnover. The rate of growth was 17% compared to the previous year's turnover of similar level of processing. This was entirely the effect of second-hand housing market trends, the sales of new homes continued to stagnate. In quarters 1–3 of 2015, 1,800 new home sales were registered; this was only 2% of the 84 thousand homes sold.

The increase in second-hand housing prices lasting since the first quarter of 2014 came to a halt in the third quarter of 2015; the price index fell by 0.4% in comparison with the second quarter. Due to price increases in the first two quarters of 2015, the level of prices is still significantly higher than in the same period of the previous year: in the third quarter of 2015, an average second-hand home was more expensive by 11.2% than a year earlier.

The price rise of new homes continued, in the third quarter of 2015, a new home was more expensive by 10.5% than a year earlier.

### Changes in property transactions

About quarters 1–3 of 2015, we have received data on a total of 84 thousand sales and purchases, which was 17% more compared to the receipts of similar level of processing aggregated in the same period of the previous year.

Table 1

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

(thousand)

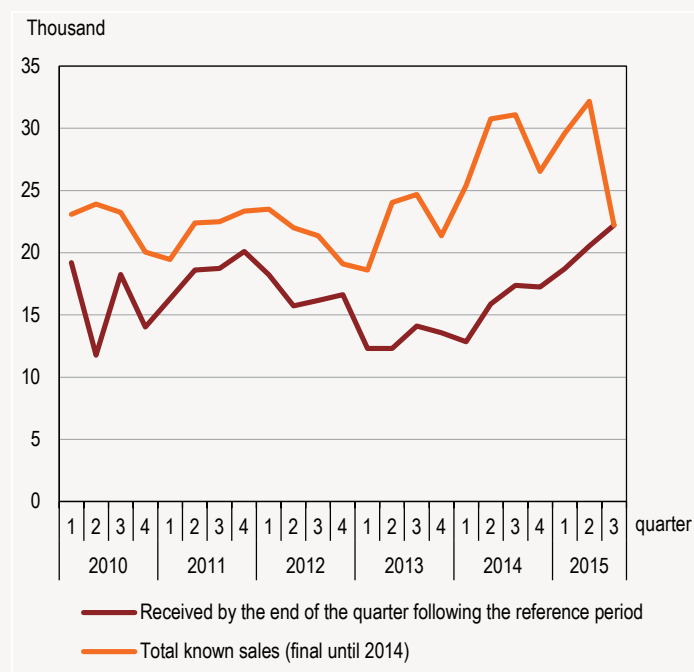
Year	Home sales as a whole	Of which:		Homes built for sale
		second-hand homes	new homes	
2007	191.2	..	..	17.9
2008	154.1	140.0	14.1	17.4
2009	91.1	82.9	8.3	16.9
2010	90.3	85.5	4.8	10.7
2011	87.7	83.9	3.9	4.8
2012	86.0	83.3	2.6	3.5
2013	88.7	86.4	2.3	3.2
2014	113.8	110.5	3.3	3.4
Q 1–3 2015	84.0	82.2	1.8	2.0

<sup>1</sup> If we multiply the composition effect and the pure change in prices, we will get the index of total change in prices.

In quarters 1–3 of 2015, a total of 2,011 new homes were built with the purpose of selling, this is the same as one year earlier and only a minimal change compared to the 2013 low, when in the first three quarters 1,700 homes were built for sale. The number of new homes sold has not yet reached that of newly-built flats (1,800 units).

Figure 1

**Quarterly changes in home sales**



### Annual price indices

In quarters 1–3 of 2015, in the market of **second-hand homes**, compared to the average price level of the previous year, a pure price increase of 10.7% occurred. It means that housing prices would have been that much higher if this year the same homes had been sold as a year earlier. However, the qualitative composition of the currently known purchases was lower than in the same period of the previous year (the composition index decreased by 2.9%), thus the average price of actually sold second hand homes rose at a lower rate of 7.5% than the pure price change.<sup>1</sup>

The price level of second-hand homes, due to price increases occurred until quarter 3 2015, was 3.9% higher than the 2010 base, but it was still noticeably lower (by 3.8%) than the typical value in 2008 prior to the crisis.

In 2015, the prices of **new homes** sold reached the 2008 level, and became significantly, 8.6% higher than in 2010.

**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%</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
Q 1-3 2015	98.7	106.6	105.2	97.1	110.7	107.5
<b>2010=100%</b>						
2007	95.0	106.5	101.2	109.1	106.2	115.8
2008	95.6	108.8	104.1	96.6	108.0	104.4
2009	97.1	106.8	103.8	91.1	102.1	93.0
2010	100.0	100.0	100.0	100.0	100.0	100.0
2011	99.7	96.7	96.4	98.7	96.4	95.2
2012	100.4	96.7	97.0	99.1	92.8	92.0
2013	99.2	97.6	96.8	100.3	90.1	90.4
2014	99.5	101.9	101.4	102.9	93.9	96.6
Q 1-3 2015	98.3	108.6	106.7	99.9	103.9	103.9

**Quarterly pure price index**

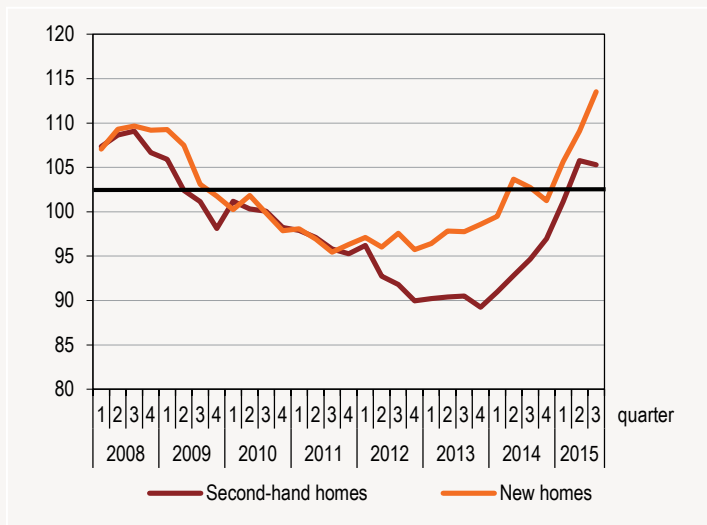
The rise in prices since the start of 2014 further strengthened in quarters 1-2 of 2015: compared to the previous period **second-hand apartments** became more expensive by 4.3%, and then by 4.6%. Then, according to preliminary data of the third quarter, the process stopped and a smaller decline (0.4%) occurred.

The rise in the price index of **new homes** was continuous in quarters 1-3 2015: 4.4, 3.2 and 4.1% respectively.

Due to the low number of new home sales, hereinafter, we will examine only the market of second-hand homes in more detail.

**Price trend in the housing market – pure price change (2010=100%)**

Figure 2



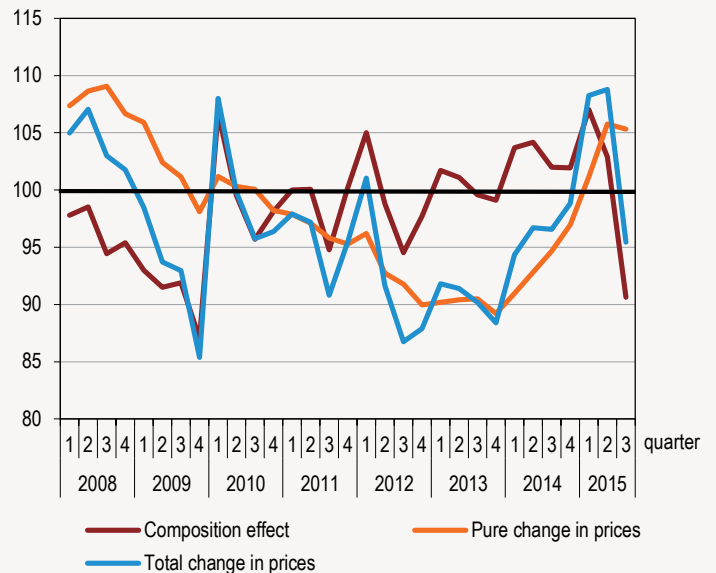
**Factors of overall price change in the market of second-hand homes**

In the first quarter of 2015, housing market activity shifted towards settlements with a large population and typically a higher price level, whereupon the composition index increased. This effect eased in the second quarter, while the composition index of the third quarter, for the time being, was reduced by the faster incoming data of smaller settlements.<sup>2</sup>

In the first quarter of 2015, the rapid rise in prices amplified the effect of the higher composition index resulting in a steep rise of 9.5% in the index of overall price change compared to the previous period. In the second quarter, as a result of a continuing price increase and a decelerating composition index the overall average price was almost unchanged (0.5%). In case of the third quarter, the composition index may differ significantly from the expected final composition, but, 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. From the currently available data, excluding the effect of the decelerating market composition, a slight decrease in pure prices can be observed (-0.4%).

Figure 3

**Factors affecting changes in the price of second-hand dwellings (2010=100%)**



**Changes in the composition of second-hand home sales**

In quarters 1-3 of 2015, 30% of second-hand homes were sold in Budapest and an additional 23% in the county seats. The housing market share of **large cities** was only 45% in 2008.

In 2015, about three quarters of homes sold in Budapest were in multi-apartment condominiums and an additional nearly one-fifth of them in housing estates, detached houses represented less than 8% of the turnover here. Condominium homes give the majority of sales (58%) in the county seats too, although the proportion of housing estates and detached houses is also higher here (22 and 20% respectively). In smaller towns, most homes were already sold in detached houses (55%), while in the housing market of villages essentially it is the only available type of home (96%).

In parallel with the increasing weight of sales in big cities, the housing market share of **detached houses** has been steadily declining since the beginning of the crisis: in 2008-2009, one of every two homes sold was a detached house, in 2015 this ratio was only 40%.

In quarters 1-3 of 2015, the national proportion of **prefabricated housing estate flats** sold was 12.5%.

<sup>2</sup> In general, there is a greater delay in receiving the data of larger settlements.

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

The average price of second-hand homes sold in quarters 1–3 of 2015 was HUF 11.1 million, i.e. HUF 800 thousand more than in 2014. The average price of homes sold increased by HUF 1.8 million in Budapest, thus the average price of a second-hand home rose to HUF 16.3 million. The average house price was HUF 10.1 million in the county seats, HUF 9.2 million in towns and HUF 6.1 million in the villages; it was greater than the value a year earlier in all categories. Despite the general rise, prices exceeded the level of 2008 only in Budapest, in other settlements they were below even the – lower – values typical of 2010 too.

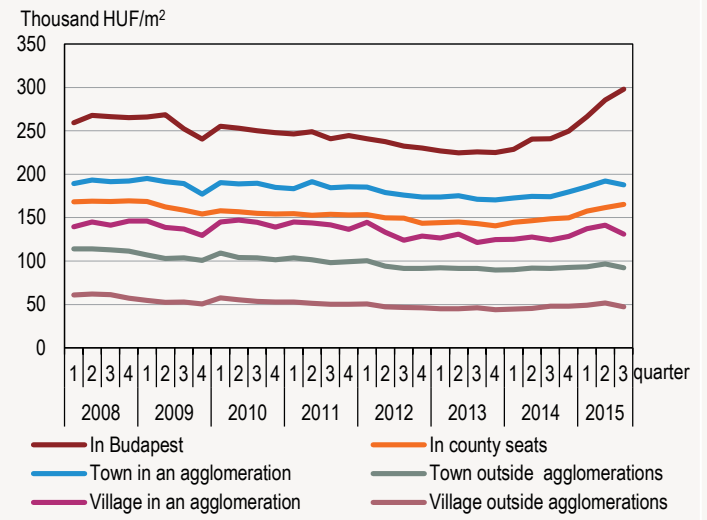
In villages outside agglomerations, in quarters 1–3 of 2015, the average price of houses was HUF 4.2 million. This was HUF 4.0 million in 2014 and HUF 5.1 million in 2008.

In Budapest, the square meter price of second-hand apartments grew from 240 to 278 thousand forints in 2015. The square meter price (HUF 67 thousand) of village homes was less than a quarter of that of Budapest, while it was only 49 thousand forints in villages outside agglomerations.

In the third quarter of 2015, the 0.4% decrease in the price index calculated for the whole country can be explained by diverging territorial processes. In this period, prices continued to rise sharply in Budapest, in the county seats they also grew though to a lesser extent, while the direction of price change reversed in smaller settlements where there was a decrease in each settlement category. This also applies to the Budapest agglomeration, where in the third quarter the average price decreased from HUF 16.6 million to HUF 15.8 million.

Figure 4

**Changes in the square meter prices of second-hand homes**



**International data**

The housing market index of Eurostat shows the aggregated price trends of used and new flats. In the third quarter of 2015, the overall housing market index of the EU member states accounted for 103.4% of the 2010 base

**Quarterly changes in the composition of sales of second-hand homes**

Table 3

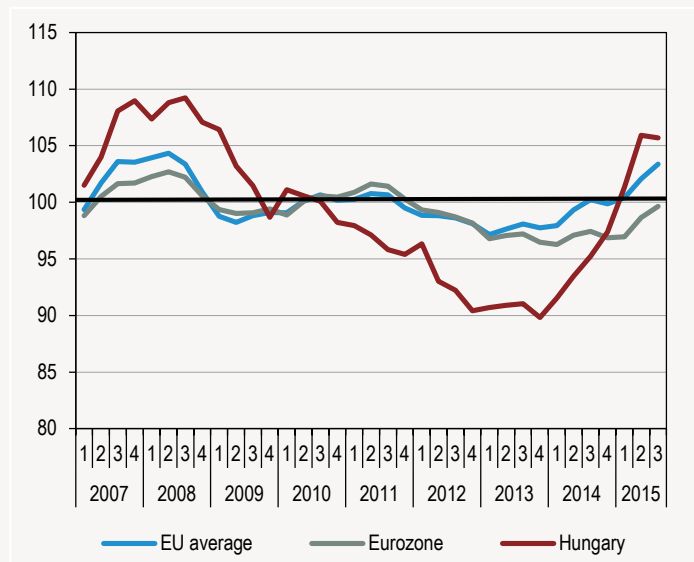
(%)

Quarter	Budapest			County seats			Towns		Villages	Total
	detached house, terraced house	multi-dwelling, not pre-fabricated	pre-fabricated, housing estate	detached house, terraced house	multi-dwelling, not pre-fabricated	pre-fabricated, housing estate	detached house, terraced house	multi-dwelling, pre-fabricated		
Q1 2011	2.8	22.9	1.4	5.5	11.7	4.1	16.5	12.5	22.4	100.0
Q2 2011	3.0	21.4	2.7	5.2	11.0	4.9	16.4	11.8	23.5	100.0
Q3 2011	2.5	20.0	3.1	5.2	11.9	5.1	15.8	11.9	24.6	100.0
Q4 2011	2.2	22.8	2.7	5.1	13.1	5.3	14.7	12.6	21.5	100.0
Q1 2012	2.7	25.3	4.1	5.0	13.5	5.1	13.7	12.4	18.2	100.0
Q2 2012	3.0	20.0	5.1	5.2	11.4	4.3	17.0	11.4	22.7	100.0
Q3 2012	2.6	18.6	5.0	5.1	11.5	4.5	17.4	11.4	24.1	100.0
Q4 2012	2.7	19.9	5.4	5.2	11.4	4.4	16.3	11.5	23.3	100.0
Q1 2013	2.3	20.3	6.4	4.8	12.2	5.1	15.8	12.3	20.8	100.0
Q2 2013	2.8	19.9	6.2	5.1	11.0	4.3	16.6	11.7	22.4	100.0
Q3 2013	2.4	20.5	5.9	5.4	11.9	4.8	16.5	11.3	21.3	100.0
Q4 2013	2.1	21.8	6.4	4.7	12.2	4.9	15.5	12.0	20.5	100.0
Q1 2014	2.4	22.8	6.4	4.8	12.0	4.8	15.7	12.8	18.4	100.0
Q2 2014	2.6	21.8	6.1	4.8	11.4	4.9	16.6	12.5	19.3	100.0
Q3 2014	2.6	22.1	6.1	4.5	12.4	4.9	15.8	12.3	19.3	100.0
Q4 2014	2.4	23.7	6.5	4.4	12.0	4.6	14.8	12.9	18.7	100.0
Q1 2015	2.6	25.1	6.5	4.4	12.7	5.0	14.9	12.5	16.3	100.0
Q2 2015	2.7	22.9	5.8	4.7	12.4	4.8	15.4	12.8	18.4	100.0
Q3 2015	1.6	18.5	4.7	4.5	13.7	5.3	15.9	13.2	22.5	100.0

value. Within the Eurozone, the housing price index was below the EU average (99.7%). Since the beginning of 2014, the Hungarian housing price index has rapidly caught up with the EU average, in 2015 it already exceeded that, it was 105.9% in the second quarter and then in the third quarter the index fell slightly (105.7%).

Figure 5

#### Combined housing price index in the European Union and Hungary (2010=100%)



In the third quarter of 2015, house prices decreased significantly in two EU member states, Slovenia and Estonia. In Estonia, a smaller decline occurred after sustained strong price increases, while in Slovenia the housing price index was previously significantly lower than in the base period.

Poland newly appeared among the countries reporting a price index. Prices have increased since the fourth quarter of 2014 in this country, however, their level was below the base (95.3%) in the most recent period too.

In the third quarter of 2015, among the neighbouring countries, besides the already mentioned Slovenia, house prices decreased in Romania too. A 0.1% increase was measured in Slovakia, while in Croatia a smaller (0.7%) and in Austria an extremely high price rise of 4.1% occurred in the housing market compared to the period a year ago.

#### Methodological notes

The below published housing price indices, as aggregate figures, are among the house price indices of Eurostat.<sup>3</sup> 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 housing data 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 analyze changes in home prices in a more detailed and exact way. **The gradually completed data base still allows only preliminary information on the processes of 2015.** The receipt of data for 2014 has been completed; our compilation's data for the period prior to 2015 are final.

As a result of missing data, 2 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 analyze 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). 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.

<sup>3</sup> <http://ec.europa.eu/eurostat/web/hicp/methodology/housing-price-statistics/house-price-index>.

Table 4

**Quarterly aggregated housing market index in European countries (2010=100%)**

Denomination	Q1 2014	Q2 2014	Q3 2014	Q4 2014	Q1 2015	Q2 2015	Q3 2015
Austria	122.8	124.8	123.9	125.1	122.2	130.1	135.4
Belgium	105.5	106.3	107.7	108.7	105.0	107.3	108.6
Bulgaria	91.4	91.7	91.9	92.9	93.4	94.2	93.8
Croatia	93.2	94.0	93.2	92.5	91.5	89.7	90.4
Cyprus	86.9	91.7	91.0	90.0	87.4	93.9	93.3
Czech Republic	99.7	100.6	101.4	102.2	103.3	104.2	105.4
Denmark	100.6	104.4	103.9	103.5	107.8	111.4	111.4
Estonia	142.4	143.9	149.9	149.6	153.9	159.0	155.9
Finland	106.6	107.0	106.6	105.9	106.2	106.9	106.6
France	101.6	101.8	102.5	100.5	99.5	99.7	101.3
Germany	111.8	113.4	113.8	113.6	116.0	119.3	120.2
<b>Hungary</b>	<b>91.6</b>	<b>93.5</b>	<b>95.2</b>	<b>97.4</b>	<b>101.3</b>	<b>105.9</b>	<b>105.7</b>
Iceland	124.9	127.8	129.1	131.3	135.0	138.1	139.6
Ireland	80.3	85.8	91.1	94.6	93.8	94.9	99.2
Italy	89.3	88.7	88.3	86.9	86.1	86.1	86.3
Latvia	128.7	130.6	135.6	120.2	120.3	124.5	125.3
Lithuania	110.8	115.3	117.2	114.9	115.8	119.4	121.2
Luxembourg	114.0	118.2	119.8	121.6	122.0	124.6	126.3
Malta	102.0	101.9	103.9	107.6	104.7	104.3	110.8
Netherlands	86.0	86.4	86.9	87.3	88.2	88.6	90.5
Norway	119.9	124.2	125.0	124.9	130.0	133.5	133.7
Poland	92.0	94.0	93.4	93.6	93.8	95.1	95.3
Portugal	89.6	91.0	90.6	90.3	90.3	93.7	93.8
Romania	82.3	81.0	80.3	81.7	84.5	83.5	82.7
Slovakia	96.5	98.0	97.9	99.9	101.5	103.5	103.6
Slovenia	86.6	84.3	83.4	84.2	85.4	87.4	84.3
Spain	70.8	71.9	72.1	72.2	71.9	74.8	75.3
Sweden	115.3	117.9	121.8	123.7	128.6	133.2	138.4
United Kingdom	109.3	113.6	118.1	117.6	118.6	120.0	124.7
EU average	98.0	99.4	100.3	99.9	100.4	102.1	103.4

**Further data, information (links):**[Tables](#)[www.ksh.hu](http://www.ksh.hu)**Contact details:**[kommunikacio@ksh.hu](mailto:kommunikacio@ksh.hu)[Information services](#)

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