

## Housing prices, housing price index, Quarter 1 2018

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### Summary

In 2017, the expansion of the housing market continued and the annual number of housing transactions exceeded 150,000. The number of new homes sold increased rapidly, however, their market share was still low at 4.0% of all home sales.

In the first quarter of 2018, preliminary data showed a further 9.4% increase in the number of transactions.

Housing prices continued to rise in 2017. New and second-hand home prices rose at almost similar rates, by 6.0% and 5.9% respectively; the pace of growth slowed in both cases compared to the previous years.

In the first quarter of 2018, house prices continued to rise by 4.0% in the second-hand market and by 3.6% in the new home market.

The total value of homes sold in 2017 was about 2,200 billion forints, 16% more than in the previous year. New homes under construction diverted demand from second-hand homes in Budapest reducing their share in total volume.

In the Hungarian housing market, 4.8% of all sales contracts were concluded by foreign buyers in 2017. This ratio is higher than average in the capital and in several counties of Western Hungary. Most homes were bought by German, Chinese and Romanian citizens. Foreigners bought more expensive homes than the average in Budapest, however, this was less pronounced for their rural home purchases.

### Changes in property transactions

According to the final figures for 2017, the number of housing transactions grew year-on-year by 5.1% to 154 thousand. In 2017, sales of new homes increased by a quarter, but their overall turnover remained low, accounting for only 4.0% of total sales. Thus, second-hand homes continued to play a decisive role in housing market trends, showing a 4.4% growth in the number of transactions in 2017.

Preliminary data show about 22 thousand contracts concluded in the first quarter of 2018, this is 9.4% higher compared to data of similar processing levels aggregated a year earlier. In this period, new build homes accounted for only 2.7% of all housing transactions.

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
2017	153.8	147.7	6.1	7.3
Q1 2018	22.1	21.5	0.6	1.8

In 2017, a total of 7,269 dwellings were built for sale, while 6,097 newly-built dwellings were sold.

### Annual price index

Growth in house prices continued to slow down in 2017. Home prices grew by 5.9% in the **second-hand market** compared to 2016. 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 composition of homes sold shifted towards higher value homes resulting in a faster increase of 8.7% in the average price of second-hand homes actually sold compared to 2016.<sup>2</sup> Therefore, due to the higher composition effect, the average increase in prices exceeded the rate of pure price change.

The price index of second-hand homes increased by 20% between 2015 and 2017. Although the quality composition increased compared to 2016, it was still lower than in the base period, indicating that the rise in the number of home transactions in those settlements where housing prices are lower still has an impact on the housing market in the longer term.

In the first quarter of 2018, the pure base index of second-hand homes approached 130%, showing a further significant increase.

<sup>1</sup> Data for the year 2017 are final, data for the first quarter of 2018 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.

In 2017, the average price of new homes sold grew by 6.0% compared to 2016 and by 17% compared to the 2015 base. As the new build market is strongly concentrated in bigger towns the quality index of new dwellings increased by nearly 10%, so that the total average price of **new homes** increased by more than the index of pure price change (16%).

Table 2

**Trends and factors of annual price changes**

(%)

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
2017	109.7	106.0	116.3	102.6	105.9	108.7
Q1 2018	94.3	108.8	102.7	91.4	107.9	98.6
<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
2017	106.8	117.1	125.1	95.4	120.1	114.5
Q1 2018	100.8	127.4	128.4	87.2	129.5	112.9

In 2017, inflation had a significant impact on price developments: the 20% base index of second-hand homes is 17% in real terms, while the real value of new homes has risen by 14% since 2015. The inflation adjusted **national** housing price level was lower in 2017 than in the pre-crisis year of 2008. In 2017, real-term home prices were 5.4% lower in the new build market and 7.1% lower in the second-hand market compared to 2008.

**Quarterly pure price index**

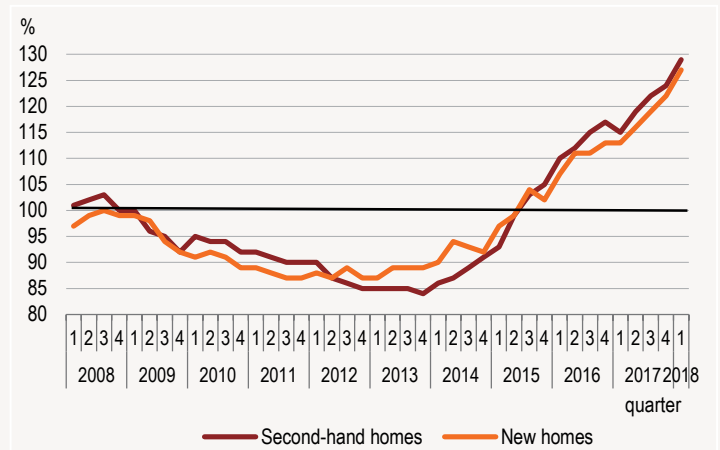
In quarter 1 2018, the level of **second-hand housing prices** grew year-on-year by 12.2% and quarter-on-quarter by 4.0%.

Over the same period, the price level of the **new home market** has also risen. In the first quarter of 2018, preliminary data suggest an even stronger 3.6% price increase. In the first quarter of 2018, the price of new homes was 12.4% higher than a year earlier.

<sup>3</sup> In general, there is a delay in receiving the data of larger settlements.

Figure 1

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



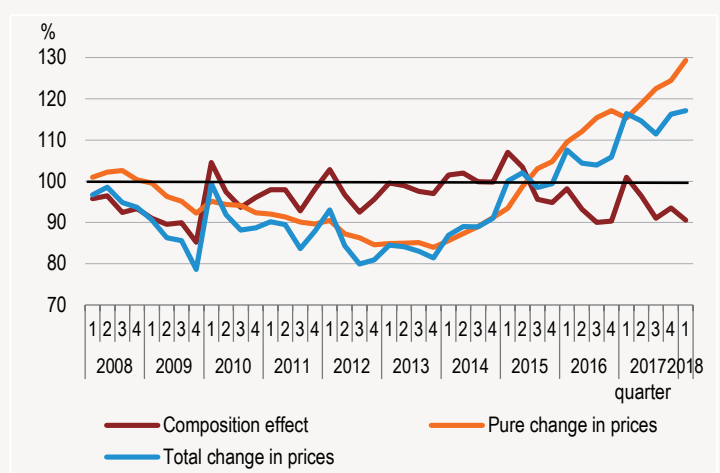
**Factors of overall price change in the market of second-hand homes**

The quarterly composition index was well below the base period level and continued to show strong quarterly fluctuations, therefore the total price index fluctuated too. The pure price index calculated by filtering the composition effect, however, clearly shows the rising trend in house prices. The **composition index** of the first quarter of 2018 is also distorted downwards by faster incoming data of smaller settlements therefore significant corrections are still expected in this area. Based on observations in previous periods, the composition index and the index of total price change are likely to increase along with incoming data.<sup>3</sup>

In the first quarter, a total price change of 117.1% and a 90.5% composition index resulted in, as a quotient, a 129.4% base index.

Figure 2

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



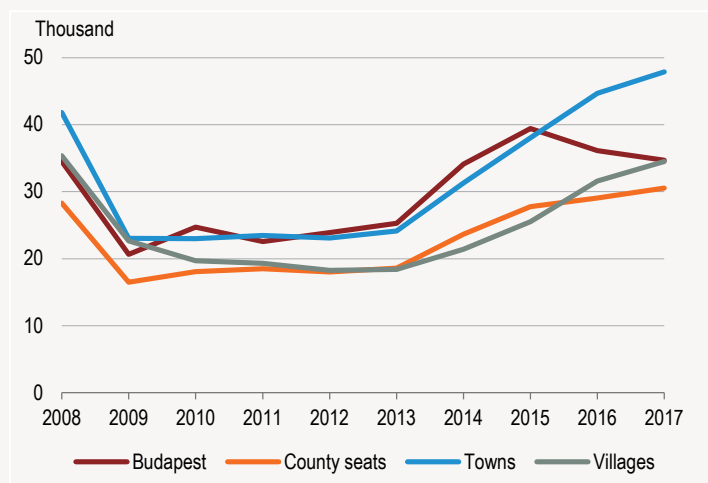
**Regional characteristics of the second-hand housing market**

After 2015, smaller towns and villages saw an ongoing increase, county seats a slight rise and Budapest a drop in the number of homes sold. The share of the capital and county seats decreased from 51% to 44% within housing market transactions between 2015 and 2017. In our case demand shifted towards the market of new homes causing a decrease in the number of second homes sold. Although in 2017, the number of home sales has fallen in bigger cities even including new homes sold, it can be regarded as a temporary slowdown. In 2017, nearly 15,000 residential

building permits were issued only in Budapest and another 8,000 in the county seats; the completion of these projects can once again shift the centre of gravity of the real estate market towards big cities.

Figure 3

**Number of second-hand homes sold by type of settlement**



In 2017, **second-hand homes** sold in Budapest were on average HUF 24.4 million, HUF 3.2 million more than in 2016. Meanwhile, the average price increased by HUF 1.5 million to HUF 13 million in county seats. The prices of second-hand homes were HUF 11.5 million in smaller towns and HUF 7.2 million in villages, both values have risen since 2016.

In the first quarter of 2018, average home prices continued to grow in Budapest and in larger cities and decreased in smaller settlements. Similarly, square meter prices grew to HUF 463 thousand in Budapest and decreased to HUF 70,000 in villages showing growing regional discrepancies. Square meter prices stood at HUF 228,000 in county seats and HUF 141,000 in smaller towns.

These square metre prices clearly reflect growing regional discrepancies and the outstanding position of Budapest. Nominal prices increased in all regions except Northern Hungary over the past 10 years, but the growth rate was particularly high in the capital.

In the first quarter of 2018, inflation-adjusted housing prices were still lower in several regions than the pre-crisis level of 2008. Inflation adjusted home prices fell most by 23% in Northern Hungary and by 14% in Pest region. Real-term prices grew most by 37% in Budapest and by 5.7% in Western Transdanubia, while other rural regions saw no significant rise in this respect.

In Budapest, mainly homes in multi-dwelling buildings saw outstanding price increases significantly rearranging the price ratios of this housing

Figure 4

**Changes in square meter prices of second-hand homes by region, first quarter, 2008–2018**

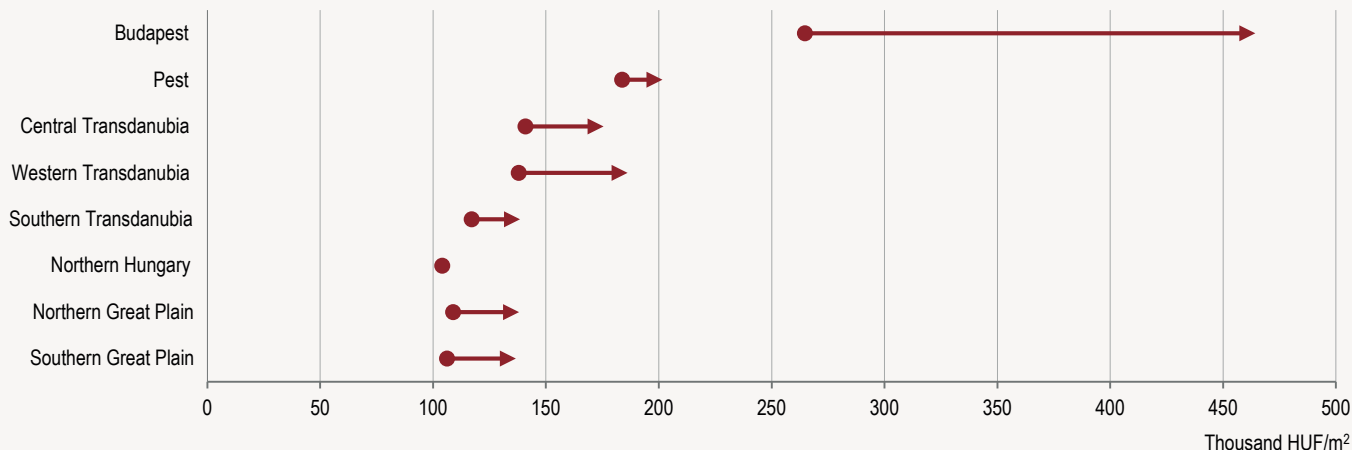
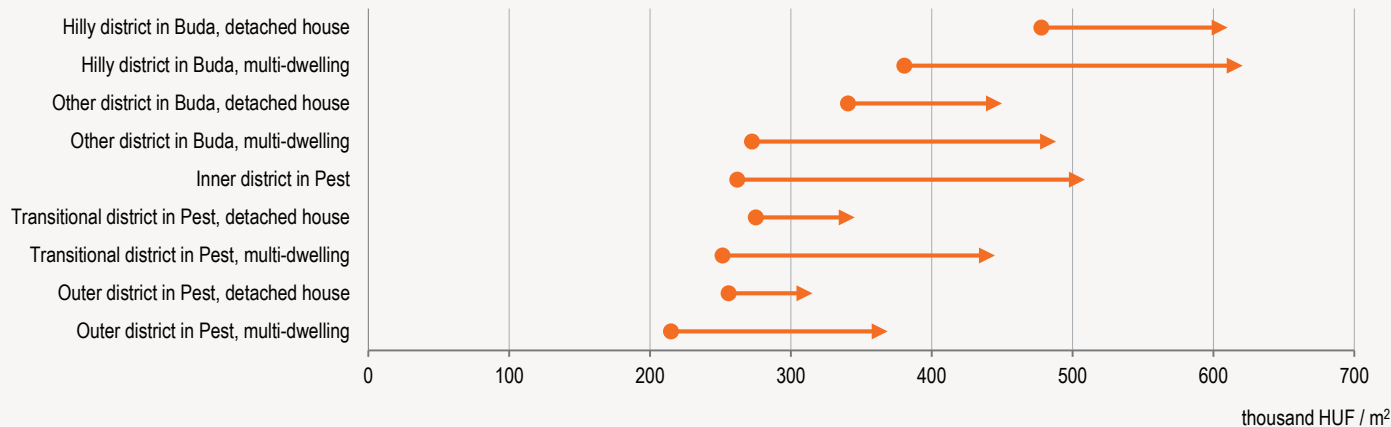


Figure 5

**Changes in square meter prices of second-hand homes in Budapest\*, first quarter, 2008–2018**



\* Categories: hilly districts in Buda: I. II. XII; other districts in Buda: III, XI, XXII; inner districts in Pest: V-IX; transitional districts in Pest: X, XIII, XIV, XIX, XX; outer districts in Pest: IV, XV-XIX; XXI. The multi-unit category includes housing estate and non-housing estate multi-dwelling buildings.

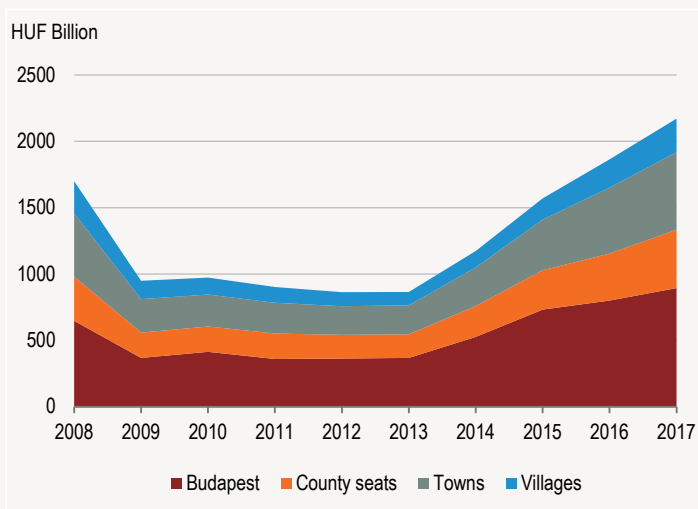
market. Ten years earlier, specific home prices were higher in the market of detached houses than in the market of flats in all groups of examined districts. By the first quarter of 2018, ratios saw a complete rearrangement and homes in multi-dwelling buildings became more expensive in all categories. Real-term square metre prices of detached houses fell in Pest and slightly increased in Buda.

### Volume of housing market turnover

In 2017, the total value of housing market sales was HUF 2,172 billion, 16% more than a year earlier. The share of Budapest fell from 47% in 2015 to 43% in 2016 and to 41% in 2017 in the volume of all housing transactions.

Figure 6

#### Volume of housing market turnover by type of settlement



New homes sold in 2017 totalled 137 billion forints, representing 6.3% of the total housing market. This was up from 5.1% a year ago, but still much lower than 14% in 2008.

Detached houses accounted for the majority of the Hungarian housing stock, but housing market transactions were dominated by multi dwelling buildings. In 2017, flats accounted for 63% of all housing transactions, HUF 1,091 billion was spent on non-housing estate flats and HUF 290 billion on housing estate flats.

### Foreign home buyers in the Hungarian housing market

In 2017, 7,371 flats were purchased by foreign nationals, accounting for 4.8% of all housing transactions. Almost two thirds of the customers were citizens of an EU Member State. German, Chinese and Romanian citizens have purchased many homes, each group in excess of 1,000.

The typically older German, Dutch and Swiss customers preferred rural localities, while the much younger Chinese the Budapest ones. Accordingly, Chinese home buyers spent most at HUF 41 million on average, while the aforementioned Westerners less than half of that, HUF 20.5 million. Home buyers from Romania spent the least at HUF 11 million on average.

Foreigners accounted for 8.8% of all home transactions in Budapest and spent HUF 36.3 million on average significantly exceeding the average spending of Hungarian home buyers amounting to HUF 23.4 million. Foreigners mainly bought homes in districts 6, 7 and 8 (more than 400 homes in each aforementioned district) and accounted for the highest share of all home transactions (at one third) in district 5 with 257 homes bought. In addition, the share of foreign home buyers was above 10% in each of districts 1, 2 and 9.

### Main features of homes purchased by foreigners in 2017

Table 3

Country of citizenship	Number of dwellings purchased in 2017	Average home price, HUF million	Average age of homebuyers, years	Proportion of homes purchased in Budapest, %
Germany	1079	17.2	55	16.0
China	1058	41.4	41	90.9
Romania	1012	11.3	42	21.7
Slovakia	695	17.5	41	24.3
Austria	424	14.9	52	12.0
United Kingdom	248	27.3	51	49.6
Netherlands	240	12.8	55	13.3
Russia	228	32.1	46	66.7
France	211	33.1	44	79.1
Italy	199	25.6	46	61.3
Ukraine	198	16.7	44	33.3
Israel	189	28.5	48	89.9
Belgium	155	15.8	52	14.8
Switzerland	134	20.2	56	12.7
Vietnam	115	32.8	44	95.7

Foreigners buying houses in the countryside were mostly interested in the central and western parts of the country. They concluded 9–10% of the contracts in Somogy and Zala counties and nearly 8% in Győr-Moson-Sopron County. Foreigners also bought more than 400 homes in Pest County, but these accounted for only 2.5% of all home transactions in that area. Compared to Budapest, foreign home buyers did not spend much more (HUF 12.9 million versus 11.0 million) than the Hungarian ones in the rural areas.

### Young home buyers in the Hungarian housing market

In 2017, almost one third of the customers were under 36 years of age and 40% of them were 36-50 years old. People over 50 years of age bought 28% of the homes.

People under the age of 36 bought less new homes than the 36-50 year olds who were most active in this area: 3.5% of young and 4.9% of middle aged home buyers bought new build homes in 2017.

Young home buyers accounted for 29% of all second-hand housing transactions in Budapest and the county seats, 32% in towns and 39% in villages. Of housing transactions in big towns, young home buyers had an above average share in housing estates, an average share in non-housing estate flats and a below average share in detached houses. They bought cheaper than average homes everywhere spending on average HUF 22 million in Budapest, HUF 12 million in county seats, HUF 10 million in smaller towns and HUF 6 million in villages.

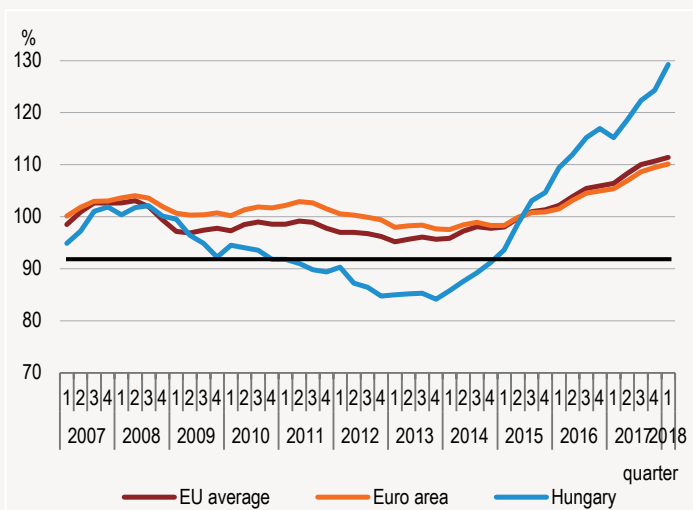
### International data

The **housing market index** of Eurostat shows the aggregated price trends of second hand and new flats. In the first quarter of 2018, the overall housing market index of the EU Member States accounted for 111.4% of the 2015 base value. Within the euro area, the housing price index was below the EU average with a value of 110.1%. The lower price rise of the euro area is also reflected in deflated housing price indices. According to Eurostat's aggregate, the real housing price index calculated for the EU as a whole has exceeded the corresponding euro area value since 2015.<sup>4</sup>

<sup>4</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).

Figure 7

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



In the first quarter of 2018, the Hungarian value of the house price index aggregated according to the Eurostat methodology was 129.2%.

In the first quarter of 2018 only Italy's index was lower than the base value among the respondent countries. At the same time, the base index is in excess of 120% in many countries and nearly 140% in Iceland. In this quarter, Hungary and Latvia also saw a very fast rise in prices reaching around 129% of the base period level.

Of the neighbouring countries, a price rise of 0.8% was recorded in Austria, 2.1% in Romania and 2.9% in Slovakia in the first three months of 2018.

**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 type of dwellings sold on the market 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.<sup>5</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 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.

<sup>5</sup> [http://epp.eurostat.ec.europa.eu/portal/page/portal/hicp/methodology/hps/house\\_price\\_index](http://epp.eurostat.ec.europa.eu/portal/page/portal/hicp/methodology/hps/house_price_index).

Table 4

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

Ország	2017				2018
	1	2	3	4	1
	quarter				
Austria	111.5	114.2	114.8	116.5	117.5
Belgium	105.0	104.7	108.2	107.6	107.6
Bulgaria	112.7	115.4	117.6	119.5	120.7
Croatia	100.9	104.6	105.1	108.5	109.4
Cyprus	99.6	102.7	102.5	105.2	103.3
Czech Republic	116.2	119.1	121.2	122.3	125.1
Denmark	106.6	110.5	111.0	109.3	112.8
Estonia	108.1	108.4	112.1	113.5	115.2
Finland	101.8	102.7	102.1	101.6	101.7
France	102.4	103.4	105.7	105.1	105.9
Germany	107.7	109.9	111.7	113.8	113.4
<b>Hungary</b>	<b>115.2</b>	<b>118.7</b>	<b>122.3</b>	<b>124.3</b>	<b>129.2</b>
Iceland	122.1	130.1	135.7	136.9	138.8
Ireland	113.4	115.9	122.2	125.3	127.4
Italy	99.1	99.6	99.2	98.8	98.7
Latvia	113.1	119.5	119.7	119.7	128.7
Lithuania	111.1	114.5	116.7	116.9	119.8
Luxembourg	109.8	112.2	112.3	113.5	116.7
Malta	105.6	108.8	113.3	116.5	111.1
Netherlands	109.7	111.4	114.0	116.7	119.9
Norway	114.9	115.5	112.4	112.2	113.6
Poland	103.3	105.4	106.5	107.9	109.5
Portugal	111.9	115.5	119.6	121.1	125.6
Romania	109.0	114.3	112.4	113.8	116.1
Slovakia	107.1	113.1	115.6	116.2	119.6
Slovenia	106.9	111.4	111.9	116.1	121.2
Spain	108.2	110.4	112.4	113.4	115.0
Sweden	114.0	116.2	117.8	114.4	113.5
United Kingdom	108.8	111.2	113.7	113.6	113.6
<b>EU average</b>	<b>106.4</b>	<b>108.3</b>	<b>110.0</b>	<b>110.7</b>	<b>111.4</b>
<b>Euro area</b>	<b>105.4</b>	<b>107.0</b>	<b>108.7</b>	<b>109.5</b>	<b>110.1</b>

**Further data, information (links):**[Tables](#)**Contact details:**[kommunikacio@ksh.hu](mailto:kommunikacio@ksh.hu)[Contact us!](#)

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